Breakthrough Workbook Answers 8

This book provides answers for:
Breakthrough Workbook English 8
Breakthrough Workbook Maths 8
Breakthrough Workbook Kiswahili 8
Breakthrough Workbook Science 8
Breakthrough Workbook Social Studies 8
Breakthrough Workbook CRE 8
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Subject</th>
<th>Pages</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td>1 - 38</td>
</tr>
<tr>
<td>Maths</td>
<td>39 - 67</td>
</tr>
<tr>
<td>Kiswahili</td>
<td>68 - 108</td>
</tr>
<tr>
<td>Science</td>
<td>109 - 143</td>
</tr>
<tr>
<td>Social Studies</td>
<td>144 - 228</td>
</tr>
<tr>
<td>CRE</td>
<td>229 - 242</td>
</tr>
</tbody>
</table>
INTRODUCTION

The Workbooks

The Breakthrough Workbook series is specifically developed to meet not only the needs of pupils and teachers but also give parents a chance to stay involved in their children’s education thus help in reinforcing classroom skills at home!

How to Use the Workbooks

These are only guidelines on how to use the workbooks to reinforce skills and concept learnt; teachers are encouraged to be more creative in their approach to meet the needs of their classes. Specifically, the workbooks give:

Diagnostic Assessments

Parents can use the exercises in the workbooks to gauge the understanding of their children. Even if parents are not subject specialists, they can easily refer to these answer books and mark their children’s exercises.

Teachers, on the other hand, should try to assess pupils individually from time to time though this can be difficult in a big class. A useful technique is to divide the pupils into groups and give them exercises from the workbooks. The teacher should work with one group at a time, keeping a record of how each pupil in the groups is answering the questions. The pupils who are weak in answering questions should be singled out for remedial work.

Practical Activities

These workbooks have practical activities like drawing, singing and others to keep learning enjoyable and memorable. Parents and teachers should supervise learners to do these activities to enhance the concepts and skills learnt.

Multi-ability Learning

The workbooks contain exercises challenging, multi-ability exercises that give a chance for slow learners to catch up and the gifted ones to have extra work to do. By giving their children several exercises, parents can easily know whether their children are slow or gifted learners. They can then discuss with teachers on the best way to help the pupils.

On the other hand, a teacher using these workbooks should praise the work of less-able pupils, even if they are not entirely correct in their answers. The teacher should
correct them gently so that the rest of the class doesn’t make them a laughing stock. The gifted pupils should be encouraged to work together with less-able ones so that they can help them. Gifted pupils should be given more exercises so that they do not make noise.

The Answer Books

This answer book contains answers for the Breakthrough Workbook:

- English Class 8
- Maths Class 8
- Kiswahili Class 8
- Science Class 8
- Social Studies Class 8
- CRE Class 8
Unit 1: Social values

A. Reading

B. Let’s recall the passage
1. A – a very effective leader
2. B – he did not want to lose any time
3. C – he was a good example to be imitated by other people
4. D – small social values we ignore can mean a lot later in our lives
5. C – was always attracted by their good behaviour
6. B – the honour accorded to him was as a result of the pupil’s conduct
7. D – pupils and teachers were devoted to their work
8. C – Member of Parliament controlled the whole school
9. A – fighting over small issues
10. D - greed
11. C – good social values are important in our lives

C. Vocabulary
1. discipline  2. control
3. goodness  4. morality
5. trust   6. honesty
7. generosity  8. forgiveness
9. respect  10. discipline
11. chastity 12. peace

D. Language patterns
I. Clauses introduced by who
1. The players who played well finally won the football match.
2. The athlete who withstood the extreme heat broke the world record.
3. The school captain who is hardworking is respected by the rest of the pupils.
4. Anita who maintained body cleanliness and self-control was praised by all the teachers.
5. The arrested child who was acquitted by the magistrate for lack of evidence told the truth. OR The arrested child who told the truth was acquitted by the magistrate for lack of evidence.
6. The doctor who is efficient has many patients calling at his clinic.
7. Linda’s mother who is a generous lady is praised by almost everybody in the neighbourhood.
8. Did you see the young athlete who won a million dollars in this year’s marathon?
9. We met the mason who constructed this house.
10. We often remember the teacher who set a good foundation for our school.

II. Clauses introduced by whose
1. David is an author whose book talks about social values.
2. This is the lady whose daughter joined a prestigious school last year.
3. The woman whose money was stolen by a pickpocket was given bus fare by a good samaritan.
4. The captain on whose bed you have been lying without his consent is annoyed.
5. The politician whose car was stolen at gun point by highway robbers was compensated by the insurance company.
6. The bicycle whose tyres were flat was sold to Philip.
7. The lorry whose windscreen was shattered into pieces belongs to Abubakar.
8. The boy whose work was praised by the local media felt very excited.
9. The daughter whose mother runs a hair-dressing college got married to Salim.
10. Simon whose honesty is very doubtful fell into a bad trap by joining the robbers.

**III. Verbs followed by to + infinitive (open choices) – examples**

**A. Main verbs in the present tense**
1. At the end of the year, all the pupils are expected to do the examinations.
2. The school captain organises to hold athletic competitions.
3. Do they intend to construct new classrooms?
4. Many people forget to keep a good record of their work.
5. Does a patient remember to take medicine before going to bed?
6. Farmers usually remember to prepare their gardens before the coming of the rains.
7. Does a monkey know how to peel a banana before eating it?
8. Many parents want to see their children educated.
9. A careful driver remembers to fuel/check any mechanical problem before he starts his vehicle.
10. Move away! This snake wants to bite you.

**B. Main verbs in the past simple tense**
1. refused 2. declined
3. planned 4. agreed
5. failed 6. wanted
7. preferred 8. robbed
9. arranged 10. decided

**C.**
1. kept 2. planned
3. called; calm 4. decided
5. decided

**IV. Verb + object+ infinitive**
The table has many open choices. Accept any correct and sensible sentences constructed by the learners.

**Grammar**

**I. Use of -ing verb form as subjects**

**A.**
2. counselling 3. reading
4. burning 5. auditing
6. jogging 7. marketing
8. talking 9. policing
10. shipping

**B.** Accept any sensible and relevant sentences given by the learners.

**II. Question tags**
1. isn’t she? 2. shall i?
3. am i not? 4. won’t you?
5. mustn’t he/she? 6. has he?
7. do they? 8. will you?
9. will it? 10. couldn’t she?

**III. Present progressive questions**
1. Are they coming over for dinner?
2. Is he calling the police?
3. Yes, he has/No, he hasn’t
4. Did we win the inter-class competition?
5. Yes, he has gone for camping/No, he hasn’t gone for camping.
6. No, I am not/Yes, I am breaking for Christmas Holidays.
7. Did you enjoy yourself at the show?
8. Has Awino felt well?
9. Yes, I will/No, I will not study mathematics tonight.
10. Has the 10 O’clock bell rung?

**F. Let’s write: Completing a story**

Go through the beginning of the story with the learners. Make them understand the plot and let then complete it making it as interesting as possible. Check for
correct sentence construction and merging of ideas as you mark.

**Quick fire**
1. bravely
2. heavily
3. nobody is useless
4. feel very frightened
5. why don’t you do it yourself?
6. becoming too curious will destroy you
7. don’t hate someone because of what he or she is
8. one without proper direction
9. hardworking
10. break the silence

**Unit 2: Careers**

**A. Reading**

**B. Let’s recall the passage**
1. Formal letter is written for official and business purposes while informal letter is written to friends, it is a friendly letter.
2. A document giving details of your qualifications and the jobs you have had in the past. It is sent when one is applying for a job.
3. C – Tabby was patient
4. A – employment where one can earn good money
5. C - somebody educated has an advantage over an uneducated person
6. B – the company’s headquarters was situated in Westlands, Nairobi
7. D – young graduate lady, disciplined and ready to work in Southern Sudan
8. A – applied for the job and sent copies of the documents needed
9. A – it was not very difficult
10. D – that Tabby would get a job
11. A – a month
12. B – Tabby the village girl

**C. Vocabulary**
1. industry
2. job, manager, certificate
3. career
4. qualifications, interview
5. formal
6. application
7. curriculum vitae
8. applicant
9. referee
10. service

**d. Language patterns**

I. **Present simple tense describing general truths**
1. The doctor advised us /them/you that we/they/you/were expected to boil drinking water to avoid water borne diseases.
2. The doctor advised the slum dwellers that they needed to take plenty of water when they had diarrhoea.
3. The counsellor told the listening audience that one needed to sleep early and wake up early in order to grow wealthy and healthy.
4. The agriculturalist told/advised the farmers that they needed to give a dairy cow plenty of fodder to enable it produce a lot of milk.
5. The production manager told him/her /them that he/she/they was /were expected to do an interview before he/she/they was /were offered a job.
6. The manager told Sitienei that one was required to have a referee whom they might consult if they needed a confidential report.
7. The nutritionist said that a baby needed to eat a lot of proteins or body building foods because it was growing.
8. My mother reminded/told/advised me that any applicant needed to have patience and tolerance as he/she waited for the outcome of the interview.
9. My sister told her friend that some careers were more demanding than others.
10. The prize winner told the attentive crowd that everybody was expected to play an important role in the preservation of our environment.

II. Present continuous tense for future arrangements

a. Complete sentences
The questions have open endings. Accept correct endings from the learners.

b. Fill diary
Mustafa’s diary
Tuesday 13th October, 2008 - Mustafa is seeing the general manager in the afternoon.
Wednesday 14th October, 2008 - Mustafa is calling all the board members in the morning and picking his children up from school in the evening.
Thursday 15th October, 2008 - Mustafa is doing some shopping in the morning and booking an appointment with the dentist in the afternoon.
Friday 16th October, 2008 - Mustafa is fuelling the car after playing golf.
Saturday 17th October, 2008 - Mustafa is meeting a client in the morning and paying the electricity bill in the afternoon.
Sunday 18th October, 2008 - Mustafa is going to church in the morning, going to the bank and later meeting some friends.

III. Present simple tense

A. Fill blanks
1. provides 2. impact
3. carries 4. cry
5. import, produce 6. shops
7. foresees 8. fires
9. scramble 10. visit

B. Fill blanks
1. feeds 2. gives
3. eats 4. shields
5. prey 6. kill
7. don’t 8. sucks
9. sets 10. attract

C. Grammar

I. Present continuous tense
1. are ploughing 2. is resettling
3. campaigning 4. are raging
5. is excavating 6. following
7. discussing 8. collecting
9. writing 10. are watching

II. Present simple tense
Check the sentences constructed by the learners. Ensure the verbs are used correctly and in their correct form.

III. Determiners
1. any 2. some
3. That 4. This/that
5. some/most 6. These/those/some
7. no 8. enough
9. that 10. These/those

F. Let’s write
Guide the learners in completing the given autobiography

Quick fire
1. forgery 2. consultation
3. qualification 4. certification
5. service 6. information
7. seizure 8. disappearance
9. living (life) 10. requirement

Unit 3: Drugs and drug abuse

A. Reading

B. Let’s recall the passage
1. rich
2. C – they appeared sweet and appealing
3. A – he realised Mutiso was now trapped
4. D – Mr Midiwo could not accept any kind of explanation
5. C – the drugs in the foodstuff started taking effect on him
6. C – he suspected something else apart from illness
7. Check the correct explanation of the words given; the pupils can use their dictionaries
8. A – unexpected revelation
9. A – mostly unsuspecting youths from poor families
10. B – drug trafficking and abuse

C. Vocabulary
Alcohol, smoking, dependence, cocaine, heroine, traffickers, hallucinations, withdrawal, addiction.

D. Language patterns
I. Phrasal verbs with get-
1. got into
2. getting over
3. get along/on 4. gets up
5. get along/on 6. got over
7. getting on 8. get at
9. got away 10. get into

II. Present simple tense for description/general truths
1. get 2. take
3. gets 4. uses
5. listen 6. are
7. break 8. are
9. drink 10. prays/prayed

III. Past perfect tense
1. had left 2. had hoisted
3. had begun 4. he called
5. had taken
6. had broken; stolen
7. had caught
8. had taken
9. had fallen
10. had talked

IV. Present continuous tense
1. are you dying
2. am experiencing
3. are you thinking
4. is pruning
5. composing
6. are treating
7. is explaining
8. are writing
9. is flying
10. is increasing

E. Grammar
I. Past Perfect tense
1. had been aware
2. had Konin been transferred
3. had been the connection
4. had ruined
5. had been sentenced
6. had stayed
7. had lived
II. Past Continuous tense
1. was helping
2. was flying
3. was the chief reading
4. was John writing
5. was walking
6. was watching
7. was going
8. were watching
9. were you looking
10. was taking

III. Modal verbs
1. should
2. should
3. should
4. would
5. must
6. might
7. should
8. could/would
9. ought to
10. must

F. Let’s write
Check the story written by the learners. Ensure good flow of content and ideas. Check the grammar used and sentence construction.

Quick fire
1. received
2. retrieve
3. belief
4. perceive
5. deceive
6. weird
7. counterfeit
8. believe
9. seize
10. chief

Unit 4: Life skills

A. Reading
B. Let’s recall the poem
1. B – critical thinking
2. A - gesture
3. C – self-esteem
4. B – we shall be able to solve problems
5. D - inability to understand one another
6. B – it is a sign of dissatisfaction
7. B – in spite of problems life has to continue
8. D – to avoid falling into problems unknowingly
9. A – starting our lives with riches and ending up in poverty
10. C – it will be difficult to recover time lost
11. D – requiring use of life skills to survive

C. Vocabulary
1. Problem solving
2. Communication breakdown
3. Facial expression
4. Life skills
5. Conflict resolution
6. Decision making
7. Self esteem
8. Critical thinking
9. Creative thinking

Language Patterns
I. Use of determiners with single nouns
1. an
2. a
3. the
4. the
5. a
6. the
7. a
8. a
9. the
10. a
11. a
12. every
13. the
14. the
15. a
16. a
17. every
18. the

II. Use of determiners with plural nouns
1. many /some /a lot of /
2. the
3. the
4. a lot of
5. any, some
6. a lot / plenty
III. Present simple for general truths
   a. Use of verbs in their correct form
   1. breathes  2. wriggles
   3. passes  
   4. communicate; frown; grin
   5. flows  6. misses
   7. use  
   8. wake; rise/set
   9. practise; reach
   10. confronted; uses

b. Matching words
   1. The earth rotates on its axis making day and night.
   2. Hot lava can flow causing serious burning.
   3. Pupils must strive to pass exams.
   4. Communication breakdown can result to major crisis.
   5. Trees make the environment green.
   6. The sun is the nearest star to the earth.
   7. Teachers impart knowledge to pupils.
   8. Children are expected to obey their parents.
   9. A river meanders along its course.

E. Grammar
I. Adverbs of degree
   Check the sentences constructed by the learners. Check grammar and use of sense of degree in the sentences.
II. The Order of Adjectives
   1. sleek, brand new 
   2. magnificent, round, silver 
   3. smart, brown, silk 
   4. heavy, dark coloured, cotton 
   5. comfortable, strong, white plastic
   6. gigantic, brown, metallic 
   7. blue, metallic 
   8. young, dark-haired, maiden 
   9. strong, tall, form four, weak, short, form one 
   10. refreshing, cold

III. The infinitive with/without to
   1. going  2. solving
   3. doing  4. paying
   5. waking  6. planting
   7. travelling  8. writing
   9. travelling  10. writing
   11. crossing  12. telling

F. Let’s write
   Let the teacher guide the learners on how to come up with a composition whose ending has been given.

Quick fire
   1. surprised  2. strange
   3. friend  4. hate
   5. abode  6. horrible/terrible
   7. prominent/great
   8. inadequate
   9. huge
   10. spooky, weird

Unit 5: Child labour

A. Reading

B. Let’s recall the passage
   1. A – poverty can easily turn one into a slave
   2. C – they could easily go home without being paid any money
   3. B – washing clothes and cleaning the house
   4. C – underage boys and girls fall victim of exploitation
5. B – house helps sleep early and wake up early
6. D – like girls, they are also exploited
7. A – she talked to a very difficult child called Tande
8. A – when Tande went back to school
9. D – Child labour and its effects

C. Vocabulary
1. plantations
2. factory
3. overcoats
4. gloves
5. workshop
6. helmet
7. gumboots
8. protective
9. labour
10. violating
11. irresponsible
12. house help
13. chores / duties
14. responsible

D. Language patterns
1. Use of appropriate determiners in the affirmative, interrogative and negative
   1. a) One of his employees got a salary increment.
      b) Did one of his employees get a salary increment?
      c) One of his employees did not get a salary increment?
   2. a) Many people are unhappy when children are abused.
      b) Are many people are unhappy when children are abused?
      c) Many people are not unhappy when children are abused.
   3. a) Every child deserves to be protected by the government.
      b) Does every child deserve to be protected by the government?
      c) Every child does not deserve to be protected by the government.
   4. a) Tina and Martin were friends; they both joined law school at the same time.
      b) Were Tina and Martin friends? Did they both join law school at the same time?
      c) Tina and Martin were not friends. They did not attend law school at the same time.
   5. a) The guests all arrived a few minutes after ten o’clock.
      b) Did all the guests arrive a few minutes after ten o’clock?
      c) All the guests did not arrive a few minutes after ten o’clock.
   6. a) All of us did considerably well; we were crowned the best team.
      b) Did all of us do considerably well? Were we crowned the best team?
      c) All of us did not do considerably well. We were not crowned the best team.
   7. a) It has taken me a long time to complete this exercise.
      b) Has it taken me a long time to complete this exercise?
      c) It hasn’t taken me a long time to complete this exercise.
   8. a) Liz has been following the story narrated by the teacher.
      b) Has Liz been following the story narrated by the teacher?
      c) Liz has not been following the story narrated by the teacher.
   9. a) This exercise has proved rather difficult.
      b) Has this exercise proved rather difficult?
      c) This exercise has not proved rather difficult.
   10. a) The children have opened a new chapter of their lives.
b) Have the children opened a new chapter of their lives?
c) The children have not opened a new chapter of their lives.

II. Past simple tense to narrate past event and state imaginary events

a. Change passage into past simple tense

I spent five thousand shillings on drugs every month. This was half my monthly earnings. I had now grown tired of this obnoxious behaviour and I did not know what to do: I would rather have died. The shame I had brought to myself and my family was just as paralysing as physical poisoning. I felt like an empty casket. I struggled to redeem myself but I couldn’t imagine life without drugs. But I did believe a miracle could happen to me in that hour of need. I needed someone to rehabilitate me. But why was I an alcoholic? I thought what ignited my addiction was too much loss of social contact with my friends and in particular the death of my parents which left a vacuum, terrible sadness and regrets. I had not lost hope of dragging myself out of bondage. Time would tell.

b. Answers to situations

1. If I got a chance to fly out to a country of my choice, I would go to America, France etc.
2. If one of my friends had started using drugs I would …
3. If I found an old man physically assaulting a young girl, I would …
4. If I got a position as a children’s officer who fights against child abuse I would …
5. If I were a judge I would …
6. If I were a world champion in swimming I would …
7. If I were invited to give a speech on the effects of drugs I would …
8. If I got lost in a deep forest I would …
9. If I suddenly become blind I would …
10. If many of my friends encouraged me to take hard drugs I would …

Let the learners give their answers in this format. They should imagine the answers and give them.

III. Past continuous tense of actions in progress at a specific time

- At eight o’clock the teacher was entering our classroom.
- At nine o’clock Mary was reading a story book.
- At ten o’clock the pupils were playing in the field.
- At eleven o’clock mother was in the kitchen preparing lunch.
- At twelve o’clock the bus was arriving from Nakuru.
- At one o’clock in the afternoon Paranai was sitting under a shade.
- At two o’clock in the afternoon all the pupils were entering their classrooms.
- At three o’clock in the afternoon Wambui was watching cartoon on TV.
- At five o’clock in the afternoon the newscaster was reading news.
- At six o’clock in the evening Salome was doing her homework.
- At seven o’clock in the evening the family was preparing to take supper.

IV. Past continuous tense for extended actions in the past

1. was playing
2. was not driving
3. was wiping; washing
4. was sleeping
5. was not feeling
6. were failing
7. was taking
8. were denying
9. were trying
10. was working

E. Grammar

Punctuation

I. Colons (·)
1. Yesterday I was reminded to do these jobs: iron clothes, go to the market and buy new shoes for my sister.
2. The class teacher asked me to tell the monitor to: give assignment; collect all the books and take them to the staffroom for marking.
3. Doctors are busy people and can: examine patients, prescribe drugs and administer treatment.
4. The thief jumped over the fence and broke into the house: stole all the money I had, damaged other valuables and made away with my laptop.
5. At school we study: English, Maths, Kiswahili, social studies and science among others.
6. Among the things we need in life are: self esteem patience, perseverance and confidence in yourself.
7. The following may be some of the causes of child crying: hunger, sickness, loneliness and discomfort.
8. Under age children should never be allowed: to work in plantations; serve as house-helps, drop out of schools or engage in any kind of immoral activities.
9. Have you ever come across these animals: an elephant, a shark, a whale or a penguin?
10. Children are expected to help their mothers: wash utensils, iron clothes, clean the house and tidy up all the rooms including the table room.

II. Passives

a. Change sentences from active voice to passive voice
1. Tande was rehabilitated to go back to school by Femi.
2. Drought was declared a national disaster by the president in his speech.
3. The exercise was finished by them before the bell rang.
4. Almost every youth has been educated about dangers of irresponsible sex by Karimi.
5. The ball has been dropped on the floor by Tina.
6. The drinking water in our estate has been contaminated by the sewage.
7. The room was tidied up by Linnet after the guests left.
8. Mum’s beautiful flower vase was broken by my sister.
9. I was hit on the face with a stone and badly injured by your sister.
10. I was rained on heavily on the way from the shopping centre.

b. Passive to active voice
1. Truck drivers lure young girls into sex.
2. The local leaders have provided people in the affected areas with food.
3. Thugs attacked and badly injured him on his way back home.
5. A very famous author wrote this book.
6. The company has transferred her to a new station.
7. The police have apprehended the drug baron.
8. They have employed her as the house help for four years.
9. Ole Muya looks after a very large herd of cattle.
10. The nutritionist advised the patients to take a lot of fluid.

III. Countable and Uncountable

A. Fill blanks
1. lights 2. a lot of bread
3. furniture 4. bottles of soda
5. a lot of rice 6. news
7. much/a lot of 8. noises/a lot of
9. much/a lot of 10. ideas

B. Rearrange words

<table>
<thead>
<tr>
<th>Countable</th>
<th>Uncountable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bananas</td>
<td>information</td>
</tr>
<tr>
<td>Animals</td>
<td>news</td>
</tr>
<tr>
<td>Bottle</td>
<td>electricity</td>
</tr>
<tr>
<td>Bag</td>
<td>milk</td>
</tr>
<tr>
<td>Coin</td>
<td>luggage</td>
</tr>
<tr>
<td>Finger</td>
<td>butter</td>
</tr>
<tr>
<td>Break</td>
<td>salt</td>
</tr>
<tr>
<td>Suitcase</td>
<td>deer</td>
</tr>
<tr>
<td>Dollar</td>
<td>money</td>
</tr>
<tr>
<td>Crowd</td>
<td>power</td>
</tr>
<tr>
<td>Stadium</td>
<td>furniture</td>
</tr>
<tr>
<td></td>
<td>happiness</td>
</tr>
<tr>
<td></td>
<td>currency</td>
</tr>
<tr>
<td></td>
<td>advice</td>
</tr>
</tbody>
</table>

F. Let’s write
Mark what the learners have written keeping in mind the guidelines to be observed when writing an application letter.

Quick fire
1. nephew 2. widower
3. hen 4. duck
5. bridegroom 6. nun
7. bullock 8. mare
9. madam 10. priestess

Unit 6: Regional cooperation in East Africa

A. Reading

B. Let’s recall the passage
1. A – development background of different states
2. B – device better ways to economic growth and development
3. B – prices in the international markets are slightly higher than those of local markets
4. A – all boundaries bordering our countries should be open to everyone
5. B – the procedure of crossing the border will be made easier
6. C – the corporation will not interfere with the country’s tax system
7. D – we shall satisfy all our needs if we use our local markets only.
8. A – producing good quality goods
9. D – close some markets that do not make any profit
10. C – East African community

C. Vocabulary
a.
1. internationally
2. security
3. migrations
4. relationship
5. strengthen
b. Accept any sensible and correct answers.

Language patterns
I. Past continous tense

a. Provide answers to questions
Let the learners complete the questions
giving their own answers. Accept any correct sentence.

b. Complete sentences
1. were writing
2. were planning
3. discussing
4. were travelling
5. were opening
6. were playing
7. preparing
8. was inspecting
9. was dreaming
10. skinning
11. was driving

II. Verbs followed by present participle
a. Fill blanks
1. swimming
2. committing
3. keeping
4. watching
5. repeating
6. walking
7. buying
8. smoking
9. taking
10. reading

b. Complete sentences
1. going
2. following
3. has; taking
4. have; exporting
5. discussing
6. strengthening
7. exporting
8. imitating
9. visiting
10. are; telling

III. Punctuation
1. Mr Omollo (our class teacher) has been of great help to us.
2. Paul and Pat (my cousins) have joined the university this year for further studies.
3. Mercy (the first born among five children) is a gifted poet and does presentations to entertain guests during important occasions.
4. Plates, cups, a sauce pan and dishes (utensils) have already been bought as presents to the newly wedded couple.
5. By 8.00 am (East African time) all the heads of state had already arrived to take part in the negotiations.
6. Coming together as one trading block (regional integration) is the hub of economic development.
7. Mr and Mrs Tanni (John’s parents) are planning to collect funds to enable him complete his degree course.
8. Dr Bakari (the current chairman) is stressing on using our time economically and wisely.
9. The *Daily Mentor* (the local newspaper) is carrying a bold headline on the breakthrough in our economic recovery strategy talks.
10. Bermuda (the dreaded island) will remain a puzzle to those who have heard about it.

E. Grammar

I. Speech Marks
1. “Where are the keys to the cupboard?” Tamu asked Lorain.
2. He replied, “It will take a bit of time before we experience any major changes. We need to have patience and restrain.”
3. “How many delegates will attend the meeting next week?” asked the interviewer.
4. “We have seen the youthful integration of our East African States bearing fruits,” replied the minister.
5. “We will be able to see what we have achieved after five years,” he said to the audience.
6. “Our political differences and cultural diversity will not be a hindrance to our regional co-operation,” commented the president.
7. The nurse asked to the patient, “When did you start experiencing these symptoms?”
8. “We called our cow Sunday because it was born on a Sunday just before we
went to church,” said my mother.
9. The disappointed tenant said to the reporter, “The shortage of water that has hit the estate is beyond any kind of endurance.”
10. The minister said, “Security across the border will be beefed up very soon.”
11. “People in East Africa will be able to intermingle and learn from each other,” said the minister to the impatient crowd.
12. “Many traders will take advantage of a diversified market beyond our borders,” said the president.
13. “I wrote this book myself,” said Penny, “and it is intended to influence the youth to change their behaviour.”
14. “Stop talking over there!” said the chief, “We cannot hear the eulogy of this great man properly.”

II. The hyphen
1. Some months of the year have thirty-one days while others have thirty.
2. My father-in-law is a very considerate man and is soft spoken.
3. For thirty-six days he survived in a deserted island with neither water nor food.
4. Since my brother-in-law has decided to do serious farming he has purchased a new Toyota pick-up.
5. The follow-up activities ensure that work is thoroughly done.
6. Hunger-stricken nations keep on borrowing from other international communities.
7. I sheltered myself under a roof-leaking verandah.
8. The team went home broken-hearted after a shameful defeat.
9. During hearing, the co-accused insisted that he was innocent.
10. Expectant mothers are advised to make sure they attend pre-natal clinics.
11. The quick-witted fox jumped over the barbed wire into the maize garden.
12. All the co-ordinators are expected to be at the venue of the meeting on time.

F. Let’s write
Guide the learner on the guidelines of writing a speech. Let them write the speech in relation to regional cooperation.

Quick fire
1. A snake glides/slithers
2. A person walks
3. A lamb waves
4. A duck wades
5. A cat plays
6. A donkey rides
7. An eagle flies
8. A hyena limps
9. A horse gallops
10. A swallow glides

Unit 7: Commerce and trade

A. Reading

B. Let’s recall the passage
1. B – the class wanted to learn different ways of trading
2. A – each of the group had to be accompanied by a teacher
3. C - perishables
4. B - because unpaid debts by some customers may throw traders out of business
5. D – people buying on credit may unknowingly throw you out of business
6. B – he cut the exact meat asked by the customers
7. B – a reasonable price
8. D – the prices in the supermarket are always fixed in shops one can bargain
9. D – the number of buyers and sellers in the market
10. D – because they learnt better in the field than they could have learnt in classroom

C. Vocabulary
1. goods
2. bank
3. kiosk
4. weighing scales
5. change
6. measure
7. credit
8. cheap
9. profit

D. Language patterns
I. Use of determiners with uncountable nouns

a. Complete exercise
1. a lot of / enough
2. the quantity of / much of
3. a lot of / much
4. much / a lot of
5. much
6. lot
7. a lot
8. much
9. much
10. a lot of / some / any

b. Use of determiners
1. a lot of
2. any
3. a lot of
4. a lot of
5. much / a lot of
6. much
7. any / some
8. a lot of
9. a lot of / much
10. any

II. Verb + Noun/Pronoun + infinitive

1. The minister of commerce and industry urged the investors to take advantage of peaceful trading environment.
2. The agricultural officer advised the farmers to keep only those cows which could give them a lot of milk.

III. Present perfect continuous tense

1. exporting
2. been buying
3. been attempting
4. has been teaching
5. he has been fasting
6. has been pounding
7. been fetching
8. have been ploughing
9. been jogging
10. has been enjoying

IV. Clauses introduced by who

1. She is a green grocer who sells fruits, green vegetables and other perishable goods.
2. She is a business lady who sells all her items expensively.
3. We found the woman who sells goods in a big shop at Mwamba local market.
4. Samuel who sells good fruits is likely to make a lot of profit.
5. I can vividly remember the young man who refused to give back my change and I had to walk home.
6. John who has requested for a loan from the bank wants to stock his shop and expand his business.
7. He is a hardworking trader who supplies different goods to supermarkets.
8. Someone who does not want to bargain always buys items at marked price.
9. Someone who supplies goods to customers is called a supplier.
10. A shopkeeper who weighs his sugar when he is not busy does not want to lose a lot of time with his customers.

OR
A shopkeeper who does not want to lose a lot of time with his customers weighs his sugar when he is not busy

V. Use of present simple tense

a. Match column A to B

1. We use lorries to transport bulky loads to the market with.
2. Pupils use pens to write with.
3. The housewives buy hard brushes for scrubbing the dirty floors with.
4. She always uses a knife to peel the potatoes with.
5. We use the hammers to drive nails into wood.
6. Do you have any ball to play with?
7. Does she have any good example to copy from?
8. There is always a blackboard for the teacher to write on.
9. Does she use the bottle with the red cork for carrying the milk in?
10. The teacher normally uses a red biro to mark the pupils' work with.
11. Mountaineers use ropes for climbing the rugged mountains with.

12. We usually correct ourselves to avoid making mistakes in future.

b. Complete sentences

Let the learners complete the sentences correctly. Check their answers ensuring they have completed the sentences in present simple tense.

E. Grammar

I. The dash (-)

a. Write correct sentences using the dash
Let the learners construct correct sentences using the dash. Check correct usage of the dash from their answers.

b. Insert a dash in sentences

1. We found Wanjiru – the nurse – giving first aid to the accident victims.
2. Kipn’getich – the farmer – grows plenty of maize in his farm.
3. Mr Korio the workman – a popular man in Tamu Village – is friendly to everybody.
4. Daniel – the school bursar – has squandered a lot of money from the caution money account.
5. Her father - the only bread winner they had – passed away in a road accident.
6. Matata – the one eyed giant – could carry children in his pocket.
7. Mapengo – the comedian – would make everybody laugh his heart out.
8. Lipsey Brown – as he was well known – resembled your brother in all aspects.
9. Kiswahili - my best subject-has been approved for communication.
10. Water – a basic commodity – was hard to come by.
II. Regular and Irregular verbs

a. Complete table

<table>
<thead>
<tr>
<th>Verb</th>
<th>Past tense</th>
<th>Past participle</th>
</tr>
</thead>
<tbody>
<tr>
<td>look</td>
<td>Looked</td>
<td>Looked</td>
</tr>
<tr>
<td>make</td>
<td>made</td>
<td>made</td>
</tr>
<tr>
<td>sell</td>
<td>sold</td>
<td>sold</td>
</tr>
<tr>
<td>bear</td>
<td>bore</td>
<td>born/borne</td>
</tr>
<tr>
<td>put</td>
<td>put</td>
<td>put</td>
</tr>
<tr>
<td>stop</td>
<td>stopped</td>
<td>stopped</td>
</tr>
<tr>
<td>go</td>
<td>went</td>
<td>gone</td>
</tr>
<tr>
<td>swell</td>
<td>swelled</td>
<td>swollen</td>
</tr>
<tr>
<td>give</td>
<td>gave</td>
<td>given</td>
</tr>
<tr>
<td>hurt</td>
<td>hurt</td>
<td>hurt</td>
</tr>
</tbody>
</table>

b. Let the learners construct correct sentences using the past tense and past participle to show clear differences between the two words.

c. Fill blank spaces
1. sought
2. have, bought
3. held, caught
4. made, have had
5. chosen

III. Past perfect continuous tense

a. 1. The family had been buying their provisions from the local market.
2. The intelligent shopkeeper had been selling his goods in cash to avoid running bankrupt.
3. The woman had been borrowing a loan from the bank to buy a house.
4. The shopkeeper had been wrapping his items in different packs.
5. My mother had been taking me to different supermarkets in order to find out which one sells items at fair price.
6. If you were not making any profit you would have closed your business by now.
7. The lady had been talking about keeping a shop of her own.
8. Had you been feeling cold after bathing with cold water?
9. What had you been doing all this time?
10. What had you been talking about?

b. Check the sentences constructed by learners. They should be in past perfect continuous tense.

F. Quick fire
1. impoverish 2. undesirable
3. presence 4. straight
5. refuse 6. save
7. harvest 8. minor
9. downstairs
10. small

Unit 8: International competitions

A. Reading

B. Let’s recall the passage
1. D – she was determined to practise for her future career
2. C – long before the inter-school competition
3. B – in no way would she allow pressing problems to be a hindrance
4. D – her discipline in waking up very early in the morning allowed her to do a lot of practice
5. D – steeplechase and relay
6. A – all the countries of the world are normally represented by their teams in Olympic Games
7. A – awarding the participants
8. B – the person who comes second in
the event
9. Check the meaning of the words given by learners
10. C - The purpose of international competitions

C. Vocabulary
Accept any correct and sensible answer.

D. Language patterns
1. Spectators – people watching a sporting event in a stadium.
2. Venue – a place where an event is taking place.
4. Celebrity – a well known person.
5. Baton – a stick used in relay races.
6. Officiate – to oversee that events are done well.
8. Endurance – the ability to last long.
9. Runner up – one who finishes second in a race.

I. Use of determiners with uncountable nouns
1. a lot of / much
2. any
3. enough
4. some / a lot of
5. a lot of / much
6. a lot of / enough
7. much / a lot of
8. a lot of / some / much
9. much / a lot of
10. any / some

II. Past simple passive
1. Olympic Games are held every four years by the world.
2. All the balls are kept in the store by the captain.
3. Gold and silver medals were won in both races by them.
4. The marathon wasn’t run by Kip; the javelin was thrown by him.
5. Our National Anthem was sung by the Kenyan team during the Olympic Games.
6. The baton was not properly passed by him, so they lost the relay.
7. All the trophies were purchased by the athletic committee last week.
8. The Javelin was thrown past the marked line by the gigantic man.
9. The victory was celebrated by everybody in this country.
10. The lone goal which kept their spirits alive was scored by Allan.

III. Use of as well as construction as a connector meaning also
1. I can throw the javelin as well as the discus.
2. The government collects revenue from taxes as well as fines.
3. He participated in all track as well as field events.
4. Can Betty run 100 as well as 3000 metres?
5. After winning they ran round the track as well as displaying our national flag.
6. The athlete’s feet as well as her hands were injured.
7. Don’t forget to take the baton as well as sprint after the other competitor.
8. Sarah wished to train as a doctor as well as become an economist.
9. Today, I felt very tired as well as weak.
10. The venue of the games is near as well as convenient for us.
11. Cherotich took part in the cross country as well as in net ball.

IV. Verb + ing as a nominal
1. Jogging in the evening helps in reducing fat content in our bodies.
2. Shopping at the supermarket requires one to read the prices of different goods.
3. Giggling in class annoys the teacher when he is busy teaching.
4. Running can become an income generating activity.
5. Imitating other people is likely to upset them.
6. Talking too much makes one to use extra energy.
7. Window shopping helps you to discover where to buy any item you need later.
8. Advertising has become popular among ladies.
9. Reading for pleasure will train one to become a bookworm.
10. Hearing impairment can make one become dumb.

V. Use of when/after/as so a
1. The competition began as soon as they had taken their lunch.
2. We left the hall after they had taken their lunch.

Expect different answers from the learners. They should be grammatically correct.

E. Grammar

I. Determiners
1. an, the
2. an, an, the
3. a, a
4. the, an, an
5. the, the, the
6. the
7. a, a, the
8. A, a, a
9. the, the
10. A, an, the, an

II. Comparative and Superlative Adjectives
1. fastest
2. faster
3. most
4. better
5. more beautiful
6. less
7. more informed
8. most useful
9. most enjoyable
10. most cunning

III. Order of adjectives
1. smart, yellow, velvet
2. long, black, curly
3. sharp-pointed, brown, leather
4. serious, tall, brown
5. talkative, medium sized, brown
6. heavy, dark, grey
7. baggy, dirty, green, woollen
8. beautiful, big, circular, green
9. ugly, cotton, bowler
10. expensive, round, brown, wooden

F. Let’s write
Let the learners write the short message then pick one message and from it guide them on what should be written on short messages.

Quick fire
1. to
2. out
3. out
4. off
5. off
6. into
7. down
8. out
9. up
10. off
11. off
12. on
13. down
14. up
15. off

Unit 9: Club and Societies

A. Reading

B. Comprehension
1. B – youth between 15 and 25 years
2. D – of the cooperation it was accorded by the community
3. D - the organising secretary
4. B – Alexander Mwangi
5. C – feel no need of attending meetings
6. D – to confirm what is read was exactly what the members discussed during the previous meeting
7. D – new ideas that may be generated from the minutes read by the secretary
8. B – the income generated and how it has been used
9. C – Community health and education

C. Vocabulary
1. Patron - a person who supports a club.
2. Venue - a place where an activity or meeting takes place.
3. Conduct - the way someone behaves especially to rules.
4. Member - someone who belongs to a group or club.
5. Secretary - someone who writes records for a meeting.
6. Constitution - set of basic laws that govern a club.
7. Guest - someone invited to a home or party.
8. Income - money got from an investment.
9. Chairman - a person in charge of a meeting.
10. Resolution - decision to do something.

D. Language patterns
I. Use of the present simple tense for habitual actions
   a.
   1. control  2. visit
   3. represent  4. check
   5. keep  6. registers, writes
   7. listen; follows up 8. has, manage
   9. is, register  10. ascertained
   11. emphasises  12. passed

b. Complete exercise
   2. takes minutes in meetings
   3. teaches pupils
   4. works and travels in space
   5. controls machines
   6. works in a bank
   7. works for a newspaper/writes news
   8. directs people visiting a national park
   9. takes care of a forest/employed to care for a forest
   10. serves passengers inside an aeroplane

II. Use of present continuous tense for extended actions
   a.
   1. The house girl has been feeding the baby on milk.
   2. The meeting has been going on for more than two hours.
   3. The patron of the club has been presiding over the election of the officials.
   4. It has been raining from morning to evening.
   5. Mothers have been cooking food for their children in the kitchen.
   6. The teachers have been expecting guests from the neighbouring school to join them.
   7. The secretary has been taking down the minutes during the annual general meeting.
   8. They have been conducting their meetings very peacefully.
   9. He has been travelling home to attend to the family get together.
   10. The officials have been discussing important matters for the well-being of the club.

b. Fill blanks
   1. has been planning
   2. have been encouraging
   3. has been crying
   4. have been reading
   5. is seeing
   6. have been singing
   7. practising
III. Use of verb + to + infinitive

a. Fill blanks
1. to cook 2. to hem
3. to leave 4. to win
5. to joke 6. to drive
7. to attempt 8. to expand
9. to write 10. to see
11. to remind 12. to wake

b. Complete sentences
Accept any correct and suitable answer
1. to hold an election
2. to please you
3. to show out
4. to jog
5. to sink to
6. to do
7. to leave/to pray
8. to do
9. to rain/to fall
10. to go about the matter?

E. Grammar

I. The dash (-)
1. Jonathan Rotich – from the Rift Valley – is a very good athlete.
2. We shall be able to send two pupils – Maria and Moraa – to represent the school at the function.
3. Please remember to buy cabbages, carrots and spinach – not forgetting meat for the stew.
4. The two athletes – Chepn’getich and Wanja – failed to win gold medals in spite of trying very hard.
5. River Nile – the longest river in the world – flows into the Mediterranean Sea forming a delta.
6. The old man narrated the whole story – amid stammering and trembling.
7. King David was crowned the King – the youngest son in the house of Jesse.
8. He fed the cub on milk and porridge – the animal that tore him into pieces later on.
9. The wedding party was very successful- people jumped about and merry made.
10. It was a memorable moment in my life time – the one I spent two days in the cold cells.
11. The bus had already left – the only one plying the route until the following day.

II. Countable and uncountable nouns

1. much 2. another; correct
3. several 4. more
5. any 6. some, any
7. no, some 8. many
9. neither, nor 10. much, several
11. many, much

b.

<table>
<thead>
<tr>
<th>Countable</th>
<th>Uncountable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Noise</td>
<td>Food</td>
</tr>
<tr>
<td>Loaves</td>
<td>Furniture</td>
</tr>
<tr>
<td>Degrees</td>
<td>Meat</td>
</tr>
<tr>
<td>Vehicles</td>
<td>Knowledge</td>
</tr>
<tr>
<td>Half</td>
<td>Flour</td>
</tr>
<tr>
<td>Handkerchief</td>
<td>Paper</td>
</tr>
<tr>
<td>feather</td>
<td>Bread</td>
</tr>
<tr>
<td>Community</td>
<td>Wheat</td>
</tr>
<tr>
<td>Footstep</td>
<td></td>
</tr>
<tr>
<td>Out cry</td>
<td></td>
</tr>
</tbody>
</table>

III. Adverbs with verb

1. scarcely 2. wrongly
3. innocently 4. beautifully
5. noiselessly 6. mercilessly
7. stealthily, quietly 8. tactfully
F. Let’s write
Let the learners write a report. Guide them in what is expected in writing a good report. Check their sentence construction and grammar.

Quick fire

**Homonyms**
1. practise - practice
2. air - heir
3. fool - full
4. heard - herd
5. ring - wring
6. knows - nose
7. peace - piece
8. reigns - rains/reins
9. our - hour
10. knot - not

Unit 10: The court of law

**A. Reading**

**B. Let’s recall the passage**
1. C – the laws are made by courts to check on people’s behaviour
2. A – the parliament makes laws and judiciary interprets them
3. A – someone who represents an offender in the court of law of law
4. D – a respondent is supposed to answer accusations alleged against him by the plaintiff
5. A – lodge an appeal before the end of two weeks
6. D – in the court of appeal
7. C – act as an arbitrator between the two sides
8. A – in order to get the truth
9. D – to bring back order in court
10. B – A visit to the court room

**C. Vocabulary**
1. capital sentence
2. complainant
3. gavel
4. arbitrator
5. jury
6. respondent
7. civil case
8. sentence
9. statement
10. exhibit
11. advocate
12. cross examine
13. litigant
14. court
15. Attorney General

**D. Language patterns**

I. Use of determine/cross examine/hear + nominal

1. The judge heard the case between the two brothers.
2. The court ruled in favour of the lady.
3. The judge cross-examined a group of standard eight girls.

II. Use of ‘Not only . . . but also’

a. Join sentences

1. Wambugu was not only a mason but also an experienced plumber.
2. Peter was not only the top student in KCPE in our province but also in KCSE in the whole country.
3. The government of Kenya is not only providing free education but also free meals to vulnerable pupils.
4. The hunter was arrested not only for poaching but also for selling game meat to unsuspecting customers.
5. The police officer not only gave his evidence but also produced the exhibits before the packed court.
6. Some pupils were expelled not only for destroying school property but also for peddling drugs in school.
7. Jane has proved not only good in spoken English but also extra-ordinary in her competence in written English.
8. The judge of High Court looked not only patient but also sober when he listened to the evidence given by the respondent.
9. The parliament vets not only the Attorney General but also the Chief Justice.
10. The two girls went to schools not only together but also attended the same college before they were posted to work in different places.

b. Sentences
1. Not only are Kevin, Sherry, Amina, Rhoda and Kamau are pupils in standard Five Red but also very good friends.
2. Kevin is very good not only at playing basketball but also cooking.
3. Sherry not only plays netball very well but also her dancing skills are quite exquisite.
4. Amina is not only very patient but also extra ordinarily kind.
5. Kamau is not only a good musician and dancer but also an actor.

III. Phrasal verbs with the verb 'put'
a.
2. Put away – make someone experience a difficulty.
4. Put forward – suggest something or offer an idea.
5. Put off – cause somebody to lose interest in doing something.
6. Put on – cover part of the body with clothing.
7. Put out – make something to stop burning.
8. Put through – to make a particular effort in order to achieve or prevent something.
10. Put up – to organise something using different ways.
b. Check the sentences constructed by the pupils. Ensure they are constructed using phrasal verbs.
c. Word to replace phrasal verbs
1. harnessed 2. transmit
3. extinguish 4. suggested
5. wrote 6. postponed
7. tolerate 8. discontinued
9. wear 10. removed
11. produced

IV. Use of This is . . . /It is called . . . /It is used for…
a.
1. A respondent is a person who is accused or charged in a court of law.
2. A suspect is a person who is expected to have been involved in committing a crime.
3. Evidence is a piece of information to explain how something happened produced in a court of law.
4. A case file is a file containing the case in front of the court.
5. The chief justice is the head of the judiciary.
6. Judgement is the verdict passed by the judge with his jury or by a magistrate.
7. A witness is the person who can produce the evidence of the circumstances of the case in court.
8. A charge is the crime someone is perceived to have committed.
9. An arbitrator is anybody who tries to reconcile two people who have disagreed.
10. An appeal is a request for a case whose judgement had been passed to be heard afresh.

b. Crossword
1. respondent  2. suspect
3. Review  4. accuse
5. law  6. cross examine
7. arbitrator  8. magistrate
9. appeal  10. imprison
11. office  12. murder
13. criminal  14. jail term

V. Use of relative pronouns ‘that/which’
1. The judges listened to the evidence which/that was brought to the court by the witnesses.
2. Why can’t you pay attention to the story which/that will be given by the respondent?
3. I came across a book which/that was used as a reference by all the lawyers.
4. Where were the missing files which contained all the cases before the court?
5. Mary fed on poisonous food that made her sick.
6. We have read the novel which was authored by Kipindi.
7. The investigators entered the room which the burglars broke into.
8. This is the best time that we can do a lot of revision for our exams.
9. You entered a court room which was packed to capacity.
10. Do you remember the evidence that you produced before this honourable court?

E. Grammar
I. Relative clauses with who, which, where, when, whose
1. She engaged the lawyer who defended her brother when he was accused of robbery with violence.
2. Have you seen the kittens whose mother was run over by a fast-moving car?
3. Mr Owino whose car is packed in front of his office is the new teacher.
4. Lamu is the only town where you find many donkeys or The only town where you find many donkeys is Lamu.
5. Can you recall the underground tunnel where the smugglers hid the stolen treasure?
6. The only house we have lived since we were small children is this or This is the only house where we have lived since we were small children.
7. I will tell you what happened to the accused when I come back.
8. Budalangi is the place where floods cause great damage to people and property.
9. The judge was in his chambers when I found him going through different case files.
10. We don’t exactly know when/where the judge will deliver his ruling or we don’t know exactly when/where the judge will deliver his ruling.

F. Let’s write
Let the learners write an account of what happened during the accident. The pictures will guide them in giving an account of what happened.

Quick fire

Proverbs
1. A stitch in time saves nine.
2. A bird in hand is worth two in the bush.
5. Health is better than wealth.
6. Set a thief to catch a thief.
7. A bad workman fights with his tools.
8. Make hay while the sunshine.
9. One man’s meat is another man’s poison.
10. Better the devil you know than the angel you don’t know.

Unit 11: Sea travel

A. Reading

B. Comprehension
1. D – large boats fitted with sails
2. B – metallic ships, replaced the wooden ones
3. D – the trawlers pull nets along as they move
4. A – it will reduce resistance as it moves in water
5. Check the meaning of the words in the dictionary
6. D – a ferry can never get stalled at any time
7. B – there are rapids and water falls along their courses
8. D – they repair the vessel immediately
9. B – Water transport

C. Vocabulary
1. passenger
2. pilot
3. cruise
4. propeller
5. captain
6. rudder
7. Oars
8. cargo
9. seaman

D. Language patterns

I. Simple present tense for habitual actions

a. Change into simple present tense
1. The airline flies from Asia to Europe once a week.
2. The ship is steered by the captain using a rudder.
3. During the day the passenger goes to the deck of the ship to see the view of the country.
4. Most of the seamen learn to swim as safety measure during emergency.
5. Before the plane takes off all the passengers are reminded to fasten their safety belts.
6. Whenever Wasike wakes up early in the morning, he takes a cup of tea before he heads to his office to start his day’s work.
7. The captain tries to use his expertise to steer the ship to safety during strong hurricane that sweeps along the coast.
8. The tanker carries crude oil to a refinery from Middle East where there are oil wells.
9. The ship carrying many tourists anchors at the Port of Mombasa before it continues on its schedule to another port.
10. A cruise ship changes its course after the weather becomes unconducive.

b. Fill blanks
1. transports 2. admire
3. ferry 4. paddle
5. travel 6. anchors

II. Adverbs of degree or (intensifiers)
1. The weather was quite fine and it favoured the occasion.
2. It was too late at night to risk going home
3. The trip to Zanzibar was really enjoyable and almost everybody got excited.
4. The captain was too annoyed to talk to any member of the crew.
5. The weather forecaster was absolutely right because failure to listen to him landed us into problems.
6. He was seriously injured after a bad road accident which made him bedridden for six months.
7. He was materially rich but spiritually poor.
8. This exercise was well done. Almost everybody in that class passed.
9. The house was poorly constructed. The walls were almost collapsing.
10. The noise of the ship was very loud. We had to close our ears.

III. Present continuous + or else
Matching column A to B
1. A ferry making a trip to the island must carry the correct weight or else it might be overloaded.
2. People intending to travel by air must check early or else they may be left at the airport the last minute.
3. Students going for Music festivals have to behave well or else they will be disqualified from the competition.
4. Pedestrians have to obey road safety rules or else they may be knocked down by motorists.
5. Athletes must practise thoroughly or else they may not perform well.
6. The captain must be very careful or else the ship may be hijacked by the sea pirates.
7. Nurses giving treatment to HIV and AIDS patients have to wear gloves or else they may get infected with the virus.
8. Passengers travelling by bus need to fasten their seat belts or else they may sustain serious injuries in case of an accident.

E. Grammar
I. The semi colon
1. The previous day was very dull; that day proved worse.
2. In the examination room you have to avoid bringing the following things: a newspaper; a mobile phone; a novel and a laptop.
3. Travelling by ship can cause him problems; travelling by air, could make him even sicker.
4. A sprain on your foot is painful; a toothache is even worse.
5. If you come in the evening make sure you: feed the chickens; water the cabbages; sweep the compound and lock the gate.
6. Controlling a ship is tedious; instructing people is even more demanding.
7. The bridal party looked excited; the crowd was even more joyful.
8. Chaki has several brothers among them being Raba; Rula, Penseli and set.
9. The darkness was enclosing the beach; night was beckoning.
10. The journey began at midnight; by morning we had arrived at Mtito Andei.

II. Conjunctions
a. Join sentences
1. Despite leaving home very early in the morning we arrived very late in the evening or despite the fact that we left home ...
2. (i) Although we had anchored the ship at the harbour it drifted away in the raging waves. OR
(ii) We had anchored the ship at the harbour although it drifted away in the raging waves.
3. I will not start the voyage until I am assured of my safety and that of the crew.
4. The captain was busy trying to communicate with another ship while the crew and passengers were busy draining the water from the deck.
5. Neither the pilot nor the air hostesses were anywhere to be seen.

b.
1. when  2. because  
3. although  4. in spite of
5. before  6. unless  
7. while

F. Let’s write
Let the learners complete the story. Check on the plot of the story, the cohesiveness of text, grammar and sentence construction.

Quick fire
Spelling
1. accept  2. surprise  
3. serpent  4. deceive  
5. pronunciation  6. dining hall
7. excitement  8. committed  
9. vice versa  10. queue

Unit 12: Health and hygiene

A. Reading

B. Let’s recall the passage
1. Pre-marital sex is the male-female relationship before marriage
2. D – discuss issues affecting the society to the pupils and the school staff
3. A – all the visitors were HIV positive
4. D – he wanted to keep the pupils anxious
5. A – he wanted them to know that it is not easy to differentiate a HIV positive person from the rest of the people just by looking at them
6. D – they thought differently about Aids victims
7. B – sensitise people and staff on how Aids is transmitted and to educate them on how to stay safe and live healthy
8. C – a disease that takes advantage of a weakened immune system
9. D – because they do not have sufficient knowledge on how Aids is spread
10. C – avoid going anywhere near an HIV positive person

C. Match column A to B
1. Sputum – body fluid that originates from respiratory organs produced by having chest related infections.
2. Opportunistic infections – diseases that take advantage of reduced body immunity of an HIV and AIDS person.
3. Deficiency – lack or shortage of something.
5. White blood cells – blood cells whose purpose is to defend the body from external attack.
6. Pre-marital sex – sex before marriage.
7. Contaminate – to make dirty.
10. Abstain- to restrain oneself from having sexual intercourse.

D. Language patterns
I. Present tense for description of general truths
1. HIV/AIDS is mainly transmitted through sexual intercourse.
2. Many people ignore the existence of AIDS until they fall victim of it.
3. People who indulge in irresponsible sex can easily contract AIDS.
4. Guidance and counselling helps to sensitise people on HIV/AIDS.
5. Lack of a healthy immune system of the body allows opportunistic diseases like pneumonia, common cold and diarrhoea to attack the body.
6. Majority of the hospital cases are either AIDS or Aids related ailments.
7. A careless person can easily contract AIDS.
8. AIDS does not attack other animals apart from human beings.
9. AIDS causes weaknesses in the human body and its immunity.
10. White blood cells defend the body against attack from foreign bodies.
11. Most of Aids Victims can easily contract tuberculosis.
12. Body fitness and living positively helps one to remain strong to fight back opportunistic diseases.

II. Use of the + some proper noun categories
1. the
2. the, the
3. The
4. The, the
5. The, the
6. The
7. the
8. the
9. the
10. the

III. Imaginary events
1. If I contracted Aids now, I would try to live positively.
2. If I were chosen the peer counsellor in my school, I would try to advise the young people to abstain.

Expect similar sentences from the learners. The sentences should be grammatically correct.

IV. Relative clauses introduced by who or whose
a.
1. whose 2. who

b. Joining sentences using who or whose
1. I met the girl whose skin has rashes all over.
2. The doctor who advised us to abstain was very kind to us.
3. Many people who do not follow the counsellors advice end up contracting sexually transmitted diseases or HIV.
4. Many people in that village whose blood was tested were positive for HIV/AIDs.
5. The person who is HIV positive looks healthy.
6. You followed Juma’s example who was not speaking the truth.
7. The woman whose husband died of AIDS is very desperate and badly needs help from well wishers.
8. The person whose body has started showing signs of AIDS looks weak and frail.
9. The doctors who try to search for cure of AIDS are very important to this country. Doctors who are very important to this country try to search for a cure for AIDS.
10. The mother whose blood is contaminated is not allowed to suckle her baby.

E. Grammar
I. The suffix –ful, -less, -ly, -ment, and -ish
a. The suffix –less
1. bluish 2. childish
3. reddish 4. blackish
5. foolish 6. Scottish
7. greyish 8. pinkish
b. Complete sentences
1. advertisement
2. colourful; wonderful
3. movement
4. commitment
5. treatment
6. agreement
7. foolish
8. hopeless
9. faithful; commitment
10. entertainment; involvement

II. Use of past simple tense
1. rang
2. giggled
3. sang
4. felt
5. did, did
6. Lost; travelled
7. was, wove
8. said, had
9. went; opened
10. put, left

F. Let’s write
Go through the speech written by the learners. Check use of direct and indirect speech and sentence construction.

Quick fire

Abbreviations
1. CID – Criminal Investigation Department
2. AIDS – Acquired Immune Deficiency Syndrome
3. MP – Member of Parliament
4. Hon - Honourable
5. M/S - Miss
6. PTO – Please Turn Over
8. WHO – World Health Organisation
9. NGO – Non Governmental

Unit 13: Modern Communication methods

A. Reading

B. Let’s recall the passage
1. D - letter
2. D – modern machines are more efficient and faster
3. A - browsing
4. B – receiving and transmitting information
5. B – telephone booths are no longer in use
6. B – the message would never go across if there is no network
7. D – sending letters using stamps
8. C – because it handles complicated mathematical calculations
9. C – this world will be a better place to live in with advanced technology
10. D – A world that never sleeps

C. Vocabulary
1. browse
2. email
3. connect
4. internet
5. address
6. key
7. surf
8. fax
9. telephone
10. network
11. letter
D. Language patterns

Present perfect continuous events in the past
1. Lucy has been learning to operate a computer for the last six months.
2. Have they been learning computing in this college?
3. Have you been listening to their conversations?
4. You have been sleeping the whole afternoon and you have been wasting a lot of time.
5. The pot has been boiling for more than six hours before it dried out.
6. Has Muhonja been writing her composition on time?
7. Has he been fixing a stamp on the envelope?
8. We have been observing a lot of change in modern technology.
9. Has she been listening to what I have been explaining about a mobile phone and network coverage?
10. Ole Kasai has been looking after his father’s cattle in the Kapiti plains.

E. Grammar

I. Past perfect continuous tense
1. All along, the candidate had been expecting to perform well in the examination.
2. We had been arriving in the school compound before sunrise.
3. The police had been following the criminals as they planned to raid a bank.
4. Doctors had been experimenting on the new vaccine which they expected to have an effect on the dreaded disease.
5. The kidnappers had been avoiding the police dragnet but that time round they were not lucky.
6. The land locked country had been exporting oil through our port.
7. The new factory had been emitting dangerous fumes of smoke into the atmosphere and it had been closed down.
8. Thousands of birds had been migrating to Africa from far distances because their natural habitats had been destroyed by human activities.
9. The teacher had been discussing about the modern means of communication.
10. The coverage of the whole book had been closely following the syllabus.
11. We had been revising the past test papers for the last two months.

II. Order of Adjectives

1. an expensive, small, brown, metallic
2. expensive, small, golden
3. smart, expensive, new, woollen
4. long, brownish, iron-sheet.
5. polite, tall, brown, Maasai
6. small, yellow, black, Kiswahili
7. sweet, brown
8. long, continuous dialling
9. big, brown, striped
10. big, bluish, wholesale

E. Let’s write

Let the learners choose what they want to write, then guide them on how to go about it.

Quick fire
1. relevant 2. browse
3. until 4. hardware
5. handset 6. occasionally
7. conscious 8. greetings
9. desert 10. minutes
Unit 14: The atmosphere and the solar system

A. Reading

B. Let’s recall the passage

1. D
2. (a) Atmosphere – This is a blanket of air that covers the surface of the planets
   (b) An orbit – This is path that the earth follows as it revolves round the sun.
   (c) Gravity
3. (a) A galaxy is defined as the home of stars.
   (b) Constellation – A constellation is a group or band of stars forming a specific pattern
4. A 5. D 6. A
7. B

C. Match column A to B

1. As soon as the clouds gather a heavy downpour will follow.
2. Immediately nitrogen disappears the world will go up in flames.
3. The candle will go off immediately all the oxygen is used up.
4. Before a heavy downpour, we experience a lot of heat.
5. The astronaut will be received jubilantly as soon as the rocket touches the surface of the sea.
6. As soon as the sun sets in the west, the moon will start shining brightly.
7. The moon will not reflect any light when the earth blocks the sunlight from reaching it.
8. When the air is finished every living creature on earth will perish.
9. Venus will be seen clearly when the sun rises showing its golden rays.
10. As soon as the rains come the seeds will germinate
11. Immediately astronauts land on the moon they will dig up some rocks and bring them back to the earth.
12. The clouds will clear when the rain stops.
13. Human beings will send people to colonise the planet Mars when they discover that it is habitable.
14. The forest cover will disappear when we cut down all the trees.
15. We shall not sit and watch as the atmosphere is completely polluted with poisonous gases.

D. Language patterns

I. Verbs followed by present participle
1. entertain walking
2. enjoy playing
3. hate listening
4. prefer sowing
5. start walking
6. avoid reading
7. fear walking
8. fear telling
9. keep whispering
10. keep sneezing

II. Positive statements
1. You shouldn’t have understood the effects of pollutants to the atmosphere.
2. Animals can’t only survive if there is no oxygen in the atmosphere.
3. We don’t have to feed on a balanced diet if we don’t want to remain healthy.
4. Most of us do not depend on the hidden energy and strength that originates from inside us.
5. She does not have to report the matter to the head teacher every time she notices a strange behaviour in the students.
6. The nut shouldn’t have been too hard to crack.
7. “The force of gravity does not hold all the heavenly bodies in their positions”, argued one of the pupils.
8. There is no evidence that there are people called Martians presently living on the planet Mars.
9. A very large number of people is not convinced that they can achieve many goals on their own.
10. The humidity in the atmosphere can’t give rise to a heavy downpour.

III. Negative statements changed into positive statements.
1. This saying says that charity begins at home.
2. I see the importance of being interested in all that goes on round us.
3. This book was written by a popular author.
4. We can achieve the millennium development goals with the current trend of corruption.
5. That student is as smart in education as he claims to be.
6. We have to agree that Nelisa has done a good job.
7. The bell to resume classes has gone.
8. The colour of the sky appears blue to our eyes.
9. We have finally come to the conclusion of this unit since we have learned everything.
10. We have to trust some body in this country because not everyone is corrupt.

E. Grammar
1. has been sleeping
2. has been speaking
3. has been showering
4. has been reading
5. has been drinking
6. has been watching
7. have been swimming
8. has been making
9. has been lecturing
10. have been quarrelling

F. Let’s write
Guide the learners on what is expected in writing a good article. Let them choose a title and write the article.

Quick fire
1. planet 2. astronaut
3. telescope 4. comet
5. star 6. atmosphere
7. condensation 8. moon
9. space 10. sun
11. earth 12. vapour

Unit 15: Civic education

A. Reading

B. Let’s recall the passage
1. C – we should elect our members of parliament wisely and exercise our voting rights
2. D – in discotheques
3. B – a government properly elected by the people themselves
4. D – the parliament cannot be dissolved before the end of five years
5. A – the Member of Parliament
6. D – you will be able to make yourself popular among the constituents
7. A
8. C – to make the government fulfil their promises to people
9. A – most of the MPs do not support it
10. B – the sergeant at arms keeps the records and proceedings in the house
C. Vocabulary
Accept sensible and correct answers
The president attended the meeting
The people elected members of parliament
to represent them.

D. Language patterns
I. Present perfect continuous for events
begun in the past which are still
continuing
1. has been
2. been learning
3. been listening
4. been expecting
5. has been practising
6. has been campaigning
7. been queuing
8. been following
9. been teaching
10. been conducting

II. Contrast of present perfect and past
simple with for
1. He worked as the Attorney General
   for more than twenty years.
2. He listened to the news on the outcome
   of elections for ten hours without
   sleeping.
3. Mr Matata represented the Mashimoni
   ward for three years as their county
   representative.
4. The pupils wrote a very good essay
   on how they wanted the changes to be
   implemented.
5. The school choir recited a very nice
   poem on patriotism for ten minutes.
6. We waited for the arrival of the
   minister for three hours.
7. The county government waited for
   two months to enable the people
   demolish the illegal structures on the
   road reserve.
8. His supporters had then campaigned
   for a whole month without resting.
9. The people observed a change in
   parliamentary debate for the last three
   months.
10. For how long had you ailed?

III. Contrast of for and since with present
    perfect
1. since 2. for
3. for 4. since
5. since 6. for
7. since 8. for
9. for 10. for
11. since

IV. Contrast of for and since with present
    perfect
a.
1. She has been our deputy head teacher
   for ten years.
   She has been our deputy head teacher
   since 2001.
2. Has Kenya been independent for a
decade now?
Expect similar answers from learners.
The sentences should be grammatically
correct.

b. Changing sentences into present
   perfect tense.
1. They have testified in the High Court
   for two months consecutively before
   winning the case.
2. She has been a politician for thirty four
   years before she retires.
3. The new bill has been put in place by
   the Members of Parliament.
4. The debate against child abuse has
   been introduced to the house by the
   nominated Member of Parliament.
5. Kenyan athletes have had reason to
   celebrate even before the results are
   officially announced.
6. The Vice President has announced that
   the government is going to resettle the
   internally displaced people soon.
7. The government has provided material and moral support to the contestants.
8. The Electoral Commission of Kenya has paid all the polling clerks who have served in different polling stations.
9. The Chief Justice has been vetted by the Parliamentary committee.
10. Have the disabled people voted in the already concluded voting exercise?

V. Use of past participle and past perfect tense

1. lied; laid
2. bitten, fled
3. flung
4. married; met
5. lent
6. taken; affixed
7. bought, delayed
8. purchased
9. expected
10. put, hurt

E. Grammar

I. The suffixes

a.
1. laziness
2. stubbornness
3. unbearable
4. commitment
5. remarkable
6. valuables
7. yellowish
8. approachable; slippery
9. smartness
10. knowledgeable

b. Past tense

1. produced
2. hanged
3. laid
4. flew
5. learned
6. flung
7. sprang
8. bore
9. dyed
10. died
11. forsook
12. fled
13. shook

F. Quick fire

1. parliament
2. mayor
3. debate
4. legislature
5. campaign
6. judiciary
7. constituency
8. vote
9. ballot
10. urban
11. chairman
12. speaker
13. councillor
14. president

Unit 16: Technology

A. Reading

B. Let's recall the passage

1. D – it was beneficial to learn computer for the future
2. C – the first computers were more bulky than the current computers
3. C – by connecting it with a cable
4. D – hard drive
5. B – they were appreciative
6. A – it keeps information in safe custody just the same way as cabinets
7. C – a computer takes commands just as a human being does
8. D – the hard disk
9. D – because she was able to print her name using a printer
10. C – the computers

C. Vocabulary

1. computer
2. connect
3. cable
4. screen
5. mouse
6. key board
7. command
8. save
9. flash disk
10. diskette
D. Language patterns

I. The conditionals with *would* and *could* + negative
Check whether the sentences written by the learners are negative. They should include either could or would in their construction.

II. Use of *understand/see* + questions
The learners should complete the dialogue using their own words.

III. Use of *should* for obligation
1. Before we close our offices in the evening we should make sure the power is switched off.
2. Everyone should learn how to operate a computer because we are expected to be computer literate.
3. If your computer develops a problem you should take it for repair at once.
4. If you type a document on a computer you should go through it to rectify mistakes.
5. If you want to learn how to use a computer you should start attending classes.
6. If you want to be fit and healthy you should do a lot of exercises.
7. If your computer types very small letters you should adjust the font size.
8. If Mutinda intends to pass her examination in computing she should do a lot of practice.
9. We should take a lot of water if we don’t want to become dehydrated.
10. We should be very observant if we want to follow all that is happening.

IV. Use of *should* for probability
1. Having completed the computer course the pupils should now be able to type letters without any problem.
2. Seeing that you have learnt all the parts of the computer you should be in a position to write down their names.
3. Heavy clouds having gathered it should be raining heavily very soon.
4. The farmer should be harvesting his crops by now having planted his crops very early this year.
5. Having completed and passed your examination they should be rewarding you with a certificate.
6. This term should be ending after working tirelessly for three months.
7. Amina should be celebrating her birthday today this being the day she was born.
8. Everybody should be able to browse having used a computer for six months now.
9. They should be arriving now having started their journey before dawn.
10. The class should be going home now having completed their exam yesterday morning.

V. Sentence construction
Let the learner construct correct and sensible sentences using the words listed and following the given example.

E. Grammar

I. Prepositions
1. by  2. with  3. in  4. to  5. on; through; to  6. on  7. into  8. in  9. about  10. on; to

II. Order of Adjectives
1. beautiful, red and black, concentric  2. beautiful, expensive, round, golden  3. beautiful; expensive, rectangular, striped  4. small, silver, metallic  5. old, small, round, mud  6. sharp, long, graphite  7. cunning, small, wild
8. expensive, green, mountain
9. beautiful, popular, learned, Indian
10. strong, large, blue, plastic

III. Tenses
a.
1. worked
2. repairs/has repaired/will repair
3. laying
4. been swimming
5. has been crying
6. been doing
7. rattles
8. singing
9. been coming
10. completed
11. attended/been attending

b. Word puzzle
1. software
2. command
3. mouse
4. monitor
5. cable
6. keyboard
7. skill
8. printer
9. video player; programme
10. memory
11. diskette
12. computer
13. disk

F. Let’s write
Learners should write an educative composition about the computer.

Quick fire
Spelling
1. Celebrate
2. fulfilment
3. The fried food is full of flies.
4. received
5. believed
6. monitor
7. diskette
8. printer
9. queue
10. knead

Answers to Test Papers
Test paper 1
1. B
2. D
3. C
4. A
5. A
6. A
7. C
8. A
9. B
10. A
11. educated
12. hospitalised
13. rumoured
14. sympathised
15. lengthen/prolong
16. protected
17. housed
18. transported
19. populated
20. feed
21. This is the place where he keeps all his belongings.
22. Do you hear that we are holding the end of year party?
23. Does she realise that the son is being used in drug-trafficking?
24. How long does it take you to finish the task?
25. I do not know what I am expected to do whenever I am left at home.
26. The road to success is often rugged and rough.
27. Nobody I know gets cured of epilepsy but it is controlled with proper medication.
28. Before the sun rises my mother has prepared breakfast for the family.
29. The teacher observes the tremendous improvement Linda makes in Mathematics.
30. The war fought by the community against spread of AIDS bears a lot of fruits.

Test Paper 2
1. C
2. A
3. A
4. A
5. B
6. D
10. B  11. speechless  
12. fluency  
13. asleep/sleeping  
14. successfully; locality; lawlessness  
15. comedian; humorously  
16. organisation; eventually  
17. excitedly; quickly  
18. stealthily; engagement; marriage  
19. by  20. in  
21. from  22. on  
23. to; between  24. against  
25. on a silver plate  
26. while the sun shines  
27. twice shy  
28. and sure wins the race  
29. before they are hatched  
30. has a silver lining  

Test paper 3  
10. C  11. treatment  
12. discouraged  13. judgement  
14. hostility; warring  
15. introduction; eased  
16. disagreement  
17. humility; brought  
18. commitment, diligence  
19. arrival; management  
20. patience; dismissal  
21. joined; improvement  
22. fulfilment; confidence  
23. importance; completion  
24. movement; shuffling  
25. The best selling story book was written by a very famous author.  
26. By who is the trip to the national park being arranged this year?  

27. The standard eight class has been taught how to use phrasal verbs by the teacher of English.  
28. The instructions given before the examination will be read by the pupils.  
29. We were promised very fabulous presents by him if we did well in the end of the year examination.  
30. Her computer course will have been completed (by her) before the year ends.  

Test paper 4  
10. D  
11. Tim listened to the secret conversation among the kidnappers and informed the police about their plan.  
12. What have you been doing since you arrived here three hours ago?  
13. Although Teddy left that place in a hurry, he could not manage to arrive home before night fall.  
14. The boy whose leg was badly injured when playing football in the field was given first aid by his friends.  
15. The tea you placed on the table is too hot for the child to take.  
16. The little boy was taken to an approved school because he broke into a neighbours house and stole some money.  
17. I am feeling tired and exhausted today.  
18. Neither Pamela nor Tina had attended the birthday party.  
19. The beautiful lady dressed herself in very expensive clothes.  
20. The peacock spreads her feathers beautifully as if to show the observers how proud she is.  
21. Patiently, the lioness waited for the deer to come closer where she could pounce on her.
22. The cock wanted his friend to call his cockrel.
23. put up
24. put off
25. put across
26. wake up
27. take up
28. get on
29. broke up
30. putting up

Test Paper 5
1. D 2. B 3. B
10. D

II. Adjectives
1. sorrowful
2. deep
3. readable
4. adjectival
5. faithful
6. remarkable
7. able
8. proverbial
9. responsive
10. active
11. fashionable
12. speakable
13. useful
14. knowledgeable
15. washable
16. provocative
17. valuable
18. available
19. protective
20. reliable
21. calculable
22. fortunate
23. stony
24. hilly
25. chilly
26. wise
27. talkative
28. merciful
29. alternative
30. foolish

III. Verb formulation
1. simplify
2. beautify
3. correct
4. improve
5. rage
6. materialise
7. jeopardise
8. energize
9. prove
10. advise
11. honour
12. weaken
13. terrify
14. straighten
15. circulate
16. revolve
17. encourage
18. summarise
19. differentiate
20. fasten
21. relate
22. familiarise
23. fatten
24. cycle
25. collide
26. provide
27. empower
28. endear
29. horrify
30. add

IV. Complete similes
1. merry
2. strong
3. nymph
4. client
5. essence
6. critic
7. jockey
8. block

V. Reported speech
9. The farmer asked his son where he would go the following morning.
10. The counsellor wondered and said he/she did not understand why people had decided to live on drugs.
11. John told Martin that he intended to pay his friend a visit before he went home.
12. The mother asked the girls why they could not tidy up the room.

Model test paper 1
1. A 2. B 3. C
31. C 32. A 33. A
34. B 35. B 36. C
37. A 38. C 39. A
40. C 41. D 42. C
43. A 44. C 45. A
46. D 47. B 48. C
49. C 50. B
<table>
<thead>
<tr>
<th>Model test paper 2</th>
<th>Model test paper 3</th>
<th>Model test paper 4</th>
<th>Model test paper 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>34. C</td>
<td>35. D</td>
<td>34. D</td>
<td>35. B</td>
</tr>
<tr>
<td>40. D</td>
<td>41. B</td>
<td>40. B</td>
<td>41. D</td>
</tr>
<tr>
<td>43. B</td>
<td>44. D</td>
<td>43. B</td>
<td>44. D</td>
</tr>
<tr>
<td>46. D</td>
<td>47. A</td>
<td>46. B</td>
<td>47. C</td>
</tr>
</tbody>
</table>

| 40. B             | 41. A             | 42. B             | 41. D             |
| 43. D             | 44. C             | 45. A             | 44. B             |
| 46. B             | 47. D             | 48. A             | 47. C             |

| 34. D             | 35. B             | 36. C             | 35. B             |
| 40. B             | 41. D             | 42. A             | 41. D             |
| 43. B             | 44. D             | 45. C             | 44. D             |
| 46. B             | 47. C             | 48. D             | 47. C             |
Breakthrough Workbook Maths 8

Unit 1: Revision

**Exercise 1**

A

1. Thousands

B

<table>
<thead>
<tr>
<th>Number</th>
<th>Hundred million</th>
<th>Ten million</th>
<th>Millions</th>
<th>Hundred thousands</th>
<th>Ten thousands</th>
<th>Hundreds</th>
<th>Tens</th>
<th>Ones</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>5 6 4 1 0 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>1 4 5 7 9 2 1 5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>6 708 532</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>637 011 763</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
<td></td>
<td>5 0 9 2 6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>4 2 3</td>
<td>7 1 0 9 5 0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>183 524</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>56 984</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>8 792 541</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>9 2</td>
<td>3 5 0 6 1 8</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td></td>
<td>3 0 1 8 6 4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

C.

1. 8
2. 5000
3. 70 000
4. 300 000 000
5. 50
6. 10 000
7. 100 000 000
8. 0

D.

1. Thousands
2. Ten Millions
3. Hundred Millions
4. Ones
5. Millions
6. Ten thousands
7. Tens
8. Hundreds

**Exercise 2**

A.

1. Four million, eighty-one thousand and ten
2. Two million, five hundred and one thousand, nine hundred and three
3. Six million, three hundred and twenty-nine thousand, one hundred and fifty seven.
4. Nine million, one hundred and forty-
seven thousand, eight hundred and sixty-three

5. Two hundred and ninety million, four hundred and seventy-six thousand nine hundred and eighty.

6. Thirty-five million, eighty-one thousand, six hundred and twenty-nine.

7. Two million, one hundred and four thousand and thirty-five.

8. Eight million, six hundred and ninety-seven thousand, five hundred and six.

9. Ninety-five million, two hundred and eighty-six thousand, one hundred and seven.

10. Three hundred and ten million, seven hundred and forty thousand, nine hundred and twenty.

11. Ninety million, sixty-two thousand and forty.

12. Twenty million, seventy-nine thousand and sixty-eight.

B

1. 542 752 302  2.  3 406 022
2. 54 792 451  3.  6 399 157
3. 12 059 190  4.  228 001 025
4. 74 020 352  5.  7 312 152
5. 5 000 500  6.  42 002 008
6. 302 000 001  7.  78
7. 605 202 572  8.  30 009 208
8. 904 000 302

Exercise 3

A.

1. 81  2. 441
3. 1225  4. 5184
5. 6724  6. 8100
7. 14 400  8. 16 900
9. 19 600  10. 90 000
11. 176 400  12. 252 004

B.

1. 64  2. 144
3. 225  4. 324
5. 625  6. 1024
7. 1444  8. 4900
9. 8100  10. 16 900
11. 19 600  12. 360 000
13. 100 cm²  14. 81 m²

Exercise 4

1. 18  2. 24
3. 10  4. 32
5. 25  6. 36
7. 30  8. 22
9. 15  10. 20
11. 70  12. 42
13. 91  14. 120
15. 78  16. 53
17. 65 m  18. 26
19. 200  20. 108 m
21. 192 m  22. 0.09 m²
23. 1.5 m  24. 1452 cm²
25. 10 pieces.

Exercise 5

1. 0.4  2. 0.08
3. 0.009  4. 0.0043
5. 0.0093  6. 4.34
7. 1.875  8. 7.1
9. 3.35  10. 25.4
11. 0.625  12. 0.75
13. 0.4  14. 0.15
15. 0.875  16. 0.32
17. 0.5625  18. 0.175
19. 0.35  20. 0.58
**Exercise 6**

1. \( \frac{49}{50} \)  
2. \( \frac{14}{25} \)  
3. \( \frac{1}{4} \)  
4. \( \frac{173}{200} \)  
5. \( \frac{1}{125} \)  
6. \( \frac{3}{5} \)  
7. \( \frac{1}{10} \)  
8. \( \frac{4}{25} \)  
9. \( \frac{3}{11} \)  
10. \( \frac{1}{5} \)  
11. \( \frac{15}{25} \)  
12. \( \frac{4}{8} \)  
13. \( \frac{4}{50} \)  
14. \( \frac{1}{1000} \)  
15. \( \frac{9}{200} \)  
16. \( \frac{3}{40} \)  
17. \( \frac{1}{20} \)  
18. \( \frac{25}{25} \)  
19. \( \frac{7}{100} \)  
20. \( \frac{1}{10} \)

**Exercise 7**

1. 55.56%  
2. 37.5%  
3. 80%  
4. 28.6%  
5. 75%  
6. 90%  
7. 46%  
8. 360%  
9. 50%  
10. 90%  
11. 105%  
12. 520%  
13. 225%  
14. 350%  
15. 180%  
16. 475%  
17. 62.5% or 62\( \frac{1}{2} \)%  
18. 75%  
19. 25%  
20. 25%  
21. 60%

**Exercise 9**

1. 70%  
2. 50%  
3. 30%  
4. 38%  
5. 102%  
6. 210%  
7. 320%  
8. 8%  
9. 640%  
10. 860%  
11. 75%  
12. 125%  
13. 47.8%  
14. 955%  
15. 117.5%  
16. 9%  
17. 70%  
18. 60%  
19. 75%  
20. 83.2%  
21. 41.3%  
22. 11%  
23. 25%  
24. 21%  
25. 75%

**Exercise 10**

A

1. 0.25  
2. 0.45  
3. 0.54  
4. 0.89  
5. 0.47  
6. 0.01  
7. 0.89  
8. 0.63
Unit 2: Operations on numbers

Exercise 11

A
1. 4 594 808
2. 31 841 290
3. 1 629 214
4. 79 953 515
5. 77 719 272
6. 4 771 602
7. 11 757 014
8. 220 998
9. 95 568 125
10. 647 388 954

B
1. 11 400
2. 14 598
3. 25 023
4. 29 481
5. 65 192
6. 225 509
7. 743 353
8. 1 182 485
9. 10 728 577
10. 3 609 732
11. 52 498 451
12. 109 974 969
13. 683 313 944
14. 1 664 976 052
15. 126 992 152

C
1. 222 438 litres
2. 87 595 books
3. sh 851 500
4. sh 172 948

Exercise 12

A
1. 487 394
2. 323 280
3. 464 237
4. 758 889
5. 1 074 538
6. 3 610 710
7. 5 189 224
8. 38 364 821
9. 1 361 812
10. 234 249 193
11. 179 103 539
12. 7 136 349
13. 4 259 534
14. 15 846 001
15. 1

B
1. 11 360
2. 8664
3. 265
4. 18 498
5. 156 168
6. 208 016
7. 400 356
8. 314 393
9. 8 105 061
10. 88 476 573
11. 51 448 807
12. 82 112 332
13. 266 304 883
14. 93 620 414
15. 89 992 907

C
1. sh 575 690
2. 31 357 658
3. 188 210 litres
4. 5 514 631 kg
5. 59 588 tonnes
6. 88 115 larvae
7. 1 369 693 tonnes
8. 1 742 154 people
9. sh 1 902 544
10. sh 354 150
Exercise 13

A
1. 5 292
2. 4 212
3. 3 276
4. 4 896
5. 209 952
6. 953 700
7. 1 198 925
8. 4 100 970
9. 5 078 580
10. 26 673 300
11. 13 312 350
12. 25 342 504
13. 10 198 925
14. 4 100 970
15. 209 952
16. 953 700
17. 1 198 925
18. 4 100 970
19. 5 078 580
20. 26 673 300

B
1. 103 824
2. 817 425
3. 89 072
4. 317 394
5. 1 957 060
6. 4 120 611
7. 7 629 188
8. 3 023 088
9. 23 351 339
10. 51 971 652
11. 76 221 122
12. 34 466 915
13. 8 469 650
14. 37 757 016
15. 317 284 656
16. 179 723 856
17. 147 067 728
18. 471 567 865
19. 58 548 420
20. 322 883 990
21. 829 209 798

C
1. 1 053 920 oranges
2. sh 1 847 692
3. 5 043 419 litres
4. 125 664 litres
5. 10 520 670 kg
6. sh 3 402 000
7. 88 tyres
8. 308 glasses of juice
9. 373 500 kg
10. 1 416 800 fruits

Exercise 14

A
1. 13
2. 153
3. 81
4. 169
5. 2197
6. 1320
7. 820
8. 2730
9. 5929
10. 880
11. 608
12. 1325
13. 236
14. 625
15. 625
16. 2883
17. 7035
18. 3150
19. 706
20. 11 750.4

B
1. 195
2. 108
3. 399
4. 984
5. 45
6. 962
7. 1370
8. 672
9. 5253
10. 961
11. 1005
12. 1542.68
13. 707.21
14. 2459
15. 3384

C
1. sh 3024
2. 948 passengers
3. 56 pens
4. sh 2959
5. sh 15 850
6. sh 1125
7. 75 rows
8. 700 litres
9. 250 eggs
10. 1549 books

Exercise 15

1. 1984
2. 27
3. 265
4. 7
5. 22
6. 84
7. 49
8. 108
9. 294
10. 6
11. 15
12. 16
13. 24
14. 100
15. 129
16. 315
17. 35
18. 170
19. 3.5
20. 9
21. 1
22. 0
23. 2
24. 12
Exercise 16

1. 80, 160  
2. $10^2, 12^2$  
3. 220, 120  
4. 11, 16  
5. 20, 0  
6. 196, 225  
7. 134  
8. 75  
9. 360  
10. 1440

Exercise 17

1. $\frac{2}{3}$  
2. $\frac{2}{3}$  
3. $\frac{1}{3}$  
4. $\frac{2}{3}$  
5. $\frac{11}{16}$  
6. $\frac{3}{7}$  
7. $\frac{1}{2}$  
8. $\frac{11}{18}$  
9. $\frac{3}{8}$  
10. $\frac{1}{5}$  
11. $\frac{7}{20}$  
12. $\frac{4}{5}$  
13. $\frac{5}{13}$  
14. $\frac{2}{15}$  
15. $\frac{1}{11}$  
16. $\frac{7}{10}$  
17. $\frac{1}{5}$  
18. $\frac{1}{9}$  
19. $\frac{1}{4}$  
20. $\frac{111}{240}$

Exercise 18

1. $\frac{23}{24}$  
2. $1\frac{5}{36}$  
3. $\frac{4}{6}$ or $\frac{2}{3}$  
4. $1\frac{29}{63}$  
5. $\frac{3}{4}$  
6. $1\frac{3}{40}$  
7. $1\frac{1}{8}$  
8. $1\frac{2}{11}$  
9. $21\frac{57}{58}$  
10. $72\frac{31}{42}$  
11. $45\frac{7}{9}$  
12. $5\frac{33}{38}$  
13. $6\frac{12}{35}$  
14. $8\frac{1}{8}$  
15. $12\frac{26}{35}$  
16. $11\frac{10}{49}$  
17. $7\frac{39}{40}$  
18. $26\frac{3}{10}$  
19. $46\frac{14}{51}$  
20. $20\frac{41}{60}$

Exercise 19

1. $\frac{2}{15}$  
2. $\frac{2}{9}$  
3. $\frac{1}{8}$  
4. $\frac{3}{22}$  
5. $\frac{1}{55}$  
6. $\frac{5}{18}$  
7. $\frac{7}{48}$  
8. $\frac{250}{513}$  
9. $89\frac{21}{35}$ or $89\frac{3}{510}$  
10. $\frac{6}{17}$  
11. $\frac{17}{21}$  
12. $6\frac{3}{14}$  
13. $9\frac{8}{7}$  
14. $44\frac{3}{8}$  
15. $89\frac{229}{450}$  
16. 320  
17. $6\frac{1}{20}$  
18. $10\frac{19}{30}$  
19. $5\frac{2}{30}$ or $5\frac{1}{1520}$  
20. $9\frac{18}{18}$  
21. $1\frac{23}{24}$  
22. $5\frac{26}{36}$  
23. $39\frac{7}{24}$  
24. $6\frac{2}{8}$ or $6\frac{1}{4}$

Exercise 20

1. $\frac{1}{30}$  
2. $\frac{1}{32}$  
3. $\frac{1}{6}$  
4. $\frac{9}{52}$  
5. $\frac{1}{8}$  
6. $\frac{9}{20}$  
7. $\frac{1}{2}$  
8. $\frac{78}{175}$  
9. $42\frac{1}{2}$  
10. $58\frac{2}{3}$  
11. $180\frac{3}{8}$  
12. 141  
13. 81  
14. $2\frac{2}{5}$  
15. $115\frac{1}{2}$  
16. 88  
17. $12\frac{1}{18}$  
18. $7\frac{1}{4}$
19. 7  
20. $\frac{58}{135}$  
21. 8  
22. $15 \frac{5}{6}$  
23. $333 \frac{1}{7}$  
24. $22 \frac{2}{6}$ or $22 \frac{1}{3}$  

### Exercise 21

1. 49  
2. 27  
3. 36  
4. 25  
5. $46 \frac{1}{2}$  
6. $385 \frac{5}{7}$  
7. $32 \frac{1}{2}$  
8. 7  
9. $\frac{1}{24}$  
10. $\frac{1}{18}$  
11. $\frac{1}{65}$  
12. $\frac{7}{80}$  
13. $\frac{3}{175}$  
14. $\frac{1}{100}$  
15. $\frac{5}{441}$  
16. $\frac{2}{15}$  
17. 2  
18. $\frac{1}{2}$  
19. $1 \frac{1}{2}$  
20. $\frac{1}{3}$  
21. $1 \frac{1}{2}$  
22. $1 \frac{1}{20}$  
23. $\frac{5}{8}$  
24. 1  
25. $\frac{36}{319}$  
26. $\frac{5}{44}$  
27. $\frac{77}{650}$  
28. $\frac{13}{153}$  
29. $6 \frac{1}{3}$  
30. $9 \frac{3}{7}$  
31. $20 \frac{5}{6}$  
32. $6 \frac{11}{15}$  

### Exercise 23

1. $\frac{2}{5}$ tonnes  
2. 96 km  
3. 72 kg  
4. Tennis  
5. $28 \frac{4}{5}$ cm  
6. 10 200 people  
7. 86 Animals  
8. $\frac{5}{32}$  
9. $\frac{1}{12}$  
10. $\frac{2}{15}$  

### Exercise 24

#### A

1. 15.2355  
2. 54.189  
3. 7.599  
4. 17.869  
5. 103.057  
6. 26.401  
7. 62.531  
8. 28.47  
9. 25.5051  
10. 15.75  

#### B

1. 0.833  
2. 7.38  
3. 550.209  
4. 3993.295  
5. 6697.331  
6. 176.085  
7. 7.323  
8. 111.203  
9. 11 170.5843  
10. 1310  
11. 2.1034  
12. 1522.3  

### Exercise 25

#### A

1. 6.155  
2. 3.73  
3. 0.802  
4. 8.01
<table>
<thead>
<tr>
<th>Exercise 26</th>
<th>Exercise 27</th>
<th>Exercise 28</th>
<th>Exercise 29</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td></td>
<td></td>
<td>A</td>
</tr>
<tr>
<td>1. 0.1875</td>
<td>1. 16 km/h</td>
<td>1. 150</td>
<td>1. 20%</td>
</tr>
<tr>
<td>2. 2.205</td>
<td>2. 331.5 cm²</td>
<td>2. 172.5</td>
<td>2. 43.3%</td>
</tr>
<tr>
<td>3. 1.21</td>
<td>3. 40 km 24 m</td>
<td>3. 135</td>
<td>3. 66.7%</td>
</tr>
<tr>
<td>4. 12.636</td>
<td>4. 6.002</td>
<td>4. 181.25</td>
<td>4. 7.5%</td>
</tr>
<tr>
<td>5. 17.64</td>
<td>5. 1000</td>
<td>5. 6466</td>
<td>5. 44.8 words/min</td>
</tr>
<tr>
<td>6. 140</td>
<td>6. 1.3611</td>
<td>6. 3815</td>
<td>6. 24</td>
</tr>
<tr>
<td>7. 1022.04</td>
<td>7. 4.322</td>
<td>7. 1227</td>
<td>7. 93 135</td>
</tr>
<tr>
<td>8. 720</td>
<td>8. 19.714</td>
<td>8. 672</td>
<td>8. sh 93 135</td>
</tr>
<tr>
<td>10. 33.8</td>
<td>10. 19.714</td>
<td>10. 77292.5</td>
<td>10. sh 592.60</td>
</tr>
<tr>
<td>11. 57.2</td>
<td>11. 4.66</td>
<td>11. 7.8 hr</td>
<td>11. 7.8 hr</td>
</tr>
<tr>
<td>12. 1538.9</td>
<td>12. 4.66</td>
<td>12. 800.00</td>
<td>12. 150</td>
</tr>
<tr>
<td>13. 690</td>
<td>13. 4.66</td>
<td>13. 30</td>
<td>13. 20%</td>
</tr>
<tr>
<td>14. 10.545</td>
<td>14. 525.76</td>
<td>14. 100</td>
<td>14. 30%</td>
</tr>
<tr>
<td>15. 0.001</td>
<td>15. 4.66</td>
<td>15. 30</td>
<td>15. 30%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>B</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. 0.25</td>
<td>1. 20%</td>
<td>1. 20%</td>
<td>1. 20%</td>
</tr>
<tr>
<td>2. 0.3</td>
<td>2. 43.3%</td>
<td>2. 43.3%</td>
<td>2. 43.3%</td>
</tr>
<tr>
<td>3. 0.012</td>
<td>3. 66.7%</td>
<td>3. 66.7%</td>
<td>3. 66.7%</td>
</tr>
<tr>
<td>4. 0.12</td>
<td>4. 7.5%</td>
<td>4. 7.5%</td>
<td>4. 7.5%</td>
</tr>
<tr>
<td>5. 100.36</td>
<td>5. 44.8 words/min</td>
<td>6. 224 $\frac{1}{4}$ hr</td>
<td></td>
</tr>
<tr>
<td>6. 0.002</td>
<td>6. 224 $\frac{1}{4}$ hr</td>
<td>6. 224 $\frac{1}{4}$ hr</td>
<td></td>
</tr>
<tr>
<td>7. 2.54</td>
<td>7. 24</td>
<td>7. 24</td>
<td>7. 24</td>
</tr>
<tr>
<td>8. 1000</td>
<td>8. 93 135</td>
<td>8. 93 135</td>
<td>8. 93 135</td>
</tr>
<tr>
<td>10. 1.3611</td>
<td>10. 77292.5</td>
<td>10. 77292.5</td>
<td>10. 77292.5</td>
</tr>
<tr>
<td>11. 250</td>
<td>11. 7.8 hr</td>
<td>11. 7.8 hr</td>
<td>11. 7.8 hr</td>
</tr>
<tr>
<td>12. 4.322</td>
<td>12. 800.00</td>
<td>12. 800.00</td>
<td>12. 800.00</td>
</tr>
<tr>
<td>13. 12.311</td>
<td>13. 4.66</td>
<td>13. 150</td>
<td>13. 150</td>
</tr>
<tr>
<td>14. 0.1</td>
<td>14. 50%</td>
<td>14. 50%</td>
<td>14. 50%</td>
</tr>
<tr>
<td>15. 0.5667</td>
<td>15. 1600 people</td>
<td>15. 1600 people</td>
<td>15. 1600 people</td>
</tr>
</tbody>
</table>
Exercise 30

A
1. sh 22.40  
2. 95.04  
3. 720  
4. 39 000  
5. 6375  
6. 710  
7. $\frac{11}{60}$  
8. $11\frac{1}{2}$ or 11.5  
9. 1592  
10. 104  
11. 3600  
12. 0.25 litres  
13. 452.4  
14. 0  
15. 448  
16. 2.5  
17. 72  
18. 2.55 km

B
1. 650  
2. 775  
3. 712.5  
4. 5300  
5. 950  
6. 1650  
7. 10 000  
8. 28 000  
9. 7.5  
10. 40  
11. 10  
12. 200

C
1. 30%  
2. 500 Pupils  
3. 13.33%  
4. 200 girls  
5. 90%  
6. 25.3 kg  
7. 400 pupils  
8. 100 robberies  
9. 25.5 km  
10. 55 students  
11. sh 555 750  
12. 600 000 tonnes  
13. 2400 cases  
14. 600 litres

Unit 3: Measurement

Exercise 31

A
1. 3 cm  
2. 0.8 cm  
3. 4000 cm  
4. 10 000 cm  
5. 400 cm  
6. 5500 cm  
7. 2000 cm  
8. 52 000 cm  
9. 20 000 cm  
10. 3500 cm  
11. 450 cm  
12. 5000 cm

B
1. 200 mm  
2. 62 mm  
3. 75 mm  
4. 860 000 m  
5. 40 mm  
6. 56 mm  
7. 500 mm  
8. 27 500 mm  
9. 10 000 000 mm  
10. 1100 mm  
11. 305 mm  
12. 10 000 mm

C
1. 1.4 m  
2. 6 m  
3. 10 000 m  
4. 80 000 m  
5. 2 m  
6. 4.5 m  
7. 45 m  
8. 10 500 m  
9. 3700 m  
10. 16 m  
11. 2000 m  
12. 2600 m

D
1. 0.008 km  
2. 24 km  
3. 0.2 km  
4. 7 km  
5. 40 km  
6. 7 km  
7. 650 km  
8. 0.32 km  
9. 56 km  
10. 5.6 km  
11. 5.174 km  
12. 0.065 km

E
1. 4 dm  
2. 30 dm  
3. 5000 dm  
4. 6000 dm  
5. 100 dm  
6. 525 dm  
7. 7600 dm  
8. 2500 dm  
9. 52 000 dm  
10. 6150 dm  
11. 32.5 dm  
12. 100 dm

F
1. 20 Dm  
2. 600 Dm  
3. 8000 Dm  
4. 280 Dm  
5. 37.5 Dm  
6. 250 Dm  
7. 65 Dm  
8. 0.501 Dm
9. 30 Dm  
10. 15 Dm  
11. 24 Dm  
12. 500 Dm  

G  
1. 4.6 Hm  
2. 60 Hm  
3. 360 Hm  
4. 8 Hm  
5. 5.6 Hm  
6. 0.4 Hm  
7. 0.07 Hm  
8. 14 Hm  
9. 20 Hm  
10. 3.7 Hm  
11. 220 Hm  
12. 60.2 Hm  

Exercise 32  
1. (a) 4.15 m  
   (b) 41.5 dm  
   (c) 487 dm  
   (d) 4870 mm  
2. 240 strides  
3. (a) 1.45 km  
   (b) 0.85 km  
4. 2000 m  
5. 2 km  
6. (a) 0.01628 km  
   (b) 1628 cm  
   (c) 162.8 dm  
   (d) 1.628 dm  
7. 5.10 m  
8. 1 dm 5cm  
9. (a) 992 m  
   (b) 9920 dm  
   (c) 0.992 km  
10. 8 Hm 22 m 1 dm  
11. (a) 1.5 km  
    (b) 15 Hm  
    (c) 1500 m  
    (d) 150 dm  
12. 206 poles  
13. 12. 928 km  

Exercise 33  
A  
1. 16.6 km  
2. 23 Hm  
3. 176 cm  
4. 730 m  
5. 30 m  
6. 680 cm or 6.8 m  
7. 47 m  
8. 52 cm  
9. 108 m  

B  
1. 165 cm  
2. 11 m  
3. 330 cm  

Exercise 34  
1. 80 posts  
2. 29.6 m  
3. 78 litres  
4. 2800 m  
5. 200 m  
6. 33 cm  
7. 57 revolutions  
8. 50.548 cm  
9. 3 m  
10. 550 m  
11. 234.872 m  
12. 379  
13. 3 laps  
14. (a) 13.61 cm  
   (b) 106.76 cm  
15. 106.76 cm  
16. 0.25 74 km  
17. 226 m  
18. 813  

Exercise 35  
A  
1. 40 cm²  
2. 64 cm²  
3. 36 cm²  
4. 25 cm²  
5. 40 cm²  
6. 16 cm²  

B  
<table>
<thead>
<tr>
<th>Base</th>
<th>Height</th>
<th>Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>8 cm</td>
<td>4 cm</td>
</tr>
<tr>
<td>2.</td>
<td>24 cm</td>
<td>20 cm</td>
</tr>
<tr>
<td>3.</td>
<td>10.5 mm</td>
<td>2.4 m</td>
</tr>
<tr>
<td>4.</td>
<td>14 cm</td>
<td>6 cm</td>
</tr>
<tr>
<td>5.</td>
<td>6 m 30 cm</td>
<td>5 m</td>
</tr>
<tr>
<td>6.</td>
<td>10 cm</td>
<td>3.24 cm</td>
</tr>
<tr>
<td>7.</td>
<td>66 m</td>
<td>55 m</td>
</tr>
<tr>
<td>8.</td>
<td>4.2 mm</td>
<td>2.4 mm</td>
</tr>
<tr>
<td>9.</td>
<td>40 m</td>
<td>7.25 m</td>
</tr>
<tr>
<td>10.</td>
<td>120 m</td>
<td>60 m</td>
</tr>
<tr>
<td>11.</td>
<td>22.2 cm</td>
<td>6 cm</td>
</tr>
<tr>
<td>12.</td>
<td>185 m</td>
<td>77 m</td>
</tr>
</tbody>
</table>
### Exercise 36
1. 108 Ha
2. 18 ha
3. 11.5 km
4. 12 cm
5. 7.2 Ha
6. 15 300 m²
7. 160 m
8. 72 cm
9. 336 cm²
10. 104 Ha
11. 40 m
12. 2816 cm²
13. 15 000 templates
14. 63 Ha
15. 54

### Exercise 37
#### A
1. 2400 cm² (kite)
2. 608 cm² (parallelogram)
3. 3.75 m² (rectangle)
4. 1600 cm² (rectangle)
5. 836 cm² (trapezium)
6. 2700 (parallelogram)
7. 14 400 cm² (square)
8. 0.13 km² (trapezium)
9. 0.875 ha (trapezium)

#### B
1. 54 cm²
2. 20 cm²
3. 45 cm²
4. 252 cm²
5. 195 cm²
6. 205.2 cm²
7. 72 cm²
8. 210 cm²
9. 21.4 cm²

#### C
1. 216 cm²
2. 280 cm²
3. 252 cm²
4. 882 cm²
5. 41.6 cm²
6. 111.6 cm²

### Exercise 38
#### A
1. 41.6 m²
2. 111.6 m²
3. 513.6 mm²
4. 24 cm²
5. (a) 1925 m²

#### B
1. (b) 1000 m²
2. 0.0988 ha
3. 140 m
4. 281.25 m²

### Exercise 39
#### A
1. 346.5 cm²
2. 78.5 cm²
3. 1.57 m²
4. 1600 cm²
5. 836 cm²

#### B
1. 452.16 m²
2. 132.88 cm²
3. (a) 113.04 cm² (b) 8.549 cm²
   (c) 72.35 cm² (d) 136.78 cm²
4. (a) 530.66 cm² (b) 50.24 cm²
   (c) 30.18 cm² (d) 84.91 cm²
5. 2 cm
6. 25.12 cm²
7. 7546 cm²
8. 3.87 cm²
9. 78.5 m²
10. 82.425 m²
11. 2461.76 m²
12. 16.86 cm²
13. 346.5 m²
14. 12.56 cm²
15. 6.575 m²

### Exercise 40
#### A
1. 96 cm²
2. 68 cm²
3. 56.52 cm²
4. 144 cm²
5. 144 cm²
6. 162.24 cm²
7. 16.9 cm²
8. 8 m²
9. 3680.64

#### B
1. 144 cm²
2. 868 cm²
3. 21.42 cm²

#### C
1. 1.96 cm²
2. 159.5 cm²
3. 273.87 cm²
Exercise 41
1. 4.55 m²
2. (a) 45 pieces (b) 60 cm²
3. (a) 2880 cm² (b) 2080 cm² (c) 800 cm²
4. (a) 103.32 m² (b) 36.12 m² (c) 67.2 m²
5. 6323.05 m²
6. 18.6 m²
7. 864 m²
8. 82 m²
9. 183.04
10. (a) 25 600 m² (b) 2.56 ha
11. 437.5 cm²
12. 49.61 m²
Exercise 42
1. 312 cm²
2. 478 cm²
3. 1550 cm²
4. 6 m²
5. 13.5 dm²
6. 600 cm²
Exercise 43
1. 1240 cm²
2. 216 cm²
3. 253.5 cm²
4. 6 m²
5. 13.5 dm²
6. 600 cm²
7. 864 m²
8. 82 m²
9. 183.04
10. (a) 25 600 m² (b) 2.56 ha
11. 437.5 cm²
12. 49.61 m²
13. 32790.14 cm²
Exercise 44
1. (a) \( \frac{32}{7} \) cm² (b) \( \frac{9}{7} \) cm²
(c) \( \frac{4}{7} \) cm² (d) 1056 cm²
2. 44.274 cm²
3. 866.64 cm²
4. 710.84 cm²
5. 1865.16 cm²
6. 16.485 cm²
7. 1607.68 cm²
Exercise 45
1. 267.08 cm²
2. 33170.56 cm²
3. 3389.76 cm²
4. 82.6448 cm²
5. 3714 cm²
6. 19.468 cm²
7. 6.594 m²
8. 155.3 cm²
9. 49.41 cm²
10. 612.28 cm²
11. 1105.92 cm²
12. 4823.04 cm²
13. 401.92 cm²
14. 663.168 cm²
15. 1061.3 cm²
16. \( h = 10 \) cm²
17. 103.62 m²
18. 175.84 cm²
19. 32790.14 cm²
Exercise 46
Teacher check
Exercise 47
1. 1,120,000 cm³
2. 216,000 cm³
3. 1 cm³
4. 9 Dm³
5. 1.44 m³ or 1,440,000 cm³
6. 1.08 m³ or 1,080,000 cm³
Exercise 48
1. 1000 cm³
2. 544 cm³
3. (a) 0.2 m³ (b) 8.33 cm
4. 64,000,000 cm³
5. 89.6 cm³ or 0.896 m³
6. 583 cm
7. 250 cm
8. 225 packets
9. 96 m³
10. 2160 cm³
11. 18,000 cm³
12. 0.12 m³ or 120,000 cm³
13. 3,575 m³
14. 64,000 cm³
15. 960 m³
16. 0.64 m³
17. 0.18 m³
18. 3.2 m³
19. 4.5 cm
20. 120 packets
Exercise 49

A
1. 3384.92 cm$^3$
2. 11 077.92 m$^3$
3. 21 980 cm$^2$
4. 31 400 cm$^3$
5. 3532.5 cm$^3$
6. 5544 cm$^3$

B

<table>
<thead>
<tr>
<th>Radius</th>
<th>Area</th>
<th>Height</th>
<th>Volume</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. 6 m</td>
<td>113.04 cm$^2$</td>
<td>15 cm</td>
<td>1695.6 cm$^3$</td>
</tr>
<tr>
<td>2. 3.5 mm</td>
<td>38.465 mm$^2$</td>
<td>5 mm</td>
<td>192.325 cm$^3$</td>
</tr>
<tr>
<td>3. 8 cm</td>
<td>200.96 cm$^2$</td>
<td>28 cm</td>
<td>5626.88 cm$^3$</td>
</tr>
<tr>
<td>4. 6 cm</td>
<td>113.04 cm$^2$</td>
<td>18 cm</td>
<td>2034.72 cm$^3$</td>
</tr>
<tr>
<td>5. 2 cm</td>
<td>12.56 m$^2$</td>
<td>6.5 m</td>
<td>81.64 m$^3$</td>
</tr>
<tr>
<td>6. 1.5 cm</td>
<td>7.065 cm$^2$</td>
<td>6 cm</td>
<td>42.39 cm$^3$</td>
</tr>
<tr>
<td>7. 5 mm</td>
<td>78.5 mm$^2$</td>
<td>40 mm</td>
<td>308 mm$^3$</td>
</tr>
<tr>
<td>8. 3.8 cm</td>
<td>45.3416 cm$^2$</td>
<td>4 cm</td>
<td>181.366 cm$^3$</td>
</tr>
</tbody>
</table>

Exercise 50

1. 1356.48 cm$^3$
2. 12 cm
3. 1000
4. 12 cm
5. 1 125
6. 0.33 m$^3$
7. 520 cm$^3$
8. 12 cm
9. 2.9132 cm$^3$
10. 1000 litres
11. 172 cubes
12. 92.944 cm$^3$
13. 0.7536 m$^3$
14. 0.471 m$^3$
15. 60 tins

Exercise 51

1. 1536 mm$^3$
2. 614.4 cm$^3$

Exercise 52

1. 50 cm
2. 79.2 m$^3$
3. (a) 10.5 m$^3$
   (b) 0.9648 m$^3$
4. 4320 cm$^3$
5. 1233 cm$^3$
6. 14 cm
7. 33 cm

Exercise 53

<table>
<thead>
<tr>
<th>Figure Number</th>
<th>Volume in cm$^3$</th>
<th>Volume in m$^3$</th>
<th>CAPACITY</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Millilitres</td>
</tr>
<tr>
<td>1</td>
<td>1000</td>
<td>0.001</td>
<td>1000</td>
</tr>
<tr>
<td>2</td>
<td>1 125 000</td>
<td>1.125</td>
<td>1 125 000</td>
</tr>
<tr>
<td>3</td>
<td>11 250 000</td>
<td>11.25</td>
<td>11 250 000</td>
</tr>
</tbody>
</table>
### Exercise 54

#### A

1. 8 ml  
2. 14.6 ml  
3. 2 040 000 ml  
4. 500 000 ml  
5. 2800 ml  
6. 4000 ml  
7. 5 500 000 ml  
8. 28 300 000 ml  

#### B

1. 3260 litres  
2. 240 litres  
3. 8000 litres  
4. 12 180 litres  
5. 1500 litres  
6. 7200 litres  
7. 4000 litres  
8. 0.1 litres  

### Exercise 55

#### A

1. 38 cm  
2. 500 cm²  
3. 9 cm  
4. 9250 cm²  
5. 1 hr 24 min  
6. (a) 90 m³  (b) 90 000 000 ml  
7. 339 120 litres  
8. 7.536 litres  
9. 532.26 cm²  
10. 4.6 m  
11. 144 000 litres  
12. 18 600 litres  
13. (a) 360 litres  (b) sh 180 000  
14. 200 bottles  
15. 489 litres  
16. 924 ml  

#### B

1. 615 bags  
2. 2.2692 t  
3. 53 Kg  
4. 22 857 bags  
5. 20 800 kg  
6. 6 tones  
7. 2746 kg  
8. 0.1 litres  
9. 29.9 days  

### Exercise 56

#### A

1. 5600 g  
2. 800 g  
3. 2640 g  
4. 62 000 g  
5. 360 000  
6. 700 000 g  
7. 4 500 000 g  
8. 20 000 g  

#### B

1. 0.52 kg  
2. 7.2 kg  
3. 4100 kg  
4. 270 kg  
5. 8300 kg  
6. 2.5 kg  
7. 600 kg  
8. 5.205 kg  

### Exercise 57

#### A

1. 54 t 155 kg 767 g  
2. 48 t 969 kg 912 g  
3. 170 t 494 kg 351 g  
4. 294 t 116 kg 15 g  
5. 146 t 3 kg 979 g  
6. 9 t 739 kg 216 g  
7. 1 t 419 kg 945 g  
8. 6 t 7 kg 684 g  
9. 643 g  
10. 1 t 563 kg 410 g  
11. 87 t 407 kg 209 g  
12. 1 kg 2 g  

#### B

1. 756 t 964 kg 320 g  
2. 228 t 14 kg 900 g  
3. 46 t 350 kg 960 g  
4. 712 t 257 kg 398 g
5. 1122 t 787 kg 974 g  
6. 392 t 964 kg 396 g  
7. 31 t 419 kg 945 g  
8. 26 t 687 kg 968 g  
9. 12 t 365 kg 122 g  
10. 6 t 507 kg 16 g  
11. 6 t 392 kg 168 g  
12. 6 t 507 kg 516 g  

13. 5 t 526 kg 616 g

**Exercise 59**

1. 118.1 kg
2. 8 tonnes
3. 2460 kg
4. 23 000 sachets
5. sh 470.60
6. 67 704 kg
7. sh 15 004
8. 46 kg

**Exercise 60**

### A

<table>
<thead>
<tr>
<th>Cost price (sh)</th>
<th>Selling price (sh)</th>
<th>Profit (sh)</th>
<th>Loss (sh)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 1020</td>
<td>564</td>
<td>456</td>
<td></td>
</tr>
<tr>
<td>2 40</td>
<td>75</td>
<td>35</td>
<td></td>
</tr>
<tr>
<td>3 189 755</td>
<td>375 510</td>
<td>185 755</td>
<td></td>
</tr>
<tr>
<td>4 112 000</td>
<td>100 800</td>
<td>11 200</td>
<td></td>
</tr>
<tr>
<td>5 26 950</td>
<td>2655</td>
<td>395</td>
<td></td>
</tr>
<tr>
<td>6 30 600</td>
<td>40 957</td>
<td>10 357</td>
<td></td>
</tr>
<tr>
<td>7 4 850 369</td>
<td>5 700 738</td>
<td>850 360</td>
<td></td>
</tr>
<tr>
<td>8 75 075</td>
<td>39 325</td>
<td>35 750</td>
<td></td>
</tr>
<tr>
<td>9 62 500</td>
<td>61 999</td>
<td>501</td>
<td></td>
</tr>
<tr>
<td>10 10 998</td>
<td>9999</td>
<td>999</td>
<td></td>
</tr>
<tr>
<td>11 1758.75</td>
<td>1708.50</td>
<td>50.25</td>
<td></td>
</tr>
<tr>
<td>12 99.90</td>
<td>111.90</td>
<td>12.00</td>
<td></td>
</tr>
<tr>
<td>13 128.75</td>
<td>191.25</td>
<td>62.5</td>
<td></td>
</tr>
<tr>
<td>14 256 104</td>
<td>366 214</td>
<td>110 110</td>
<td></td>
</tr>
<tr>
<td>15 100</td>
<td>107</td>
<td>7</td>
<td></td>
</tr>
</tbody>
</table>

### B

<table>
<thead>
<tr>
<th>Cost price</th>
<th>Selling price</th>
<th>Profit</th>
<th>% profit</th>
<th>Loss</th>
<th>% loss</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 220</td>
<td>20</td>
<td>20</td>
<td>9375</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td>2 46875</td>
<td>115</td>
<td>60</td>
<td>1575</td>
<td>135</td>
<td></td>
</tr>
<tr>
<td>3 9360</td>
<td>44.4</td>
<td>48</td>
<td>70.15</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td>6 33.60</td>
<td>9.60</td>
<td></td>
<td>7.01</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7 4500</td>
<td>82.25</td>
<td></td>
<td>4727.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8 120</td>
<td>80</td>
<td></td>
<td>80</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10 35227.50</td>
<td>4727.5</td>
<td></td>
<td>70.15</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td>11 28114</td>
<td>80</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12 28114</td>
<td>80</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Exercise 61

1. (a) Sh 380 (b) 61.3 %
2. (a) loss (b) sh 2250
3. sh 1760
4. sh 3.50
5. sh 450 000
6. (a) profit (b) 25%
7. 45.5% profit
8. sh 1133.50
9. sh 3466.70
10. sh 32 000
11. sh 8250
12. 14.3 %
13. sh 144
14. (a) sh 10 (b) 12.5%
15. 10% loss
16. 12.5%
17. (a) 200 (b) 25 %
18. 25%
19. 60 %
20. sh 584260
21. sh 2750
22. sh 32 000
23. 23.1%
24. (a) sh 35 (b) 21 7/8% or 21.9%
25. 1980
26. \( \frac{x - g}{g} \times 100 \)
27. 27.3%

Exercise 62

1. (a) sh 1156 (b) sh 344
2. sh 11
3. (a) 6 notes (b) sh 410
4. sh 1286
5. sh 357

Exercise 63

<table>
<thead>
<tr>
<th>Item</th>
<th>sh</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 packets of sugar @ sh 50</td>
<td>250.00</td>
</tr>
<tr>
<td>2 Kg of onions @ sh 40</td>
<td>80.00</td>
</tr>
<tr>
<td>4 Kg of beans @ sh 20.40</td>
<td>81.60</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>411.60</strong></td>
</tr>
</tbody>
</table>

2. sh. 10,750

Exercise 64

1. Sh 381
2. Otos = Sh 130; Jalas = Sh 255; Wilbroda = Sh 126
3. Sh 789

Exercise 65

1. sh 200 000
2. sh 5600
3. 7.7%
4. sh 400,000
5. 5%
6. sh 40 000
7. sh 1875
8. sh 640
9. sh 220 000
10. sh 20 000
Exercise 66

1. sh 21 500
2. sh 7700
3. sh 152 199
4. sh 622 500
5. sh 14 147.50
6. 14.1%
7. sh 1 487 500
8. sh 78 400
9. sh 45 000
10. 5%
11. sh 10 500
12. sh 1244
13. sh 7 200
14. sh 14 147.50
15. sh 14 147.50
16. sh 487 500

Exercise 67

<table>
<thead>
<tr>
<th>Hire purchase price (sh)</th>
<th>Deposit (sh)</th>
<th>Installment duration (period)</th>
<th>Amount per installment (sh)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 150 000</td>
<td>40 000</td>
<td>11 months</td>
<td>10 000</td>
</tr>
<tr>
<td>2 97 500</td>
<td>15 000</td>
<td>15 months</td>
<td>5500</td>
</tr>
<tr>
<td>3 215 000</td>
<td>200 000</td>
<td>10 months</td>
<td>1500</td>
</tr>
<tr>
<td>4 700 000</td>
<td>100 000</td>
<td>20 months</td>
<td>30 000</td>
</tr>
<tr>
<td>5 62 100</td>
<td>7500</td>
<td>12 months</td>
<td>4550</td>
</tr>
<tr>
<td>6 27 500</td>
<td>1260</td>
<td>8 months</td>
<td>3280</td>
</tr>
<tr>
<td>7 1 155 000</td>
<td>355 000</td>
<td>25 months</td>
<td>32 000</td>
</tr>
<tr>
<td>8 50 000</td>
<td>8000</td>
<td>7 months</td>
<td>6000</td>
</tr>
<tr>
<td>9 784 000</td>
<td>100 000</td>
<td>24 months</td>
<td>28 500</td>
</tr>
<tr>
<td>10 132 750</td>
<td>18750</td>
<td>6 months</td>
<td>19000</td>
</tr>
</tbody>
</table>

Exercise 68

1. Sh 21 500
2. Sh 90 650
3. Sh 3244
4. Sh 11 050
5. Sh 41400
6. Sh 10 800
7. 10 months
8. Sh 7 650
9. 8 months
10. Sh 6 015
11. 20 months
12. (a) Sh 18 135.50
   (b) Sh 4788.50
13. (a) Sh 67 100
   (b) Sh 17 600
14. (a) Sh 1 880 000
   (b) Sh 280 000
15. (a) Sh 44 000
   (b) Sh 24,000
16. Sh 3000

Exercise 69

A

<table>
<thead>
<tr>
<th>Simple interest (sh)</th>
<th>Amount (sh)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. 65</td>
<td>6565</td>
</tr>
<tr>
<td>2. 307.5</td>
<td>20 807.50</td>
</tr>
<tr>
<td>3. 50</td>
<td>9650</td>
</tr>
<tr>
<td>4. 373.50</td>
<td>16 373.30</td>
</tr>
<tr>
<td>5. 202.5</td>
<td>9202.50</td>
</tr>
<tr>
<td>6. 653.30</td>
<td>16 653.30</td>
</tr>
<tr>
<td>7. 16516.5</td>
<td>126 626.50</td>
</tr>
<tr>
<td>8. 127 500</td>
<td>627 500</td>
</tr>
<tr>
<td>9. 367 745</td>
<td>1 118 245</td>
</tr>
<tr>
<td>10. 643 125</td>
<td>1 893 125</td>
</tr>
</tbody>
</table>
### B

<table>
<thead>
<tr>
<th>Principal (sh)</th>
<th>Rate (sh)</th>
<th>Time (years)</th>
<th>Simple interest (sh)</th>
<th>Amount (sh)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td></td>
<td></td>
<td>19 425</td>
<td>74 925</td>
</tr>
<tr>
<td>2.</td>
<td>20%</td>
<td></td>
<td>247 500</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td></td>
<td>1 $\frac{1}{5}$</td>
<td></td>
<td>413 000</td>
</tr>
<tr>
<td>4.</td>
<td>80 000</td>
<td></td>
<td>1 $\frac{1}{4}$</td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>620 500</td>
<td>4.2%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td></td>
<td></td>
<td>4125</td>
<td>154 125</td>
</tr>
<tr>
<td>7.</td>
<td>17.5%</td>
<td></td>
<td>2 625 000</td>
<td></td>
</tr>
<tr>
<td>8.</td>
<td></td>
<td></td>
<td>472 500</td>
<td>1 972 500</td>
</tr>
<tr>
<td>9.</td>
<td>375 000</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10.</td>
<td>850 000</td>
<td>10%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Exercise 70

1. 4.5%  
2. 1 $\frac{1}{2}$ yrs  
3. sh 2000  
4. 3 $\frac{1}{3}$%

### Exercise 71

<table>
<thead>
<tr>
<th>Principal</th>
<th>Rate</th>
<th>Time</th>
<th>Compound interest</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td>108 000</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td>275 625</td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td>22 200</td>
</tr>
<tr>
<td>4</td>
<td>125 000</td>
<td></td>
<td></td>
<td>145 000</td>
</tr>
<tr>
<td>5</td>
<td></td>
<td></td>
<td>192 617.60</td>
<td>592 617.6</td>
</tr>
<tr>
<td>6</td>
<td></td>
<td></td>
<td>8400</td>
<td>48 400</td>
</tr>
<tr>
<td>7</td>
<td></td>
<td></td>
<td>4200</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td></td>
<td></td>
<td>126.10</td>
<td>926.10</td>
</tr>
</tbody>
</table>

### Exercise 72

1. sh 986 000  
2. sh 5566  
3. sh 23968  
4. (a) 1632  
   (b) 21 632  
5. (a) sh 5767.80  
   (b) sh 21 767.80  
   (c) sh 10 883.90  
6. sh 10 880  
7. (a) sh 22 248  
   (b) sh 214 382.90  
   (c) sh 10 880  
8. sh 2432  
9. sh 3146.10  
10. sh 1924.80
**Exercise 73**

1. sh 24.00  
2. sh 24.00  
3. sh 45.00  
4. sh 45.00  
5. sh 85.00  
6. sh 105.00  
7. sh 83.00  
8. sh 93.00  
9. sh 35.00  
10. sh 31.00  
11. sh 45.00  
12. sh 28.00  
13. sh 208.00  
14. sh 41.00  
15. sh 58.00  
16. sh 362.00  
17. sh 93.00  
18. sh 20.00  
19. sh 356.00

**Exercise 74**

1. sh 27.00  
2. sh 50.00  
3. sh 82.00  
4. sh 46.00  
5. sh 89.00  
6. sh 189.00  
7. sh 167.00  
8. sh 398.00  
9. Newspaper is cheaper  
10. sh 4.00  
11. sh 356.00  
12. 6 Stamps  
13. sh 549.00  
14. sh 636

**Exercise 75**

1. sh 135.00  
2. sh 70.00  
3. sh 90.00  
4. sh 250.00  
5. sh 353.00  
6. sh 3730  
7. sh 416.00  
8. sh 995.00  
9. sh 1110.00  
10. sh 510.00  
11. sh 4090.00  
12. sh 2155.00  
13. sh 1250.00  
14. (a) sh 3 small packets  
(b) sh 180.00  
15. (a) 15 printed papers  
(b) sh 250.00  
16. sh 2145.00

**Exercise 76**

1. sh 114.00  
2. sh 2099.00  
3. sh 441.00  
4. sh 617.00  
5. sh 25.00  
6. sh 250.00  
7. sh 425.00  
8. sh 80.00  
9. sh 209.00  
10. sh 1687.00  
11. sh 335.00  
12. (a) sh 35 000 money order and  
(b) sh 10 000 money order  
13. sh 789.00  
14. sh 616.00  
15. (a) sh 175.00  
(b) sh 32.00  
16. (a) sh 35 000 money order and  
(b) sh 17 000 money order  
17. sh 46 628.00  
18. (a) sh 10 000.00  
(b) sh 5000.00  
19. (a) sh 3500.00 Postal order is cheaper  
(b) sh 130.00

**Exercise 77**

A

1. sh 19.20  
2. sh 16.80  
3. sh 20.40  
4. sh 26.40  
5. sh 15.60

B

1. sh 24.70  
2. sh 16.95  
3. sh 10.75  
4. sh 15.40  
5. sh 16.95

C

1. sh 22.00  
2. sh 13.20  
3. sh 11.00  
4. sh 17.60  
5. sh 19.80  
6. sh .22.00
D
MARIA MOHAMED BOX 1234 NAIROBI
MEET MONDAY ELDORET 2.00PM
NAHASHON MWANGI

Exercise 78

A
1. 300 sec  2. 495 sec
3. 3600 sec  4. 2112 sec
5. 10 800 sec  6. 1800 sec
7. 900 sec  8. 3480 sec

B
1. 2 min  2. 300 min
3. 30 min  4. $3\frac{1}{2}$ min
5. 615 min  6. 1440 min
7. 78 min  8. 732 min

C
1. 1 hr  2. 60 hr
3. $\frac{1}{4}$ hr  4. $\frac{3}{4}$ hr
5. 15 hr  6. $3\frac{1}{4}$ hr
7. $1\frac{1}{2}$ hr  8. $2\frac{1}{2}$ hr

D
1. 6 min 15 sec  2. 3 min 9 sec
3. 30 min 30 sec  4. 7 min 9 sec
5. 4 min 51 sec  6. 52 min 39 sec
7. 48 min 15 sec  8. 10 min 6 sec

E
1. 7 hr 27 min  2. 2 hr 15 min
3. 5 hr 39 min  4. 45 hr 12 min
5. 8 hr 9 min  6. 56 hr 18 min
7. 1 hr 51 min  8. 2 hr 45 min

Exercise 79

1. 5 hr 15 min  2. 2 hr 50 min
3. 4 hr 20 min  4. 3 hr 35 min
5. 19 hr 15 min  6. 5 hr 55 min
7. 16 hr  8. 12 hr
9. 8 hr 30 min  10. 7 hr 13 min

Exercise 80

1. 12.20 pm  2. 11.35 am
3. 5 lessons  4. 8.1 km
5. 4 hr 25 min  6. 1.20 pm
7. 2 hr 20 min; 9:45 am
8. 320 min
9. 3600 bottle tops  10. 2 hr 51 min

Exercise 81

A
1. 12.40 pm  2. 10.40 am
3. 12.15 am  4. 11:10 pm
5. 9:55 pm  6. 11.00 pm
7. 10.45 am  8. 1.55 am
9. 3.20 pm  10. 2.25 pm

B
1. 2322 h  2. 0007 h
3. 1343 h  4. 2016 h
5. 0430 h  6. 0945 h
7. 2011 h  8. 0237 h
9. 2359 h  10. 0015 h

Exercise 82

A
1. 7.2 km/h  2. 216 km/h
3. 108 km/h  4. 36 km/h
### Exercise 83

**A.**
1. 2 hr  
2. 250 km  
3. 120 km/h  
4. 225 km  
5. 10 hr  
6. 576 km  
7. 5 km/h  
8. 140 km  
9. 50 km/h  
10. 54 km

**B.**
1. 22.22 m/s  
2. 41.67 m/s  
3. 11.11 m/s  
4. 27.78 m/s  
5. 6.67 m/s  
6. 66.67 m/s  
7. 16.67 m/s  
8. 20 m/s  
9. 12.5 m/s  
10. 10 m/s

### Exercise 84

**A.**
1. 14 km  
2. 24 km  
3. 36 km or 36 000 m  
4. 144 000 m or 144 km  
5. 1260000 m  
6. 225 km  
7. 225 km  
8. 35 km  
9. 350 km  
10. 10 min  
11. 7200 s

**B.**
1. 3 s  
2. 5 s  
3. 7 s  
4. 200 s  
5. 129.6 km  
6. 1512 km  
7. 80 km/h  
8. 20 km  
9. 3 h  
10. 315 km

### Exercise 85

1. Degrees Celsius  
2. 100 °C  
3. 0 °C  
4. Low  
5. Falls  
6. 36.9 °C  
7. below 0 °C  
8. 32 °C  
9. 23 °C  
10. 33 °C  
11. 65 °C  
12. 48 °C

### Exercise 86

1. (a) 18 °C  
   (b) 0.9 °C per minute  
2. 44 °C  
3. 29 °C  
4. 15.5 °C  
5. 20.3 °C  
6. 11.2 °C  
7. 10.5 °C  
8. 12 min  
9. (a) 15 °C  
   (b) 0.5 °C/min  
10. (a) 10 min  
    (b) 10 min  
    (c) 15 °C  
    (d) 10 min  
    (e) 54 °C  
11. 20 °C  
12. 12 min  
13. 57 °C  
14. 94 °C

### Unit 4: Geometry

### Exercise 87

1. \( x = 55° \)  
2. \( a = 133°; b = 107° \)  
3. \( y = 50° \)  
4. \( p = 47° \)  
5. \( r = 48° \)  
6. \( b = 59° \)  
7. \( e = 70°; h = 110° \)
8. \( g = 40^\circ; \ y = 70^\circ \)
9. \( m = 80^\circ \)

**Exercise 88**

1. \( PQR = 69^\circ; \ PQR = 63^\circ \)
2. \( XYZ = 56^\circ; \ YZX = 74^\circ \)
3. \( BAC = 72^\circ \)
4. \( LM = 2.1 \text{ cm}; \ LN = 3.2 \text{ cm} \)
5. \( AC = 2.5 \text{ cm}; \ ABC = 73^\circ \)
6. \( UVW = 52^\circ; \ VUW = 79^\circ; \ UWV = 49^\circ \)
7. \( KM = 9.4 \text{ cm}; \ LKM = 29^\circ \)
8. \( PQ = 8.6 \text{ cm}; \ PR = 6.4 \text{ cm}; \ PQR = 72^\circ \)
9. \( TR = 4.8 \text{ cm}; \ RST = \text{Equilateral} \)
10. \( XZ = 6.5; \ XYZ = 68^\circ \)

**Exercise 89**

1. \( GH = 10 \text{ cm}; \ FH = 7.6 \text{ cm} \)
2. \( GH = 10.4 \text{ cm}; \ FH = 8.3 \text{ cm} \)
3. \( GH = 4.2 \text{ cm}; \ FH = 5.2 \text{ cm} \)
4. \( GH = 5.7 \text{ cm}; \ FH = 5 \text{ cm} \)

**Exercise 90**

A

1. CD is perpendicular to AB
2. Not perpendicular
3. XY is perpendicular to NW
4. Not perpendicular
5. PR is perpendicular to KL
6. Not perpendicular
7. JM is perpendicular to Q5
8. Not perpendicular
9. WS is perpendicular to NR

B

**Construction: Teacher check**

**Exercise 91**

1. (a) \( XZ = 8.9 \text{ cm} \) (b) Area = 16 cm\(^2\)
2. (a) \( PR = 6.1 \text{ cm} \) (b) \( PQR = 53^\circ \)
   (c) \( PQR = 38^\circ \) (d) Area = 24.4 cm\(^2\)
3. (a) Construction (b) TS = 12.9
   (c) Area = 40 cm\(^2\)
4. \( NL = 2.7 \text{ cm} \)
5. Area = 25 cm\(^2\)
6. \( JL = 10.7 \text{ cm} \) KL = 9.1
7. (a) \( AC = 10.8 \text{ cm} \)
   (b) Perimeter = 25.8 cm
8. (a) \( SL = 9.9 \text{ cm} \) (b) Area = 24.1 cm\(^2\)

**Exercise 92**

1. Radius = 1 cm
2. Diameter = 3.4 cm
3. Radius = 1.5 cm
4. Radius = 8 cm
5. Diameter = 4.4 cm
6. Diameter = 5.4 cm
7. \( r = 5 \text{ cm} \)
8. Radius = 2 cm
9. Radius = 1.9 cm
10. Diameter = 4 cm
11. Radius = 1.2 cm
12. Radius = 4.6 cm
13. Diameter = 7.2 cm
14. Radius = 6.5 cm
15. Radius = 8 cm

**Exercise 93**

Teacher check
Exercise 94
1. W  2. PR  3. e

Exercise 95
A
1. ✓  2. ✗  3. ✗  4. ✗  5. ✗

B
1. AC = 25 cm  2. BC = 120 cm
3. AB = 56 cm  4. AC = 500 cm
5. AC = 117 cm

Exercise 96
1. 25 cm  2. 21 cm
3. 75 cm  4. 1200 m³
5. x = 18  6. 20 cm
7. 33 m  8. 10 m²
9. 24 m
10. AC = 13 cm  CD = 4 cm

Exercise 97
No. 1 – 6 (Practical work.
7. (a) PQ = 5 cm  (b) PS = 7 cm
(c) RO = 3 cm  (d) OS = 6 cm
(e) PQR = 35°  (f) QRS = 145°
8. (a) ABC = 106°  (b) BCD = 74°
9. (a) JLK = 130°  (b) JKL = 50°
(c) Line IJ = 12 cm  (d) Line OI = 6 cm
(e) Line OK = 9 cm
10. Diagonals: UW = 5 cm; VX = 8.9 cm
11. GE = 7.3 cm
12. KL = 4 cm; LM = 2.6 cm
13. (a) MO = 3.5 cm; OT = 3.5 cm
(b) LO = 2.9; ON = 2.9
(c) Discuss

Exercise 98
1. Diagonals are: 10.3 cm and 6 cm respectively
2. 9.2 cm, 6.7 cm
3. 9.3 cm, 3.4 cm
4. Line AB 7.8 cm; Angle ABC = 80°
5. Diagonals are: 6.1 cm and 10.2 cm
6. Diagonals are: 16.6 cm and 7 cm
7. (a) ABC = 70°  (b) BCD = 100°
(c) AOD = 90°  (d) DAB = 110°
(e) CDA = 70°  (f) OD = 25 cm
(g) AC = 35 cm
8. Diagonals are: 11.6 cm and 5.4 cm
9. BC = 4.6 cm
10. YZO = 30°, OX = 11.2
11. GI = 5 cm; HJ = 8.6; GO = 2.5;
    HO = 4.3  IO = 2.5; JO = 4.3
12. SQR = 40°

Exercise 99
1. u = 117°; v = 63°; x = 110°; w = 70°
2. p = 117°; q = 63°; r = 117°
3. f = 65°; g = 25°
4. p = 120°
5. a = 120°; b = 60°
6. c = 90°; d = 90°; e = 90°
7. f = 110°; g = 70°; h = 110°
8. a = 110°
9. b = 75°; c = 60°; d = 120°; e = 105°
10. g = 55°
11. h = 124°
12. k = 65°; m = 55°
13. n = 90°; p = 90°
14. r = 70°
15. y = 60°; x = 60°
16. e = 35°; z = 35°
17. z = 45°
18. a = 110°; b = 45°; c = 60°
**Exercise 100**

1. \( a = 90^\circ ; \ b = 40^\circ \)
2. \( x = 45^\circ ; \ y = 90^\circ \)
3. \( \text{KYZ} = 120^\circ \)
4. \( a = 30^\circ ; \ b = 80^\circ ; \ c = 70^\circ \)
5. \( a = 55^\circ ; \ b = 20^\circ \)
6. \( v = 24^\circ ; \ x = 90^\circ ; \ y = 64^\circ ; \ z = 64^\circ \)
7. \( l = 30^\circ ; \ n = 30^\circ ; \ p = 80^\circ \)
8. \( \text{ABE} = 70^\circ \quad \text{(b) ADE} = 140^\circ \)
9. \( a = 35^\circ ; \ b = 55^\circ \)
10. \( x = 10^\circ ; \ y = 30^\circ ; \ z = 140^\circ \)

**Exercise 101**

Teacher check

**Exercise 102**

1. Vertices = 4  
2. Edges = 6  
3. Triangular base  
4. Triangular faces = 4

**Exercise 103**

1. Vertices = 5  
2. Faces = 5  
3. Edges = 8  
4. Square based pyramid

**Exercise 104**

1. Faces: ABF ; BCEF ; CDE ; ADEF ; ABCD  
2. Rectangular Faces : BCEF ; ABCD ; ADEF  
3. Triangular Faces : ABF ; CDE  
4. Edges = 9  
5. Vertices = 6

**Exercise 105**

1. Class Activity  
2. 39 triangles

**Exercise 106-110**

Class Activity – Group Work

**Unit 5: Algebra**

**Exercise 111**

A

1. \( 6t + 2s \)
2. \( 8x \)
3. \( 11a - y \)
4. \( 2n \)
5. \( 3t + 2u \)
6. \( a \)
7. \( 9p - 3 \frac{1}{2} q \)
8. \( 4p - 5q \)
9. \( 8x - 3y \)
10. \( 15a + 11b \)
11. \( 9x - 3 \frac{1}{4} y \)
12. \( 12.1a + 0.9b \)
13. \( 6r - 6s \)
14. \( 2m - 2.4n \)
15. \( 2q - 5p \)
16. \( 6a \)
17. \( 3x \)
18. \( 6a + 6b - 23 \)
19. \( \frac{13}{40} a \)
20. \( \frac{2}{5} c \)
21. \( \frac{3}{60} \)
22. \( \frac{539}{40} p \)
23. \( \frac{12}{35} w \)
24. \( \frac{1}{5} q \)
25. \( \frac{3}{4} n \)
26. \( \frac{2}{15} m \)

B

1. \( 5x + 3y \)
2. \( 300t + 5x - (p + y) \)
3. \( \frac{n}{26} \) eggs  
4. \( 500 - (4x + 4p + y) \)
5. \( 4x - \frac{35}{30} \)
6. $4y + 7t$
7. $y - 2000 - x - f$
8. $7x + 15m$
9. $\frac{(t + y + m + 2y + 60)}{5}$
10. $180^\circ - (8x - 10)^\circ$
11. $6x + 40$
12. $2(x + y + z)$
13. $1500 \cdot \frac{y}{x}$
14. $2 \frac{1}{2}n - 8$
15. $40n - 40$ or $8n - 8$

**Exercise 112**

A

1. 4  
2. 4  
3. 32  
4. $1 \frac{1}{5}$  
5. 63  
6. 36  
7. 17  
8. $4 \frac{3}{7}$

B

1. 9  
2. 10  
3. 1  
4. $1 \frac{4}{15}$  
5. 60  
6. $24 \frac{3}{8}$  
7. 15  
8. 3

**Exercise 113**

1. $x = 3$  
2. $n = 6$  
3. $t = 4$  
4. $t = 48$  
5. $g = 15$  
6. $b = 15$  
7. $p = 4$  
8. $y = 7$  
9. $y = 24$  
10. $j = 7$  
11. $f = 4$  
12. $p = 24$  
13. $t = 6 \frac{1}{5}$  
14. $r = 12$

**Exercise 114**

1. $3x > 22$  
2. $\frac{7}{8}k < 5$  
3. $e > 8$  
4. $6f < 14$  
5. $\frac{2}{5}g < 6$  
6. $f < 10$  
7. $\frac{1}{2}j > 6$  
8. $\frac{3}{8}p < 21$  
9. $n < 6$  
10. $\frac{3}{4}d < 11$  
11. $\frac{3}{4}u < 7$  
12. $5q < 20$  
13. $\frac{2}{7}s > 10$  
14. $\frac{1}{2}h > 4$  
15. $3z < 6$  
16. $\frac{1}{2}t > 36$  
17. $\frac{1}{2}x < 10$  
18. $2v < 12$  
19. $4n > 8$  
20. $\frac{3}{4}r < 12$  
21. $6a > 24$  
22. $\frac{4}{5}m < 12$  
23. $6a > 10$  
24. $4d < 35$

**Unit 6: Tables and graphs**

**Exercise 115**

1. Teacher check  
2. 140 cm  
3. Teacher check  
4. (b) 13.9 yrs
5. sh 11 172
6. (a) 300 km/hr (b) 12.05 pm
7. (a) 96 km/hr (b) 10.45 am
8. 7.00 pm
9. 5.30 pm
10. 1.00 pm
11. (a) 40° (b) 720 000
12. 45°
13. (a) \(\frac{11}{36}\) (b) Kales
14. (b) 75 cows
15. (b) 132°

**Exercise 116**

1. 38  
2. 50  
3. 70 456.5  
4. (a) Mode = 44 (b) Median = 47.5  
5. 54.25  
6. Sh 20  
7. 3.658  
8. Sh 1654.50  
9. 16  
10. 18 yrs  
11. 108.4  
12. 2.04  
13. 497.6 yrs  
14. 364.5 km  
15. 2,925 million trees  
16. 48 cm  
17. 42,800 litres  
18. 198 cm

**Unit 7: Scale drawing**

**Exercise 117**

1. 1000 cm  
2. 1 cm rep 40 cm; 1:40  
3. 32 cm  
4. 5 cm; 1 cm rep 4 cm  
5. 1 cm rep 2500; 1:2500  
6. 1 cm rep 10 000 cm; 1:10 000  
7. 10 cm

8. 4000 m  
9. 1 cm rep 100 m; 1:10000  
10. 2400 m

**Exercise 118**

Teacher check

**Exercise 119**

A

1. 1:40  
2. 1:35  
3. 1:3 000 000  
4. 1:2800

B

1. 1 cm represents 15 m  
2. 1 km represents 12.5 m  
3. 1 cm represents 45 m  
4. 1 cm represents 225 m

C

1. 1 : 5000  
2. 1 : 200 000  
3. 1 cm  
4. 240 cm²  
5. 375 m  
6. 800 000 m²  
7. 400 ha  
8. 750 m  
9. (a) 75 km (b) 105 km  
10. 39.8 km  
11. 16 km  
12. 5.75 cm  
13. 15 600 m  
14. 3 km  
15. 10 km  
16. 600 km  
17. 1:100

**Unit 8: Ratio and proportion**

**Exercise 120**

1. 3:5  
2. 37:23  
3. 3:7  
4. 3:1
5. 4:3:5:30
6. (a) 3:1 (b) sh 1560
7. Lorries \( \frac{11}{74} \), Nissan \( \frac{15}{74} \), Saloon cars \( \frac{10}{37} \); Bicycles \( \frac{14}{37} \)

**Exercise 121**
1. Sh 400 : Sh 240  
2. 400 : 300 : 100  
3. 360 : 216 : 144  
4. 25 : 50 : 75  
5. A : B : C = 40000 : 12000 : 160000  
6. Ndere 100 litres ; Segere 200 litres  
7. K = 3000, L = 4000, M = 5000  
8. 2000 bags  
9. 150 camels  
10. (a) 600 girls (b) 1050 pupils  
11. 17,000 men  
12. (a) \( \frac{3}{10} \) (b) 50%  
13. 35 lit  
14. 9 kg  
15. sh 30,000  
16. (a) 5 : 1 (b) 1800 women  
17. 195 men  

**Exercise 122**
1. (a) 2800 (b) 1600 (c) 1200  
2. (a) 200 (b) 200 (c) 150  
3. (a) 150 litres (b) 200 litres (c) 50 litres  
4. (a) 45 kg (b) 16 kg (c) 48 kg  
5. (a) 180 goats (b) 400 goats (c) 375 goats  
6. (a) 175 bananas (b) 180 bananas (c) 750 bananas  
7. sh 27 000  
8. 5 : 4

**Exercise 123**
1. Sh 2100  
2. 6 cups  
3. Sh 125 000  
4. 100 goats (b) Sh 13 500 (c) Sh 3000  
5. Sh 225  
6. 360 litres  
7. Sh 540  
8. (a) 200 m (b) 128 m (c) 168 m  
9. (a) 60 pints (b) 24 patients (c) 7 \( \frac{1}{2} \) hr  
10. (a) 2 \( \frac{2}{3} \) hr (b) 2 hr (c) 9 min

**Exercise 124**
1. 60 trainers  
2. \( \frac{1}{2} \) hr (30 min)  
3. (a) 16 days (b) 4 days (c) 2 days  
4. (a) 6 days (b) 12 days (c) 15 days  
5. 45 days  
6. 8 \( \frac{1}{3} \) days  
7. (a) 4 hr (b) 2 hr 24 min (2 \( \frac{2}{3} \) hr)  
8. 60 more men  
9. 3 men  
10. 70 men  
11. sh 21 200  
12. 3 days  
13. 36 men  
14. 8 workers  
15. 10 days  
16. 1080 tonnes  
17. 80 km/hr  
18. 100 kg
Breakthrough Test Paper 1


Breakthrough Test Paper 2


Breakthrough Test Paper 3


Breakthrough Test Paper 4


Breakthrough Test Paper 5


Breakthrough Test Paper 6

Breakthrough Test Paper 7
41. C 42. B 43. C 44. C
49. B 50. D

Breakthrough Test Paper 8
41. B 42. B 43. C 44. A
49. C 50. D

Breakthrough Test Paper 9
33. A 34. B 35. D 36. A
41. B 42. D 43. D 44. C
49. C 50. B

Breakthrough Test Paper 10
41. D 42. A 43. B 44. D
45. A 46. D 47. A 48. D
49. D 50. D
Sura ya kwanza 1

1. Kusikiliza na kuongea

Maamkizi

Zoezi 1

1. asubuhi/macheo/matlai
2. inshallah
3. aleikum babu
4. shikamoo babu
5. jioni/magharibi/machweo
6. alkheri/aheri/masalkheri
7. njema/nzuri
8. njema/nzuri/salama
9. binuru
10. wa salmini
11. kwako pia
12. majaliwa/saala
13. ya mafanikio
14. jaala/majaliwa
15. sijambo

Adabu na heshima

Zoezi 2

1. samahani/kunradhi
2. heko/hongera
3. simile
4. starehe
5. nawasihi/nawaomba
6. samahani/kunradhi
7. makiwa
8. salimini
9. Hayati
10. bwana na bibi
11. marehemu/hayati

2. Kusoma

Zoezi 3

1. prado
2. siku ya kazi
3. barabara hujaa milolongo ya magari navyo vichochoro kushiba watu.
4. masikio ya mwandishi yaliziba
5. tetemeko kubwa lililozuka na kutikisa majengo yote jijini
6. mayowe, kelele, zahama na fujo zilitawala, likuluwa hali ya mshikemshike nayo sintofahamu haikuchelea kubisha hodi.
7. pakacha la matunda/kichala cha matunda
8. kuishiwa na nguvu mwilini
9. mwuguzi
10. Siku ya kutisha/Mkasa wa bomu

3. Sarufi

Zoezi 4

A. 1. A-Wa 2. A-Wa
3. A-Wa 4. A-Wa
5. Li-Za 6. Li-Za
7. Li-Za 8. Li-Za
9. Li-Za 10. A-Wa

B. 1. a 2. m 3. li
4. u 5. a 6. i
7. i 8. li 9. a
10. Vi 11. ku 12. u
13. u 14. m 15. ki
16. u 17. ki 18. i
19. u 20. li

C. 1. ya 2. zi 3. i
  4. wa 5. vi 6. u
  7. vi 8. zi 9. a
10. a

4. Msamiati

Dira

Zoezi 5

A.
1. 135°
2. kaskazini
3. magharibi
4. mashariki/matlai
5. kaskazini mashariki
6. magharibi
7. jua huwa utosini
8. yamini
9. kaskazini matlai
10. Ziwa Viktoria

B. Mwanafunzi achore dira inayoonyesha sehemu hizi barabara.

5. Kuandika

Kihasho

Zoezi 6

Vifungukate: A na B
1. D 6. D 11. A

Insha
Mwanafunzi aandike insha murua

inayooana na mwanzo wa insha aliopewa.

Mizani ya maarifa

Zoezi 7

1. kito 2. mkonga
3. daawa 4. mbisi
5. mpwa 6. kima
7. Akrabu 8. machweo
9. toinyo 10. moja unusu
11. nene 12. chwa
15. hajidumbi 16. mlungizi
17. mkunjufu 18. mshadhari/ Mshazari
19. mkutubi 20. nafaka
21. tasa 22. nafuu
23. akupaye 24. ubao
25. Li-Li 26. chewa
27. kiduko 28. katani
29. jingine 30. k

Sura ya pili 2

1. Kusikiliza na kuongea

Methali

Zoezi 8

A. Kamilisha methali
1. haliinjiki chungu
2. faraja
3. jiwe
4. hujikokota zizini kusaidiwa
5. ng’ombe
6. huambiwi pole
7. haukai ziakaniki
8. hula na wa kwao
9. hutuzwa
10. panya hutawala
11. ndugu wa mbali
12. mtii
13. makapi
14. shimo
15. haiiziki maiti
16. kaingoje shambani
17. gari moshi hupita
18. hung’aa gizani
19. usiku atakuchoma
20. hali wali mkavu
21. hubiuuka yeye
22. huangikwa
23. humlaza mgonjwa na matumaini
24. chukua jembe ukalime
25. hawakai zizi moja
26. ndivyo akuavyo
27. zi matakoni mwa nina
28. limemwangaza
29. zinge

B. Methali zenye maana sawa
1. Dunia mtego wa panya, ukiuchezea utakunasa/Dunia ni mwendo wa ngisi.
2. Jifya moja haliinjiki chungu.
3. Polepole ya kobe ilimfikisha mbali/Kawia ufike/Simba mwenda pole ndiye mla nyama.
4. Tamaa mbele mauti nyuma
5. Heri jirani kuliko ndugu wa mbali
6. Akiba haiozio.
7. Ndo! Ndo! Ndo! Hujaza ndoo/Tone na tone huwa mchirizi.
8. Mchelea mwana kulia hulia yeye
10. Mgala muuwe na haki mpe.

C. Maana ya methali
Maelezo ya maana za methali ya wanafunzi yaoane na maelezo ya kamusi ya methali.

1. Mtu akaaye katika mazingira mema haachi kufaidi.
2. Alipiga hatua sana katika cheo fulani anaweza kurudi nyuma.
3. Kukumbwa na kiasi cha ubaya si sawa na kukumbwa na ubaya uliokamilika.
4. Watu wanaokosana wanaweza kuelewana.
5. Hakuna namna ya kuizuia ajali.
6. Alisifuye jambo lolote sharti awe amelishiriki au amepata manufaa yake.
7. Shughuli za asiyane ya uwezo hazifaulu kwa haraka.
8. Mambo yakiharibika kiasi fulani hakuna jithiada zinazoweza kuyarekebisha.
9. Ukiwa bado duniani hujakamilika kimaumbile.
10. Ukimpwa bado madaraka huenda akajigamba na huenda asiyatumie vizuri.

D. Methali zinazotumia majina ya wanyama
1. Punda – Asante ya punda ni mateke.
2. Paka – Paka akiondoka panya hutawala.
   - Teke la kuku halimwumizi mwanawe.
   - Kuku mgeni hakosi kamba mguuni.
4. Ng’ombe – Sisimizi hawii ng’ombe/
   Ng’ombe akivunjika mguu malishoni huji kokota zizini akasaidiwe.
5. Mbwa – Meno ya mbwa hayaumani/
   Mbwa hafi maji aonapo ufuuo.
6. Nguruwe – Ukitaka kula nguruwe
   chagua aliyenona/Mkuki kwa nguruwe mtamu kwa binadamu mchungu.
7. Simba – Angurumapo simba mcheza ni nani? / Simba mwenda pole ndiye mla nyama.

2. Kusoma

Ufahamu

Zoezi 9
1. kuzingatia usafi / kuwa nadhifu
2. Musa alikuwa zumbukuku haambiliki hasemezeki
3. chawa (vimelea)
4. wazazi wake kama beberu
5. alinuka kama katumia
6. mkoba wa kubebea vitabu
7. mjinga, kaidi, mchafu
8. tano
9. Aliendesha
10. kuendesha na kutapika

3. Sarufi

Ngeli ya U-I na Ya-Ya

Zoezi 10

A. Tunga sentensi - Maagizo: mwalimu zingatia ngeli.
1. Mkono ule umeumia.
2. Marashi yangu yamepotea.
3. Mti huu utakatwa.
5. Manukato yananukia.
6. Mate yale yanachukiza.
7. Mafuta ya nyanya yameisha.
8. Mchungwa wake utazaa.
9. Maji machafu ni hatari.
10. Mhindi unahitaji kupaliliwa.
Wanafunzi watunge sentensi zao wenyewe mradi ziwe sanifu na zinazozingatia ngeli.

Zoezi 11

A.
1. Nomino dhahania
2. Nomino za wingi
4. Nomino za kawaida
5. Nomino za jumla
6. Nomino za pekee

B.
1. mwana  2. Mwalimu Tatu
3. pua/wajiji  4. tarehe
5. kitabu

C.

Nomino mguso
1. penseli  2. karatasi
3. nyumba  4. ubao
5. chaki

Nomino dhahania
1. wema  2. ukarimu
3. upole  4. ukatili
5. uovu

D. Nomino za ari au kiasi
1. mhogo  2. mkate
3. chungu/chupa/bati
4. nyama  5. hindi
6. dawa  7. ugali
8. nguo  9. nyama
10. mahindi
11. chungwa/ndimu
12. maji  13. maji
14. mchangana/faka viowevu
15. jua  16. mkate
17. kunisi 18. moto
19. matusi/mato 21. mti
22. chumvi/ugoro 23. maji
24. soda/kinywaji 25. vitu vyovyote
26. ndizi 27. moto 28. mkate
29. mvua 30. unga/mchele

4. Msamiati

Mavazi
Zoezi 12

A.
1. buibui/baibui 2. sare
3. shimizi 4. dangarizi
5. kanchiri 6. chepeo
7. tarbushi 8. kisutu

B.
1. wanawake 2. wanawake
3. wanawake 4. wanawake
5. wanaume/wanaume
6. wanaume/wanaume
7. wanaume
8. wanaume/wanaawe
9. wanaume 10. wanawake
11. wanaume 12. wanaume
13. wanaume 14. wanawake
15. wanawake

5. Kuandika

Kihasho
Zoezi 13


Insha
Wanafunzi waandike insha inayooana na methali waliyopewa.

Mizani ya maarifa

Zoezi 14

1. samawati 2. buda
3. nywele 4. jororo
5. katara 6. shemali
7. tathmina 8. viingizi
9. vigoma 10. visifa
11. zipi 12. thenine
13. vitabu 14. hukorokocha
15. mzembe 16. kuona
17. rukono 18. morita
19. kisonzo 20. anisi
21. nomino 22. vitenzi
23. kilimbwa 24. mkandaa
25. mwinyi 26. kongo
27. ina nguvu 28. urujuani
29. Nyua zenu zimekatika.
30. karimu

Sura ya tatu

1. Kusikiliza na kuongea

Misimu
Zoezi 15

A.
1. kiangazi
2. masika/ kifuku
3. vuli/mchoo
4. kipupwe
5. ukame

B. Maelezo mafupi
1. Hali ya mimea kuota na kuonekana
juu ya ardhi/wakati majani huanza kuchipuka.
2. Kuanguka kwa majani hasa msimu wa kiangazi.
3. Pepo zinazovuma kutoka magharibi.
4. Maji ya bahari yanayojaa wakati wa mwezi mwandamo.
5. Mvua inayonyesha matone mepesi mepesi.
7. Pepo zinazovuma kutoka kusini mashariki.
8. Pepo zinazovuma kutoka kaskazini mashariki

C. Kupanga nyakati
1. mawio
2. Mafungulianyama
3. asubuhi 4. adhuhuri
5. alasiri 6. jioni
7. mafungianyama 8. Machweo
9. usiku mchanga 10. usiku mkuu

2. Kusoma

Ufahamu

Zoezi 16
1. kwa sababu ameweza kutembelea nchi nyiingi
2. Aliipata nchini Uingereza akiwa na umri wa miaka thelathini na minne (34)
3. alikuwa anafanya utafiti
4. Bara la Afrika
5. Mbuga za wanyama, milima, maziwa
6. Kujionea maeneo yenye mbuga za wanyama na fuo za bahari
7. maeneo yaliyokauka
8. Waafrika
9. zitatumwa ipasavyo
10. Bara la Afrika ndilo lenye mazingira bora zaidi duniani

3. Sarufi

Mnyambuliko wa vitenzi

Zoezi 17

A. Kamilisha jedwali
1. uzika 2. achika
3. someka 4. elezeka
5. sifika 6. hamika
7. mwagika 8. katika
9. futika 10. fagiliika
11. rukika 12. gangika
13. jazika 14. pambika
15. elezeka 16. ombeka
17. pigika 18. imbika
19. ogeka 20. chapika

B. Kubadilisha vitenzi
1. ilichafuka 2. uliimbika
3. ilitengenezeka 4. ilikarabatika
5. yalizoleka/yalipomwagika
6. umpambika 7. yameandikika
8. anapendeka 9. kililika
10. itaandalika 11. ameditika
12. yamejibika 13. imekamilika
14. yamechemka 15. imekatika

C. Utunzi wa sentensi
1. Mgonjwa ameponyeka.
2. Bidhaa zimepangika.
3. Mtoto yule atakoma kucheka.
5. Mtoto ametosheka.
8. Msichana atapendeka.
9. Mto Athi utavukika.
Kauli ya kutendesha

**D.**

1. chezesha 11. tembesha
2. imbisha 12. apisha
3. ogopesha 13. ogesa
4. lelesha 14. natisha
5. lisha 15. igiza
6. julisha/juuya 16. tokoza
7. angusha 17. oza
8. fanyisha 18. pitisha
9. achisha 19. chosha
10. nyamazisha 20. shusha

**E.**

1. wanaogopesha 2. analiza
3. anapisha 4. anasomesha
5. anafanyisha 6. anachezesha
7. anakimbiza 8. analipisha
9. ameangusha 10. alionesha
11. alivisha 12. alitoza
13. nitaurusha 14. analiza

**F.**

1. rushwa 2. ponyeshwa
3. itishwa 4. imbishwa
5. andikishwa 6. rudishwa
7. komeshwa 8. ondoshwa
10. achishwa 11. pitishwa
12. katashwa 13. angushwa
14. karibishwa 15. kanishwa
16. tozwa 17. lishwa
18. toroshwa 19. kimbishwa
20. pitishwa

**G.**

1. alikopeshwa
2. tulibebeshwa
3. tuliimbishwa
4. alinyamazishwa
5. ninafulishwa

4. Msamiati

**Makao**

**Zoezi 18**

**A.**

1. tundu 2. kiota
3. zeriba/chaa 4. kitala
5. leba 6. kombe
7. utandu/ utandabui
8. kichuguu/kisuguu/kingulima/ kishirazi
9. kasri 10. ikulu
11. fukofuko 12. chotoloto
13. kilinge 14. nunge
15. shimo

**B. Mwanafunzi atumie kamusi kutoa maelezo mwafaka kwa kila nomino.**

**Nomino za makundi**

**Zoezi 19**

1. wali
2. waasi/wahuni/majambazi/wezi
3. barua 4. sabuni
5. ng’ombe 6. almasi
7. dhahabu 8. wasafiri
9. uchaguzi 10. chokaa
11. wachawi 12. milima/miti
13. wali 14. ng’ombe
15. waandishi 16. pombe
17. samaki 18. mtama
19. mahindi 20. watu
21. wasafiri 22. mawele
23. mizigo 24. mimea
25. pombe 26. mfuto
27. mboga/matunda
28. Pamba/ngozi/sufi
29. takataka 30. vitabu
5. Kuandika
Kihasho

Zoezi 20

Utunzi

Zoezi 21
A. Mwalimu zingatia matumizi jozi ya -ngali – k.m. Ningalicheka ningaliadhibiwa.

B. 
1. Nchi yetu ya Kenya imetwaa mkondo bora baada ya vurugu za kisiasa.
2. Mtu mrefu wa Mombasa amefika.
3. Musa ni mweusi kama makaa.
4. Taifa changa linahitaji msukumo kamili wa maendeleo.
5. Mwanamume na mwanamke wana nafasi sawa kimaisha.

Mizani ya maarifa

Zoezi 22
1. finyanga  2.  rahisi  
3. vikolezo  4.  I-Zi  
5. papa  6.  nafaka  
7. 6/7  8.  mna  
9. totoro  10.  viainishi  
11. ya  12.  unguja  
13. tukizi  14.  mwanambee  
15. nahau  16.  mwaridi  
17. pamba  18.  shufwa  
19. nirihii  20.  viazi  
21. mjo  22.  buki  
23. sena  24.  alinacha  
25. handaki  26.  kioski  
27. nguu  28.  hugegedwa  
29. hunguruma  30.  chanya

Sura ya nne 4

1. Kusikiliza na kuongea
Kiswahili mamboleo

Zoezi 23
1. Mimi na Jelimo tulikutana awali.
2. Hadimu yule mnene anaitisha risiti/stakabadhi.
3. Safari yetu ilichukua saa mbili.
4. Mama huwasha moto ili apike.
5. Milika ni mkondefu kuliko Hawa.
7. Mwalimu ameingia ndani ya ofisi.
8. Musa hukoroma usingizini kama paka.
11. Yule mtoto wake mkondefu ana ngozi ya maji ya kunde.
12. Sisi hufumba macho kanisani ili tuombe.
13. Mama aliuliza, “Mbona wewe husomi?”
14. Mwizi yule alinyeshewa mvua ya mateke na ngumi.
15. Karatasi za mthihi zimeletwa.
17. Chakupewa huvuta mkia kila mwaka.
18. Chambilecho wahenga, asiyekuja hakuthamini.
19. Walinunua mikebe kumi ya mafuta ya kuwapelekea waliofikwa na masai.
20. Mwalimu wetu ana gari jeupe.
22. Dereva yule anaendesha gari asteaste.
23. Siku hizi tupo pamoja/naye.
24. Mwanafunzi anayeandika ni mnene.
25. Mvua ilikuwa ikinyesha sehemu hizo.
26. Shida zingetambulika tusingekuwa na malalamishi.
27. Niliamka bukrata.
29. Wanafunzi wameingia kwenye/katika/au darasani.
30. Gari alilosafiria liliharibika.
31. Mwalimu alinipa ruhusa ya kwenda nyumbani.

2. Kusoma

Ufahamu

Zoezi 24
1. baba yake aliwapisha lakini hawakupita
2. alikuwa akiogopa watu kwenye gari lililowafuata
3. nilijawa na fundo chungu moyoni
4. yalitabasamu baada ya kupokea mkoba
5. tatu
6. baba yake mwandishi
7. Li -Ya
8. mahali panapowekwa magari au panaposimamishwa magari
9. alipoutazama mfuko wenyeye pesa uliokuwa upande wa kushoto
10. Siku ya kutisha/kifo cha baba yangu

3. Sarufi

Vivumishi sugu

Zoezi 25

A.
1. Watu gani wamefika?
2. Wao ni hodari.
3. Wanganomatuma vitambewa dawa.
4. Wagonjwa dhaifu wamepewa dawa.
5. Magari hayo ni ghali mno.
7. Wajomba wetu ni mabingwa wa kuogelea.
8. Makoti yao ni laini.
10. Wao ni watu mahiri.

B. Teua jibu sahihi
1. bora 2. sita
3. gani 4. haba
5. tajiri 6. tele
7. saba 8. hafifu
9. duni 10. katili

4. Msamiati

Msamiati wa jikoni

Zoezi 26

A.
1. seredani 2. legeni
3. kanza 4. mbuzi
5. kifumbu 6. ukoko
7. mwiku/kiporo/bariyo
8. uteo/ungo 9. ufu
10. tui
B. Mwanafunzi atumie kamusi kutoa maelezo mwafaka ya maneno haya.

C. Mwanafunzi aelezee vitendo vya jikoni kwa mujibu wa kamusi.

D.  
1. unga
2. viazi
3. matunda/ngozi
4. mboga
5. samaki
6. matawi/matagaa
7. mahindi
8. mahindi
9. kuku
10. maziwa
11. tui
12. nazi
13. samaki/nyama
14. vyakula
15. madini

Maumbo

Zoezi 27

A. Majina ya maumbo
1. pembemraba
2. pembewima mkabala
3. pembe tatu kali
4. pembe tatu sawa
5. mbonye
6. mbenuko
7. pembe zidi butu
8. trapiziamu/msambamba
9. kitovu
10. hiram/piramidi
11. mshadhari/wimbi/mshazari
12. tao

B.  
1. pembetatu
2. kopa
3. mviringo
4. haragwe
5. duaradufu

5. Kuandika

Kihasho

Zoezi 28

Insha

Tahariri

Zoezi 29

Mwanafunzi aiandike tahariri kwa hati nadhifu huku akizingatia usanifu wa lugha.

6. Mizani ya maarifa

Zoezi 30
1 nusura 2. mchuuzi
3. jeta 4. robo tatu
5. mzegamzega 6. ukope
7. siri 8. tasa
9. I – I
10. mti wa matunda 11. matusi
12. hii 13. sikio
14. kibyongo 15. koja
16. stashahada
17. kumaliza shughuli
18. wana 19. kizuka
20. karandinga 21. jinamizi
22. shombo 23. 600,666
24. michezoni 25. kivinimbi
26. bidhaa ni ghali 27. kasirika
28. msemo 29. hutekela
30. nukia
Sura ya tano 5

1. Kusikiliza na kuongea

Visawe

Zoezi 31

1. mwengoya
2. ngamizi
3. mwezi
4. king’ong’o
5. bombo
6. mtima
7. mwengo
8. samba/enea
9. konde
10. aushi
11. waba
12. ukongo/magonjwa
13. madaha
14. yowe
15. kande
16. fakefu
17. yaumu
18. shelabela
19. hulka
20. mkaragazo
21. siha
22. afueni
23. gashi
24. fanana
25. gana

2. Kusoma

Ufahamu

Zoezi 32

1. mwanambee/kifunguamimba
2. watatu
3. mjane
4. kufiwa na mkewe
5. kwa sababu alimwamini/kutokana na adabu na staha zake
6. takriban arubaini
7. Bw na Bi Mambo
8. Mwajuma aliwajibika vilivyoyo
9. Wino wa Mungu haufutiki/Kiendacho mavani hakina marejeo
10. Ni vizuri kuwa watiiifu na kuwajibika; au mada yoyote inayochukua barabara na maelezo ya ufahamu.

3. Sarufi

Kirejeshi ambazo

Zoezi 33

A. Jaza pengo.

1. ambaye
2. ambacho
3. ambalo
4. ambao
5. ambao
6. ambao
7. ambayo
8. ambao
9. ambayo
10. ambapo
11. ambalo
12. ambavyo
13. ambako
14. ambavyo
15. ambayo
16. ambazo
17. ambayo
18. ambao
19. ambazo
20. ambao

B. Andika sentensi katika umoja.

1. Jino ambalo liliuma lilitiwa dawa.
2. Kalamu ambayo nilitumia ilipendeza.
3. Nyoka ambaye ana sumu ni hatari.
4. Chombo ambacho kilinunuliwa kilirudishwa.
5. Waraka ambao aliuandika uliogofya.
7. Uwele ambao uliokutumia nchini kiuchumi.
8. Kaumu ambaye ilihusu.
9. Mungu ambayo imeendelea kiuchumi ni tajiri.
10. Utepe ambao anatumia ni mrefu.

Matumizi ya ‘ni’

Zoezi 34

1. kitenzi
2. kuaamrisha katika wingi
3. mahali/kielezi
4. nafsi
5. nafsi
6. kitenzi
7. kuaamrisha katika wingi
8. kuamrisha katika wingi
9. nafsi
10. mahali/kielezi

Matumizi ya ‘katika’ na ‘kwenye’

Zoezi 35

A.
1. katika  2.  kwenye
3. kwenye  4.  katika
5. katika  6.  katika
7. kwenye  8.  kwenye
9. katika  10.  katika

B.
1. Aliingia ndani ya nyumba/Aliingia nyumbani.
2. Tulikuwa uwanjani.
3. Alikuwa kwenye fujo.
4. Sote tulimwona katika sinema.
5. Maishani, hakuwahi kuugua.
6. Kwenye ukumbi wa sinema, palikuwa na watazamaji wengi.
7. Tulifika katika mbuga ya wanyama mwendo wa adhuhuri.
8. Mambo mengi yanapatikana katika kitabu hiki.
9. Aliingia bafuni/Aliingia ndani ya bafu.
10. Tulisafiri hadi sokoni.

Matumizi ya ‘na’

Zoezi 36

1. kiunganishi
2. kiunganishi
3. wakati uliopo
4. hali ya kutendana
5. mzizi wa kitenzi ‘kuwa na’
6. kiunganishi
7. kihuishi
8. nafsi
9. kiunganishi
10. kihuishi na kitenzi

4. Msamiati

Zoezi 37

Walemavu

1. mlemavu
2. chongo
3. kipofu
4. kibogoyo/mhangi/buda
5. mapengo
6. kijengo/kigego
7. kithembe/kitembe
8. bubwi
9. kiziwi/kiduko
10. toinyo
11. kibunye
12. kigugumizi/kitata
13. kidazi
14. kinyonyoka/kifuchuke
15. kibyengo/kijongo/kiduva/kiduvya
16. kibwiko
17. kikono
18. kigutu
19. kiguru/kiguu
20. kiwete
21. mziani
22. mbilikimo/kijimo/kibete/kisheta
23. matege
24. mang’ombo
25. magutao
26. papachi
27. king’ong’o
28. huntha
29. kikojozi/mkojozi
30. gumba
31. tasa
32. zeruzeru
33. hanithi
B.
Mwanafunzi atumie kamusi kubainisha maneno aliyopewa kwa ukamilifu.

Vikembe

Zoezi 38

5. Kuandika

Kihasho

Zoezi 39

A.

B. Mtungo
Mwanafunzi aandike insha ya kusisimua.

Mizani ya maarifa

Zoezi 40

Sura ya sita

6

1. Kusikiliza na kuongea

Vinyume

Zoezi 41

Vinyume vya kufanyua

A.

B.
2. **Kusoma**

**Ufahamu**

**Zoezi 42**
1. wengi walifanya kazi kwa bidii wakijua kwamba mgaagaa na upwa hali wali mkavu
2. alikuwa mpishi hodari wa pombe ya kienyeji
3. mwendo wa mtu asiye na nguvu kwenyewa miguu – mwendo wa mtu mlevi
4. kazi ya kufagia na kuosa kafani / mochari
5. kuuza kemikali kwa Mzee Kiparangoto
6. mambo yalipochacha / ukweli unapoibainisha
7. pombe iliwaathiri
8. mbio za sakafuni huisha ukingoni
9. karibu na mji wa Nyeri
10. Madhara ya ulevi / Mada yoyote inayolingana sawasawa na maelezo ya ufahamu

**3. Sarufi**

**Vielezi**

**Zoezi 43**

**A. Vielezi**
1. zogo na zahama
2. bure bilashi
3. waganga na waganguzi
4. kutwa kucha
5. hana hanani
6. furaha na buraha
7. dhahiri shahiri
8. kufa kuzikana
9. milima na mabonde
10. tunu na tamashaa
11. vifijo na nderemo
12. asili na jadi
13. hapiki hapakui
14. udi na uvumba
15. balaa na belua
16. simanzi na majonzi
17. ngoma wala maulidi
18. aliduwaa na kubung’aa
19. bure bilashi
20. liwe liwalo

**B.**
1. haraka
2. kidogo
3. mashambani
4. sana
5. vizuri
6. polepole
7. pima
8. jana
9. vibaya
10. vyema
11. mara mbili
12. zii
13. jukwaani
14. vibaya
15. ughaibuni / mwaka jana
16. pu!
17. vilivyoyo
18. mapema / hanunui
19. mtini
20. tang!
21. kwi kwi kwi
22. mara moja
23. mmoja mmoja
24. kitamaduni
25. kivivu
26. juu
27. huko
28. mwakani
29. mtoni
30. alfajiri

**C.**
1. mahali
2. mahali
3. namna / jinsi
4. wakati
5. kiasi / kwango
6. namna
7. mahali
8. namna
9. mahali / namna
10. wakati
4. Msamiati

Rangi

Zoezi 44

A.
1. hudhurungi 2. kijani
3. manjano 4. kijivu
5. samawati 6. kijivu
7. nyekundu 8. kijani
9. zari 10. nyeusi

B.
1. urujuani 2. buluu
3. buluu 4. samli
5. urujuani 6. hudhurungi
7. kijani 8. kijani
9. buluu iliyokoza
10. isiyo na rangi

C. Wanafunzi wachore upinde wa mvua na waonyeshe rangi zote vyema. Sahihisha kazi yao huku ukiwaelekeza iwapo rangi hizo hazijaandamana kama inavyotakikana.

5. Kuandika

Zoezi 45


Mizani ya maarifa

Zoezi 46

1. mdarisi 2. yaliharibika
3. dhaifu
4. mwandani wa chati
5. 180°
6. hamsini na miezi mitatu
7. jua 8. kayaya
9. kike 10. Waislamu
11. mjombakaka 12. karanga
14. kishanzu 15. kimau
16. sadfa 17. kupandikiza
18. vyetezo 19. (ii)
20. kafani 21. paji
22. mdomo 23. li
24. mgugu 25. zohali
26. mikataba ya uongo
27. kwa 28. hucheua
29. kunguni 30. koshi

Sura ya saba

1. Kusikiliza na kuongea

Vitate

Zoezi 47

1. gurufa/gurufu
2. ndoa/doa
3. karamu/kalamu
4. chuana/juana
5. thamini/dhamini
6. Baba/papa/bapa
7. shahada/shada
8. mbali/bali
9. nchi/inchi
10. mji/mchi
11. vipuri/vipuli
12. mzazi/msasi
13. madada/matata
14. baa/paa

2. Kusoma

Ufahamu

Zoezi 48

1. chakula cha asubuhi/staftahi/kiamshakinywa
2. mbisho kwende mlango wa madebe
3. kuwaelimisha wasichana kutoka familia maskini
4. Mzee Mzima alishtushwa na ujumbe wa Karim Abdallah
5. hazina ya shirikaingesimamia mahitaji yote ya Bahati katika masomo
6. Li -Ya
7. walikuwa wasichana sita
8. Walidhulumiwa na Karim kwa kulazimishwa kujiingiza katika ukahaba
9. Bhati hakuyatarajia aliyokumbana nayo
10. Dunia hada/mada yoyote nyingine inayooana na maelezo ya ufahamu

3. Sarufi

Viulizi

Zoezi 49

A. Viulizi ni maneno yanayotumiwa katika kuuliza swali.

B.  
1. nini 2. ipi
3. je, ngapi 4. nani
5. kwa nini 6. vipi
7. nini 8. wapi
9. nani 10. ipi

C.  
1. mingapi 2. ngapi
3. mangapi 4. ngapi
5. vingapi 6. mingapi
7. mingapi 8. mangapi
9. ngapi 10. mangapi
11. wangapi 12. wangapi
13. wangapi 14. wangapi
15. wangapi 16. wangapi
17. wangapi 18. vingapi

D.  
1. lipi 2. ipi
3. ipi 4. zipi
5. yapi 6. wapi
7. yapi 8. upi
9. yapi 10. zipi
11. upi 12. zipi
13. ipi 14. zipi
15. ipi 16. kupi
17. zipi 18. zipi
19. yupi

E.  
1. nini 2. lini 3. yupi
4. gani 5. kipi 6. kupi
7. nani 8. nini

4. Msamiati

Malipo

Zoezi 50

A.  
1. kiingilio 2. kivuko
3. nauli 4. koto
5. mtaji 6. masrufu
7. karisaji 8. fidia
9. faini 10. kiinuamgongo

B.  
1. Makadirio - kiasi cha pesa kilibikadiria kutosheleza haja fulani.
2. Chauchau - malipo ya kupata haki asiyo ostahili mtu, chai, hongo.
3. Uhunzi - malipo ya kulipa mhunzi kwa kazi yake ya uhunzi.
4. Pango - malipo ya kukodisha na kupangisha nyumba.
5. Kichuo - ada anayopewa mwanamke anapovunja ungo au mwanamume atokapo jandoni.
7. Arbuni - pesa za kukombolea kitu.
8. Bahashishi - zawadi anayopewa mtu kwa utumishi bora wa kazi.

Tarakimu

Zoezi 51

A.
1. 11,000,000  2. 4,400,400
3. 75,015,000  4. 5,400,089
5. 21,725,000

B.
1. elfu tisa, mia tisa tisini na tisa
2. mia tisa tisini na tisa.
3. milioni sita mia sita sitini na sita
4. milioni saba, mia saba na tatu elfu, mia tatu thelathini na mbili
5. kumi milioni na mbili
6. milioni tano, laki tano hamsini na tano elfu, mia tano hamsini na tano
7. milioni moja kumi na moja, laki moja tisini na tisa elfu na saba
8. milioni moja mia moja na kumi na moja elfu, mia moja na kumi na moja
9. milioni tatu, laki tatu na tatu

C.
1. nambari inayogawanyika na mbili sawasawa mfano 2,4,6,8, n.k.
2. nambari isiyogawanyika na mbili sawasawa mfano 1,3,5,7, n.k.
3. nambari ambayo haiwezi kugawanyika kwa nambari nyingine isipokuwa yenye na moja mfano 2,3,7,13,17 n.k.
4. nambari inayopatikana baada ya kusidisha namba na yenye mfano: 4,9,16, n.k.
5. isiyohasi (+) mfano +1, +2, +3, +4 n.k.
6. isiyo chanya (-) mfano -1, -2, -9, -3,-4, n.k.
7. takwimu inayoonyesha mara ngapi namba na yenye mfano: 4², 2³,6²,9⁴ n.k.
8. namba ambayo ikizidishwa mara yenye kwa kiasi kilichotajwa hupata kiasi kamili kama tatu ni kipeuo cha tisa 3×3

D.
1. mbili  2. tatu  3. nne
4. tano  5. sita  6. saba
7. nane  8. tisa
9. kumi na tano
10. kumi
11. kumi na moja
12. kumi na mbili
13. kumi na tatu
14. kumi na nne
15. kumi na saba
16. kumi na nane
17. kumi na sita
18. ishirini na nne
19. kumi na tisa
20. ishirini na tano

E.
1. mia mbili
2. mia moja elfu
3. mia moja
4. siku elfu moja na moja
5. elfu mbili
6. mwaka ujao
7. idadi ya vitu ishirini
8. idadi ya vitu kumi na viwili
9. laki mbili/mia mbili elfu
10. pea/kundi la vitu viwili

**Akisami**

**Zoezi 52**

**A**
1. nusu 2. thuluthi
3. robo
4. khumusi/humusi
5. sudusi 6. subui
7. thumuni/thumni 8. tusui
9. ushuri 10. robo tatu

**B.**
1. $\frac{1}{7} \times \frac{1}{4} = 2. \frac{5}{8}$
2. $\frac{6}{4} + \frac{4}{4} = 6. \frac{1}{4}$
3. $\frac{6}{1} \neq \frac{3}{4} = 6. \frac{7}{9}$

**C.**
1. sawa na
2. si sawa na
3. ongeza (chanya)
4. toa (hasi)
5. gawanya
6. ni kubwa kuliko
7. ni ndogo kuliko
8. ni kubwa kuliko au sawa na
9. ni ndogo kuliko au sawa na
10. alama ya kuzidisha
11. Kipeu
12. asilimia
13. kipeo
14. kipeo cha nne
15. digrii/nyuzi

**D.**
1. robo tatu zidisha humusi mbili ni sawa na ushuri tatu.
2. nusu ongeza nusu ni robo
3. robo tatu ondoa robo ni nusu
4. humusi nne gawanya humusi ni nne
5. thumuni mbili ni sawa na robo

5. **Kuandika**

**Kihasho**

**Zoezi 53**


Mwafunzi aandike insha ya mazungumzo baina ya mtangazaji na mwanasiasa. Mbinu ya mazungumzo ijitokeze kwa uwazi, lugha mwafaka pia izingatiwe.

**Mizani ya maarifa**

**Zoezi 54**

1. parange 2. gani
3. fani 4. kidevu
5. hawapatani kamwe
6. vitambaa 7. ushuri tano
8. kiwambo 9. vundevunde
10. kipepesi 11. utumwa
12. majoyo 13. rehani
14. nidaa 15. kuni
16. kuamia 17. hili
18. shujaa 19. usufi
20. shinda 21. kigeugeu
22. kiingizi 23. hindi
24. kukasirika 25. matende
26. ndaki 27. kuwa na inda
28. matendegu 29. mbuzi
30. kope
Sura ya nane 8

1. Kusikiliza na kuongea

Wizara

Zoezi 55
1. Wizara ya Afya/Siha
2. Wizara ya Michezo
3. Wizara ya Fedha
4. Wizara ya Uhamiaji
5. (a) waziri
   (b) katibu mkuu
6. Taasisi ni kitengo kinachoshughulika na uchunguzi wa fani mbalimbali
Asasi ni shirika linalotoa huduma kwa watu katika jamii kama vile afya
Kaimu ni mtu anayeshikilia wadhifu fulani kwa muda
Makamu ni mtu wa pili kwa cheo ambaye hushika kazi ya mkuu asipokuwepo
7. masuala ya kilimo
8. Wizara ya Habari na Utangazaji
9. Mwanafunzi atumie Kamusi ili kutoa maelezo mwafaka ya maneno yaliyotolewa

2. Kusoma

Ufahamu

Zoezi 56
1. mawazo mchafukoge yalimtafiri
2. kupotea au kutoonekana kwa mumewe
3. kubahatika
4. uhariri na usomaji wa habari
5. mitaroni na madarajani
6. walimu na watoto
7. manne
8. pango
9. akawa mtu ambaye hawajibiki
10. lumbwi/chura

3. Sarufi

Viunganishi

Zoezi 57
1. ingawa/ijapo/ijapokuwa
2. isipokuwa
3. ili
4. mathalani
5. ndiposa
6. aidha
7. la sivyo
8. mathalani
9. baada ya
10. kutokana na
11. tangu
12. hadi
13. miongoni
14. kati
15. pindi
16. iwapo
17. licha
18. falau
19. kwa ajili
20. ilhali

Vihisishi

Zoezi 58

A.
1. mshangao/furaha/hofu
2. mshangao/ukanusho
3. kukubali
4. mshangao/dharau
5. dharau
6. mshangao
7. dharau
8. kudhibitisha
9. kutahadharisha
10. mshangao/hofu/furaha

B.
1. simile
2. hario
3. ala
4. afanalek
5. lahaulu
6. alhamdulilahi
7. hewala zii
8. tallahi
9. wallahi
10. hewalazii
4. Msamiati
Watu na tabia zao

Zoezi 59

A.
1. mdaku 2. kidomo
3. ndumakuwili 4. mparuzi
5. mroho 6. msununu
7. bahili 8. mjuvi
9. lipyoto 10. mlumbi
11. mlimbwende 12. mpwamu
13. kupe 14. mbuge
15. damisi

B.
Mwanafunzi atoe maelezo mwafaka kwa kutumia kamusi.

Maliasili

Zoezi 60

1. unyevu 2. barafu
3. ukungu 4. ziwa
5. ghuba 6. bonde
7. ufuo 8. tambarare
9. chemchemi 10. zilizala
11. mwambao
12. kisulisuli/chamchela
13. kisiwa
14. kifungulima
15. kilindi

B.
Mwanafunzi atoe maelezo mwafaka kwa mujibu wa kamusi.

5. Kuandika
Kihasho

Zoezi 61


(i) Insha
Mwanafunzi aandike insha itakayo ambatana na kimalizio.

(ii) Insha
Mwanafunzi apange hoja zake kwa ustadi na ufasaha.

Mizani ya maarifa

Zoezi 62

1. hufanya 2. saruji
3. pia 4. adhuhuri
5. magumi 6. karadha
7. chete 8. zaidi ya hayo
9. malipo 10. pindua
11. pweza 12. rafi
13. kufaulu 14. dalali
15. jimitai 16. cha
17. marafiki 18. mende
19. fuko 20. uchechefu
21. ulele 22. picha
23. nywele 24. fanyisha
25. hiyo 26. wadudu
27. yangu wa 28. singe
29. lipi 30. krishna
**Sura ya tisa**

1. **Kusikiliza na kuongea**

**Ushairi**

**Zoezi 63**

A.
1. sanaa ya kutunga mashairi
2. mtungo wa kisanaa wenye mpangilio maalumu wa lugha ya mkato unaolelezea wazo fulani
3. manju 4. malenga
5. ngonjera 6. utenzi/utendi
7. ubeti 8. vina
9. mizani 10. minne
11. mwanzo 12. mloto
13. mleo
14. kibwagizo/mkarara/kipeokeo/kiitikio
15. viwili 16. tathmina
17. tathnia/uwili
18. tathlitha/utatu
19. tarbia/unne 20. takhmisa
21. tasdisa 22. ukumi
23. guni 24. mtiririko

B. ubeti
2. 64 (sitini na minne)
3. za/mu
4. viwili
5. tarbia

**2. Kusoma**

**Ufahamu**

**Zoezi 64**

1. Mtu ambaye hakusoma gazeti, kusikiliza redio au kutazama runinga

2. Risasi tatu kichwani
3. Mtu anayezungumzazungumza sana
4. Aliamua kuwashtaki wadhali mu kwa polisi
5. ibilisi
6. waliuawa kwa kuchunwa ngozi
7. Mchuma janga hula na wa kwao/ Mtego wa panya huingia waliomo na wasiokuwemo
8. Jumapili
9. Mia mbili na thenashara
10. Mkasa wa kutisha Kijijini Maonevu/ mada yoyote inayooana na maelezo

**3. Sarufi**

**Zoezi 65**

A. **Matumizi ya ‘ndi’**
1. ndimi 2. ndicho
3. ndiye 4. ndiko
5. ndiyo 6. ndizo
7. ndio 8. ndiyo
9. ndio 10. ndipo

B. **Wingi katika sentensi**
1. Wao ndio wenye vitabu.
2. Wakaako ndiko huku.
3. Visima vyenye maji sahi ndivyo hivi.
5. Tai wapaao ndio walilengwa.
8. Mabango ya waandamanaji ndiyo haya.
9. Vyeti bandia ndivyo vilikataliwa.
10. Sukari ambayo ilinunuliwa ndiyo inafaa.
12. Wowote wanaojitahidi ndio watafanikiwa.
C. Matumizi ya ‘si’ na kirejeshi ‘o’
1. sicho 2. sipo 3. sivyo
4. siyo 5. siyo 6. silo
7. siyo 8. sio 9. siyo
10. siye 11. siye 12. sio
13. siko 14. siyo 15. siyo

4. Msamiati

Milio

Zoezi 66
1. huluza 2. hutetea
3. huwika 4. huvuma
5. hugugumiza 6. huvuma
7. hubweka 8. humiau
9. hukoroma/hukorota
10. hurindima 11. hunguruma
12. hutekela
13. hulia/hukiriza
14. huchakata/huparakacha
15. hudunda 16. huvuma
17. huatyuka 18. hulipuka
19. hukorokocha 20. hutokota

B. Maelezo yawe mwafaka

5. Kuandika

Kihasho

Zoezi 68

Insha

Mwanafunzi afuate mtindo wa uandishi wa kumbukumbu ipasavyo.

Mizani ya maarifa

Zoezi 69
1. dondoandume 2. vyondo
3. mshinde 4. nadhiri
5. 0.4% 6. samahani
7. madada 8. ufuko
9. kupukupu 10. mboni
11. puani 12. melezi
13. zilizala 14. kijivu
16. kiunoni 15. kidogo
17. maabadi 18. mavuzi
19. kumi elfu na moja
20. bawaba 21. huagiza
22. Zi-Zi 23. hiari
24. toa 25. angatua
26. mwashi 27. mbu
28. kiwele 29. nguu
30. mbalimbali

**Sura ya kumi**

Kusikiliza na kuongea

Saa

**Zoezi 70**

**A.**
1. Saa kumi na mbili kasorobo
2. Saa tisa na dakika ishirini
3. Saa kumi na moja kasoro dakika kumi
4. Saa moja kamili
5. Saa saba na dakika kumi
6. Saa sita na nusu

**B.**
1. Saa kumi na mbili kamili
2. Saa tisa na nusu
3. Saa moja na nusu
4. Saa nane kasorobo
5. Saa nane na dakika ishirini na tano
6. Saa nne kasorobo

**C.**
1.
6.

2. Kusoma

Ufahamu

Zoezi 71

1. walikula chochote walichotaka
2. Akili ni mali/Akili ni nywele kila mtu ana zake/Methali nyingine inayofaa dereva wa garimoshi
3. alitumia muda kutafuta mali akasahau wanawe
4. uadilifu/wapole/wachapakazi/wangwana
dereva wa garimoshi
5. alitumia muda kutafuta mali akasahau wanawe
6. kukaa nyumbani kivivu wakitazama runinga
7. tabia chakaramu ya wanawe
8. nafaka
9. watu walifika kwa wingi wakibeba zana za vita.
10. walikuwa wameumizwa vibaya sana.

3. Sarufi

Zoezi 72

Ngeli ya U -U/I -I

1  a) Udhaifu wake ulimtia shakani.
    b) Udhaifu wao uliwatia mashakani.
2  a) Chai itapikwa na mjomba.
    b) Chai itapikwa na wajomba.
3  a) Miwani ya babu imeanguka.
4  a) Unga ukiletwa nitafurahi.
    b) Unga ukiletwa tutafurahi.
5  a) Kahawa ikuizwa nitapata pesa.
    b) Kahawa ikuizwa tutapata pesa.
6  a) Urembo wangu ni wa shani.
    b) Urembo wetu ni wa shani.

Matumizi ya -a unanifu

Zoezi 73

1. la  2. ya  3. wa
4. wa  5. pa  6. wa
7. la  8. wa  9. vya
10. za  11. za  12. la
13. wa  14. ya  15. za/ya
16. kwa  17. ya  18. mwa
19. za  20. wa  21. ya
22. za  23. wa  24. la
25. za  26. ya  27. la
28. ya  29. ya  30. ya

4. Msamiati

Teknolojia

Zoezi 74

A.

Mwanafunzi ataje kazi za vyombo vya teknolojia kama zilivyoorodheshwa. Anaweza kutumia Kamusi kupata haya.

Mapishi

Zoezi 75

1. birinzi  2. bisi
3. nyali  4. karamu
5. kichocheamlo  6. pudini
7. gururu  8. kanza
9. kitindamlo  10. kiungo
11. bariyo/ mwiku/kiporo
12. makombo  13. barohoa
14. udoudouh 15. pukute
16. vibanzi 17. toboza
18. karanga 19. mashendea
20. sharubati

5. Kuandika
Kifungukate

Zoezi 76

Insha
(i) Mwandishi aandike insha ya kusisimua itakayoeleza matamani yake kama angekuwa mfalme. Insha ibainishe yote yanayojiri.
(ii) Msamiati wa teknolojia utumike kwa ufasaha. Hoja zipangwe kwa ufasaha.

Mizani ya maarifa

Zoezi 77
1. kituo 2. stendi
3. kiweto 4. arufu
5. ngawira 6. hupata
7. kanchiri 8. kibemasa
9. vita 10. riaka
11. kusesa 12. magamaga
13. kiwiko 14. masuo
15. nyamafu 16. husikiza
17. mdarisi 18. miguu
19. mkongojowe 20. viatu
21. kiokote 22. hakuthamini
23. Vi-Vi 24. kuliko
25. fungule 26. suala
27. medani 28. majiko
29. hukweta 30. hudhurungi

Sura ya kumi na moja

1. Kusikiliza na kuongea

Vitendawili

Zoezi 78
1. kuku na yai 2. kufuli
3. nywele 4. siafu
5. nyayo 6. ulimi
7. ukucha 8. upepo
9. kobe 10. kifo
11. siafu 12. kufuli
13. mkungu wa ndizi
14. hindi 15. yai
16. popo
17. muhogo/viazi 18. mahindi
19. barabara
21. mafiga/mafya 22. popo
23. muwa 24. uketo/mbisi
25. mahindi 26. kaburi
27. nyuki 28. nyota
29. jua 30. moto
31. mwangaza/jua 32. firigisi
33. mwezi 34. majivu
35. usingizi 36. kinywa
37. mkufu 38. ukimwi
39. kitanda 40. mwangwi
40. kivuli

2. Kusoma

Ufahamu

Zoezi 79
1. hakuwa na mrithi
2. mwanamume jasiri/jagina/shujaa
3. haswa/halisii
4. alikuwa mwoga
5. mtupe na mt wake
6. wanaume pekee waliitika wito huo
7. pindi jina Kristina lilipotajwa
8. moja tu
9. hakuna kubwa lisiloshindwa/au methali yoyote inayolingana na maelezo
10. ndoa hatari/mada yoyote mufindi

3. Sarufi
Kirejeshi na -

A.
1. nalo 2. nao 3. nayo
4. nayo 5. nao 6. nao
7. nacho 8. naye 9. nao
10. nako 11. nao 12. nayo
13. nayo 14. nao 15. nao
16. nao 17. naye 18. nayo
19. nayo 20. nao

B.
1. Gaidi naye ni mwovu.
2. Kitoto nacho hunichekesha.
3. Mwenendo wake nao hunipendeza.
5. Sakafuni napana kigae.
6. Kalamu nayo ina wino.
7. Nyumba nayo itanunuliwa.
8. Mwito nao umetolewa.

4. Msamiati
Viungo vya mwili

Zoezi 81

1. buki /figo 2. mabongo
3. mtulinga 4. utaya
5. nyayo 6. moyo
7. sarara 8. uchengele
9. kibofu 10. wengu
11. koromeo 12. umio
13. kinena 14. ufizi

Vifaa vya viwandani

Zoezi 82

A.
1. mhunzi 2. seremala
3. seremala 4. mhunzi
5. mhunzi 6. seremala
7. mnunuzi/mkulima
8. mkulima
9. mshona nguuo 10. seremala
11. mwashi 12. mwuzaji
13. mkulima 14. seremala
15. seremala 16. mwashi
17. seremala 18. mshonanguuo
19. mwashi 20. mnajimu
21. mtalii 22. mhunzi
23. seremala

B.
1. randa 2. parafujo
3. kekee 4. mizani
5. timazi 6. msumenno
7. bisibisi 8. pimamaji
9. mvukuto/mvuuo 10. faili
11. Jenereta 12. fuawe
13. sepetu 14. cherehansia
15. koleo 16. nyundo

5. Kuandika
Kihasho

Zoezi 83

Insha

Mwanafunzi aandike insha ya kusisimua kutokana na picha iliyo kitabuni. Hoja zitiririke kwa ufasaha.

Mizani ya maarifa

Zoezi 84

Sura ya kumi na mbili (12)

1. Kusikiliza na kuongea
Tanakali za sauti

Zoezi 85

2. Kusoma

Ufahamu

Zoezi 86

3. Sarufi

Nomino

Zoezi 87
A.
1. jiti 2. buzi 3. jigari 4. guo
B.
1. Toto hili linasoma.
2. Gombe langu linakamwa.
5. Kono lake limepona.
7. Jito jingine litatumishi kwa jivuvi.
8. Jikalamu la jalimu linapendeza.

C.
1. Kijibwa
2. Kitungi
3. Kijisanduku
4. Kijitawi
5. Kijipira
6. Kijifagio
7. Kijiti
8. Kijikiti
9. Kijigurudumu
10. Kijichwa
11. Kijia
12. Kijikabati
13. Kijikufuli
14. Kijikuki
15. Kiguo
16. Kijikito
17. Kijishipi
18. Kitoto
19. Kijito
20. Kigombe

D.
1. Kiguu cha kitoto kimejeruhiwa.
2. Kijikapu hicho ni kipya.
4. Kijikeka changu ni kizuri.
5. Kijiti kile kilianguka kando ya kijito.
8. Kijijani cha kijiti kimekauka.
10. Kijikuta cha kijumba kimekarabatiw.

E.
1. Majisu yote yametiwa makali.
2. Majibwa yangu ni makali.
3. Vijiti vimeangukia vijumba vilivyoikuwa kando ya vijija.
5. Kijitabu cha kitoto kimeletwa.
7. Dole la jitu hilo lilikuwa safi.
8. Vijichupa hivyo havikuvunjika.

4. Msamiati

Sayari

Zoezi 88

A.
1. humeremeta
2. unajimu
3. jua
4. utaridi
5. mshtarii
6. zuhura
7. mirihi/utaridi
8. zohali
9. utaridi
10. hung’ara
12.(a) Babu kachomoa jicho jekundu.
   (b) Taa ya ulimwengu.
   (c) Nilianika mpunga wangu. Kulipokucha sikuupata.

B. Kuchora sayari

Hospitali

Zoezi 89

1. nyumba ya kutolea matibabu kwa wagonjwa - hospitali
2. zahanati – hospitali ndogo (dispensari)
3. wadi – chumba maalumu ambamo wagonjwa hulazwa
4. tembe – vidonge vya dawa
5. kipimamwili – chombo cha kupima hali ya mwili
6. kipimajoto – chombo chenyve zaibaki kinachotumiwa kupima joto mwilini
7. sirinji – bomba dogo la kutilia dawa kwa ajili ya kudungia sindano
8. plasta – kitambaa kigumu kifungwacho kwenye sehemu ya mwili kuunganiisha mifupa iliyovunjika
9. bendejji – kitambaa cheupe kinachotumiwa kufungia jeraha
10. uyoka- machine yenye uwezo wa kupima hadi sehemu za ndani kubaini maradhi
11. machela – aina ya kitanda cha kubebea mgonjwa au maiti
12. maabara – jumba la kufanyia majaribio ya kisayansi
13. mualisaji – sawa na muuguzi, anayewahudumia wagonjwa
14. koleo – kifaa cha kushikia vitu kinachotumiwa hospitalini
15. nusukaputi – dawa itumiwayo kwa mgonjwa wakati wa upasuaji
16. glavu – kitu kama soksi na huvaliwa mikononi ili kudumisha usafi
17. tabibu – sawa na daktari, anayewatibu wagonjwa
18. mhazigi – daktari maalum anayewatibu viungo vilivyovunjika

5. Kuandika

Kifungukate

Zoezi 90

Insha
Mwanafunzi aandike barua yake inayotarajiwa kufuata kanuni za barua rasi.

Mizani ya maarifa

Zoezi 91
1. kitawe 2. bwawa
3. kasi 4. zilizopita
5. tonguea 6. mdudu
7. kipwepwe 8. mamluki
9. kindakindaki 10. kilebu
11. umio 12. vifaranga
13. zaraa 14. rasi
15. papachi 16. miguu
17. msonobari 18. hanchifu
19. mkubwa 20. kongoni
21. konda 22. ya
23. radidi 24. maksai
25. mademu
26. uyoga wetu umeoza
27. janga 28. mitunda
29. hutekela 30. tufe

Sura ya kumi na tatu

1. Kusikiliza na kuongeza

Tashbihi

Zoezi 92
1. mfalme
2. shubiri
3. samaki/kondoo
4. ufagio/kilichafu
5. beberu/kidonda
6. swara/duma
7. umeme/ajali
8. barafu
9. mkemwenza
10. twiga/unju/mlingoti
11. mpingo/kizimwili
12. theluji
13. kaburi/usiku
14. ruhani/waridi
15. unyoya/paa
16. mkizi
17. boriti/chuma cha pua
18. kinanda
19. kasuku
20. nyati
21. mchana
22. maziarani/makaburini
23. mpingo/kizimwili
24. njugu/siifu
25. mtumwa
26. mchwa
27. kibogoyo aliyeota jino/tasa
   aliyejifungua salama
28. kiriba
29. Firauni
30. kobe/konokono
31. kupe/chaza/kozi
32. mwasi
33. msahafu
34. panya/ndumakuwili
35. mwana wa kambo/mfiwa
36. simba
37. wembe
38. kunguru
39. mtende/Ijumaa
40. nanga
41. ahera
42. radi
43. lofa/mbwakoko
44. jongoo

2. Kusoma

Ufahamu

Zoezi 93
1. ya ufukara wa familia yao
2. Mzee Omari Babu alikazana kuilisha
   familia yake kwa dhiki kubwa
3. alikuwa mlemavu
4. hakuridhika navyo
5. wazee/mashaibu
6. kaa la moto
7. Alida
8. majimbi yalimrukia Alida na
   kumfanya ajikwae
9. sehemu ya uso au uso wote na
   kifuani
10. Hujafa hujaumbika/Aliye juu
    mngojee chini. Au mada yoyote
    inayoafiki maelezo ya ufahamu)
3. Sarufi

Vivumishi

Zoezi 94

<table>
<thead>
<tr>
<th>Nomino</th>
<th>-eny</th>
<th>-enyewe</th>
<th>-ote</th>
<th>-o-ote</th>
<th>-ingine</th>
<th>o-rejeshi</th>
</tr>
</thead>
<tbody>
<tr>
<td>kikombe</td>
<td>cheny</td>
<td>chenyewe</td>
<td>chote</td>
<td>chochote</td>
<td>kingine</td>
<td>-cho-</td>
</tr>
<tr>
<td>vikombe</td>
<td>vyeny</td>
<td>vyenyewe</td>
<td>vyote</td>
<td>vyovote</td>
<td>vingine</td>
<td>-vyo-</td>
</tr>
<tr>
<td>ulezi</td>
<td>weny</td>
<td>wenyewe</td>
<td>wote</td>
<td>wowote</td>
<td>mwingine</td>
<td>-o-</td>
</tr>
<tr>
<td>malezi</td>
<td>yeny</td>
<td>yenyewe</td>
<td>yote</td>
<td>yoyote</td>
<td>mengine</td>
<td>-yo</td>
</tr>
<tr>
<td>ufito</td>
<td>weny</td>
<td>wenyewe</td>
<td>wote</td>
<td>wowote</td>
<td>mwingine</td>
<td>-o-</td>
</tr>
<tr>
<td>fito</td>
<td>zenye</td>
<td>zenyewe</td>
<td>zote</td>
<td>zozote</td>
<td>nyingine</td>
<td>-zo-</td>
</tr>
<tr>
<td>pakiti</td>
<td>yeny</td>
<td>yenyewe</td>
<td>yote</td>
<td>yoyote</td>
<td>nyingine</td>
<td>-yo-</td>
</tr>
<tr>
<td>pakiti</td>
<td>zenye</td>
<td>zenyewe</td>
<td>zote</td>
<td>zozote</td>
<td>nyingine</td>
<td>zo-</td>
</tr>
</tbody>
</table>

4. Msamiati

Mapambo

Zoezi 95

1. uti wa pua
2. sikioni
3. kidoleni
4. puani
5. mkononi
6. shingoni
7. shingoni
8. shingoni pamoja na mkufu
9. miguuni
10. mikononi/miguuni
11. mdomo wa chini
12. mkononi
13. puani
14. nyweleni
15. kidevuni
16. mkononi
17. machoni
18. miguuni/mikononi
19. pua
20. mguuni/mkononi
21. mkononi
22. shingoni
23. shingoni
24. usoni
25. mkononi

Maradhi

Zoezi 96

A.
1. kiharusi
2. tauni
3. malale
4. malaria
5. waba/kipindupindu
6. ukimwi
7. kaswende/kisonono
8. kifuakikuu
9. utapiamlo
10. kichocho

B.
1. Safura - unaletwa na michango ya kumfanya mtu kukosa damu
2. Bilisukari - sukari nyingi kwenye damu
3. Tetekuwanga - mapele yanayoambatana na homa kali
4. Pepopunda - ugonjwa unaambukizwa na vitu vilivyoshika kutu
5. Ndui - ugonjwa wa watoto wa kutoa sauti za filimbi
6. Kichomi - nimonia
7. Surua - ugonjwa wa vipele wa watoto
8. Mnoga - damu imtokayo mtu puani/mjusi/mutuna
9. Ukoma - ugonjwa wa kumatika viungo vya mwili
10. Kimeta - ugonjwa wa homa kali wa wanyama

5. Kuandika

Kifungukate

Zoezi 97

Insha

Mwanafunzi aandike insha ya hotuba huku akizingatia kanuni zote zizazohitajika katika uandishi wa insha. Lugha fasaha idhihirike.

Mizani ya maarifa

Zoezi 98
1. ki  2. ninga
3. kifunguamkoba  4. tongo
5. kitutu  6. dahalia
7. kisiwa  8. nyendo
9. kibaya 10. bwaibwai
11. nyaadhi 12. pambajo
13. josho 14. ghadhabu
15. mgomba 16. salimini
17. Ki - Vi 18. chumvi
19. sawa 20. ndizi
21. mabua 22. katika
23. koto 24. mtukutu
25. maziarani 26. arafa
27. mkoi 28. timazi
29. diwani 30. mha fidhina

Sura ya kumi na nne

1. Kusikiliza na kuongea

Istiara

Zoezi 99
1. kizito  2. mlafi
3. ni kuzuri  4. mwepesi
5. anasema sana  6. anaiga
7. mpole
8. ana sauti nzuri  9. kubaya
10. mnene 11. magumu
12. ameadimika
13. mrembo/baidhati
14. machungu  15. mjanja
16. nzito 17. anaringa
18. imara/thabiti 19. mweusi
20. haondoki 21. mjinga
22. mbaya/katili 23. laini
24. mrefu
25. karibu/yanakaribiana

2. Kusoma

Ufahamu

Zoezi 100
1. apevuke
2. kutekwa na utamaduni wa kigeni
3. wakimwa
4. mwacha mila ni mtumwa
5. watu kukiri Kiswahili ni kigumu na kuzungumzwa na wale ambao hawajaelimika
6. hutumiwa kokote popote na momote
7. Kiswahili kimepuuzwa na lugha za kigeni kupewa kipaumbele
8. sita
9. mtu mwenye ujuzi wa dini ya Kiislamu na anawafunza wengine
10. Mwalimu Hassan Mbega

3. Sarufi

Kuakifisha

Zoezi 101
1. Umetoka wapi?
2. Nilipoenda sokoni nilinunua tufaha, ndizi na embe.
4. Miye hupenda kula pure (githeri).
5. Lo! Moto huyu alipiana chupa chuma.
7. Ng’ombe ameenda malishoni.
8. Mombasa ni mji mzuri.
9. Mwikali na Kamene ni dada pacha.
10. Babu alipokataa kuyapa majizi pesa, yalitoa bastola na…
   (viakifishi vitumiwe kwa usahihi)

4. Msamiati

Michezo

Maelezo ya michezo

Zoezi 102
1. mwajificho – kujificha na kutafutana
2. gofu – hushirikisha watu wawili wakiingiza mpira katika vishimo
3. gozi - sawa na kandanda; mpira wa miguu/soka
4. riadha- jumla ya michezo yote ya kunyoosha viungo
5. tenisi- wachezaji hutumia vibao maalumu kupigiana mpira mdogo, huwa na watu wawili katika kiwanda kidogo chenye wavu
6. bao - kipande cha mti kilichochongwa na kuchimbuliwa vishimo kitumiwacho kucheeza kete, komwe au vijwe
7. kibunzi – michezo wa watoto wa kukaa na kunyoosha miguu huku mmoja wao akiwimbia na kupitisha mikono katika magoti ya weniwe
8. sataranji – chesi
9. gungwi – michezo wa watoto wa kurukuruka kwa mguu mmoja
10. kibafute – michezo wa watoto wa kukisasi idadi ya vitu viliyovubatwa katika gao la mkono wa mtu mwengine
11. netiboli – michezo wa kufungu magoli kweneje pete
12. mpira wa vikapu – michezo unaoshirikisha timu mbili na wachezaji hugongesha mpira chini kila mara kisha wakaribiapo magoli huruka juu na kuutumbukiza kweneje vikapu
13. jugwe – michezo baina ya timu mbili wa kuvuta kamba
14. raga - hutumia mpira wenye umbo la duradufu na ambao hurushiana na kukimbizana
15. mpira wa magongo - mpira mdogo unaachezwa na timu mbili na kila mchezaji hubeba gongo (kijiti) na mavazi maalum ya kinga
16. miereka – michezo wa kukumbatiana na kuangushana
17. judo – kupigana mieleka kwa kujihami
18. urushaji sagai – ni mchezo wa urushaji mkuki
19. kuruka kwa upondo – michezo ambao unahusisha mti maalum unaomsaidia mchezaji kuruka juu.
20. mpira wa vinyoya – huu ni mchezo wa badmintoni
Viumbe vya kike na kiume

Zoezi 103
1. ajuza/bikizee 2. shangazi
3. miti 4. sultana
5. maltina 6. kijakazi
7. yaya 8. hawa
9. binti/biti 10. pakashume
11. laalali 12. mkemwenza
13. mrembo
14. gashi/banati/msichana
15. nyanya/bibi 16. unyago
17. nana 18. mwanamwali
19. tasa 20. kiruka njia
21. kijulanga 22. mwana halali
23. bikira 24. memsahib
25. nina/mama
26. kikongwe/mzee

5. Kuandika
Kifungukate

Zoezi 104

Insha
Insha ifuate kadiri za uandishi wa insha ya kumbukumbu.

Mizani ya maarifa

Zoezi 105
1. maharagwe 2. mhunzi
3. kiambaza 4. kifundo
5. mapaja 6. mna
7. nasibu 8. wavuvi
9. fahari 10. zijazo
11. kitengele 12. maarufu
13. huchemshwa 14. mmoja
15. razini 16. gurufo
17. bwelasuti 18. kuperepesa
19. pareto 20. malale
21. mganga 22. kibapara
23. la 24. kanzi
25. pua 26. kudhuku
27. wanaelewana 28. mawakili
29. kisulisuli 30. dodo

Sura ya kumi na tano 15
1. Kusikiliza na kuongea

Zoezi 106
1. kuta za nyumba yake zilionyesha dalili ya kusalimu amri wakati wowote
2. Mzee Tamaa kumsifia bintiye wa haki
3. elimu ni uchawi wa mtu mweupe
5. mwanamwali
6. elimu ni taa
7. elimu inafaa ilhali tamaduni nyingine hazifai
8. Jumanne
9. askari wa Chifu
10. Ndoa ya mapema haifai au mada yoyote ambayo inaoana na maelezo ya ufahamu

2. Kusoma
Ufahamu

Zoezi 107
1. istiara
2. kwa kuibuka mshindi tarafani kimasomo
3. nne
4. kama mwana wa nyumba kubwa
5. siku ya kipekee/ya furaha
6. hatibu
7. kaka la yai tupu
8. jezi/kaptura/vitabu/mashati kochokocho/shilingi elfu mbili
9. ndimi wako wa ubani, Dennis Onsarigo (au kimalizio kingine kinachukubali) 

3. Sarufi

Zoezi 108
1. ku 2. ku 3. ku 4. pa
5. m 6. m 7. ku 8. ku
9. pa 10. ku

Usemi halisi na usemi wa taarifa

Zoezi 109
1. Musa alisema kuwa angeelekea mjini siku hiyo.
2. Dada yangu alisema kuwa nguyo yake ilikuwa haijakauka.
3. Mwalimu alisema kuwa angejezaji angiua dafa maishani.
4. Mama alisema mtoto wake kwa nini hakushiria chakula chake.
5. Watalii walisema kuwa walishahisi kuwa vilevile siku tupa kuelekea kwa kipindi cha kwanza.
6. Wageni walisema kuwa aliwasha kuwa aliwasha kwa watoke wa Kiswahili.
7. Wanakijiji alisema kuwa walikuwa wa kijiji wanaotinga na wanzo ili kufanya maishani.
8. Kazungu alisema kuwa wa kufanya kazi kwa siku hili.
9. Chifu aliwambia kuwa aliwambia kuwa aliwambia kwa watoto wa kijiji wanaotinga na watoto wa kijiji wanaotinga.
10. Mzazi wangi alinieza kuwa aliwambia kuwa aliwambia kwa watoto wa kijiji wanaotinga.

B.
6. "Maenye yote yote yote yote.
7. "Tumefanya hivyo."
chote hiki,” wasafiri walisema.
9. maafa,” mshauri alisema.
10. “Je, utingo twaweza kununua vyakula safarini?” Abiria walimuuliza.

4. Msamiati

Mimea

Zoezi 110
1. mchele  2. kahawa/buni
3. tura  4. tini
5. parachichi  6. kanju/bibo
7. kwaju  8. ndizi
9. tofaa  10. fenesi
11. papai  12. embe
13. pareto  14. pera
15. chenza

Wafanyakazi

Zoezi 111
A.
1. mjumu  2. mnajimu
3. mhunzi  4. mhazigi
5. kuli  6. rubani
7. mwashi  8. serehangi/sarahangi
9. mhandisi/injinia  10. mkadamu
11. haramia  12. mlanzi/mgema
13. mshitiri/zabuni  14. dalali
15. kungwi/nyakanga  16. msaawidi
17. mshitiri/zabuni  18. sogora
B. Mwanafunzi atoe maelezo mwafka kuhusu kazi za watu walioorodheshwa. Anaweza kutoa maelezo kwenye kamusi.

5. Kuandika

Kihasho

Zoezi 112

Insha

Mwanafunzi aandike insha ya kusimua yenye kiishio kilichotolewa.

Mizani ya maarifa

Zoezi 113
1. dafina  2. nonyo
3. sasa  4. nyama
5. kihisishi  6. mti
7. kibui  8. vimilikishi
9. hutotoa  10. viza
11. lakabu  12. foliti
13. mhazini  14. kopa
15. kitaifa  16. shajara
17. roshani  18. vyema
19. mtulagha  20. munkari
21. karibia kufa  22. mfaruku
23. hazama  24. chache
25. mkazahau  26. 1,250,000
27. shahiri  28. makombo
29. maganjo  30. weu
Majibu ya majoribio ya mitihani

Muhula wa kwanza

<table>
<thead>
<tr>
<th>Jaribio la kwanza</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>4. C</td>
<td>5. A</td>
<td>6. A</td>
<td></td>
</tr>
<tr>
<td>31. D</td>
<td>32. A</td>
<td>33. A</td>
<td></td>
</tr>
<tr>
<td>40. B</td>
<td>41. B</td>
<td>42. C</td>
<td></td>
</tr>
<tr>
<td>43. C</td>
<td>44. C</td>
<td>45. C</td>
<td></td>
</tr>
<tr>
<td>46. A</td>
<td>47. C</td>
<td>48. C</td>
<td></td>
</tr>
<tr>
<td>49. A</td>
<td>50. B</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Jaribio la pili

<table>
<thead>
<tr>
<th>Jaribio la pili</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>16. A</td>
<td>17. A</td>
<td>18. A</td>
<td></td>
</tr>
</tbody>
</table>

Jaribio la tatu

<table>
<thead>
<tr>
<th>Jaribio la tatu</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. D</td>
<td>2. B</td>
<td>3. B</td>
<td></td>
</tr>
<tr>
<td>31. C</td>
<td>32. D</td>
<td>33. B</td>
<td></td>
</tr>
<tr>
<td>34. A</td>
<td>35. B</td>
<td>36. C</td>
<td></td>
</tr>
<tr>
<td>40. A</td>
<td>41. A</td>
<td>42. A</td>
<td></td>
</tr>
<tr>
<td>43. B</td>
<td>44. A</td>
<td>45. A</td>
<td></td>
</tr>
<tr>
<td>46. D</td>
<td>47. A</td>
<td>48. D</td>
<td></td>
</tr>
<tr>
<td>49. B</td>
<td>50. A</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Jaribio la nne

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>A</td>
<td>2. C</td>
</tr>
<tr>
<td>4.</td>
<td>A</td>
<td>5. D</td>
</tr>
<tr>
<td>7.</td>
<td>C</td>
<td>8. D</td>
</tr>
<tr>
<td>10.</td>
<td>C</td>
<td>11. A</td>
</tr>
<tr>
<td>16.</td>
<td>C</td>
<td>17. C</td>
</tr>
<tr>
<td>19.</td>
<td>A</td>
<td>20. C</td>
</tr>
<tr>
<td>22.</td>
<td>B</td>
<td>23. B</td>
</tr>
<tr>
<td>25.</td>
<td>D</td>
<td>26. A</td>
</tr>
<tr>
<td>28.</td>
<td>B</td>
<td>29. A</td>
</tr>
<tr>
<td>31.</td>
<td>A</td>
<td>32. B</td>
</tr>
<tr>
<td>34.</td>
<td>C</td>
<td>35. A</td>
</tr>
<tr>
<td>37.</td>
<td>C</td>
<td>38. D</td>
</tr>
<tr>
<td>40.</td>
<td>D</td>
<td>41. C</td>
</tr>
<tr>
<td>43.</td>
<td>A</td>
<td>44. A</td>
</tr>
<tr>
<td>46.</td>
<td>D</td>
<td>47. D</td>
</tr>
<tr>
<td>49.</td>
<td>C</td>
<td>50. D</td>
</tr>
</tbody>
</table>

### Muhula wa pili

#### Jaribio la sita

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>B</td>
<td>2. C</td>
</tr>
<tr>
<td>4.</td>
<td>D</td>
<td>5. B</td>
</tr>
<tr>
<td>7.</td>
<td>A</td>
<td>8. B</td>
</tr>
<tr>
<td>16.</td>
<td>B</td>
<td>17. B</td>
</tr>
<tr>
<td>22.</td>
<td>B</td>
<td>23. D</td>
</tr>
<tr>
<td>31.</td>
<td>B</td>
<td>32. D</td>
</tr>
<tr>
<td>34.</td>
<td>C</td>
<td>35. B</td>
</tr>
<tr>
<td>37.</td>
<td>A</td>
<td>38. D</td>
</tr>
<tr>
<td>40.</td>
<td>C</td>
<td>41. B</td>
</tr>
<tr>
<td>43.</td>
<td>C</td>
<td>44. D</td>
</tr>
<tr>
<td>46.</td>
<td>A</td>
<td>47. A</td>
</tr>
<tr>
<td>49.</td>
<td>C</td>
<td>50. B</td>
</tr>
</tbody>
</table>

### Jaribio la tano

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>D</td>
<td>2. B</td>
</tr>
<tr>
<td>4.</td>
<td>D</td>
<td>5. A</td>
</tr>
<tr>
<td>7.</td>
<td>D</td>
<td>8. B</td>
</tr>
<tr>
<td>10.</td>
<td>D</td>
<td>11. D</td>
</tr>
<tr>
<td>16.</td>
<td>C</td>
<td>17. D</td>
</tr>
<tr>
<td>19.</td>
<td>C</td>
<td>20. B</td>
</tr>
<tr>
<td>22.</td>
<td>C</td>
<td>23. B</td>
</tr>
<tr>
<td>25.</td>
<td>D</td>
<td>26. D</td>
</tr>
<tr>
<td>28.</td>
<td>A</td>
<td>29. D</td>
</tr>
<tr>
<td>31.</td>
<td>C</td>
<td>32. D</td>
</tr>
<tr>
<td>34.</td>
<td>A</td>
<td>35. D</td>
</tr>
<tr>
<td>37.</td>
<td>D</td>
<td>38. A</td>
</tr>
<tr>
<td>40.</td>
<td>A</td>
<td>41. D</td>
</tr>
</tbody>
</table>

### Jaribio la saba

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>A</td>
<td>2. B</td>
</tr>
<tr>
<td>4.</td>
<td>A</td>
<td>5. B</td>
</tr>
<tr>
<td>7.</td>
<td>B</td>
<td>8. C</td>
</tr>
<tr>
<td>16.</td>
<td>A</td>
<td>17. B</td>
</tr>
<tr>
<td>19.</td>
<td>C</td>
<td>20. C</td>
</tr>
<tr>
<td>22.</td>
<td>A</td>
<td>23. C</td>
</tr>
<tr>
<td>25.</td>
<td>D</td>
<td>26. B</td>
</tr>
</tbody>
</table>

ANS Kiswahili 8 Combined.indd   105
4/27/15   9:13 AM
31. C  32. D  33. A  
34. A  35. D  36. D  
37. B  38. C  39. B/A  
40. C  41. B  42. A  
43. C  44. A  45. D  
46. C  47. C  48. C  
49. B  50. A  

Jaribio la nane

31. A  32. D  33. D
34. B  35. A  36. B
40. C  41. A  42. B
43. D  44. C  45. B
46. B  47. B  48. C
49. D  50. B

Jaribio la tisa

1. A  2. A  3. A

Jaribio la kumi

1. C  2. C  3. A
31. C  32. D  33. B
34. B  35. A  36. C
40. A  41. A  42. D
43. D  44. C  45. B
46. A  47. A  48. A
49. B  50. A
### Muhula wa tatu

#### Jaribio la kumi na moja

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>31.</td>
<td>D</td>
<td>32.</td>
</tr>
<tr>
<td>34.</td>
<td>B</td>
<td>35.</td>
</tr>
<tr>
<td>40.</td>
<td>D</td>
<td>41.</td>
</tr>
<tr>
<td>43.</td>
<td>B</td>
<td>44.</td>
</tr>
<tr>
<td>46.</td>
<td>C</td>
<td>47.</td>
</tr>
<tr>
<td>49.</td>
<td>B</td>
<td>50.</td>
</tr>
</tbody>
</table>

#### Jaribio la kumi na mbili

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>31.</td>
<td>A</td>
<td>32.</td>
</tr>
</tbody>
</table>

#### Jaribio la kumi na nne

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>D</td>
<td>2.</td>
</tr>
<tr>
<td>4.</td>
<td>B</td>
<td>5.</td>
</tr>
</tbody>
</table>
49. B  50. D

Jaribio la kumi na tano
34. D  35. C  36. B
37. B  38. A  39. A
40. A  41. D  42. A
43. A  44. C  45. B
46. C  47. B  48. A
49. D  50. B
Reproduction in human beings

1. Fusion of sperm and ovum to form a zygote.
2. B
3. The release of an ovum/egg from the ovary just before menstruation occurs.
4. (a) P – Head
   Q – Nucleus
   R - Neck
   S – Tail
   (b) V – Outer membrane
   T – Nucleus
   U – Egg yolk
5. Tail
6. One
7. (a) Fallopian tube/oviduct
   (b) Womb or uterus
8. i) puberty ii) sperm iii) ovum iv) copulation v) vagina
   vi) swim vii) ovum viii) fertilization
   ix) zygote x) implantation
   xi) conceived xii) menstruation
9. Internal fertilisation occurs inside the body of the female whereas external fertilisation occurs outside the body.
10. (a) Fallopian tube (b) Uterus (c) Birth canal
11. i) Menstruation stops
    ii) Enlargement of breasts and abdomen region
iii) Morning sickness
iv) Emotional changes which may include being moody at times.
12. A
13. U – Placenta
   V – Umbilical cord
   W - Embryo
   X – Amnion or amniotic sac
   Y – Amniotic fluid
   Z - Uterus/womb
14. Amniotic fluid
15. (a) - Supplies nutrients and oxygen to foetus.
   - Removes waste products from foetus.
   (b) - Protects foetus from shock, mechanical injury.
   - Lubricates the foetus ensuring friction-free movement.
   (c) - Transports things to and from the foetus.
16. Umbilical artery – carries deoxygenated blood and other wastes to the placenta from the foetus.
   Umbilical vein – carries oxygenated blood and dissolved nutrients to the embryo from the placenta.
17. 4-5 months
18. B

The process of birth

19. (a) Period between fertilisation and birth.
    (b) 9 months
20. i) amnion/amniotic sac
    ii) labour pains iii) cervix
    iv) head v) breech
    vi) afterbirth vii) navel
21. To reduce blood loss.
22. D
23. Parturition
24. Colostrum
25. iv), v), ii), i), iii)

**Excretory organs and their waste products**

26. i) Carbon dioxide   ii) Urea
   iii) Salts   iv) Excess water
27. i) Kidney   ii) Lungs    iii) Skin
28. Excretion is the removal of waste products from the body of an organism whereas egestion is the elimination of undigested and indigestible food materials from the body.
29. i) Removes toxic materials from the body.
   ii) Prevents accumulation of wastes inside the body.
   iii) Makes the body function properly.
   iv) Cools the body (e.g. removal of excess water from the body through sweating)

**The Skin**

30. i) Protection from physical damage.
   ii) Excretion (excess water and salts).
   iii) Regulation of body temperature.
31. (a) i) Epidermis   ii) Dermis
   (b) i) Dead cells, hair, pores.
   ii) Sweat gland, blood capillaries, nerves, fat deposits.
32. salts, water
34. D
35. F – Supplies tissue with nutrients.
   G – Temperature regulation.
36. B

37. D

**The Kidneys**

38. i) Excess water   ii) Urea
   iii) Excess salts
39. Urine
40. Two
41. (a) A – Artery  B- Vein
   C – Kidney  D- Ureter
   E – Bladder  F – Urethra
   (b) A – Carries oxygenated blood to the kidney.
   B – Carries deoxygenated blood away from the kidney.
   C – Purifies blood by removing wastes.
   D – Takes urea to the bladder.
   E – Stores urine temporarily.
   F- Takes urine out of the body.
42. B

**The lungs**

43. Carbon dioxide, water
44. Pass the product through lime water. The lime water turns milky, showing that carbon dioxide is present in the product.
45. D
46. (a) Salts
   (b) Carbon dioxide
   (c) Urea

**Part 2: True or false**

1. False  2. False  3. False
4. True  5. False  6. False
10. True  11. True

**Part 3: Jog your mind**

**Across**

5. Miscarriage  6. Menopause

**Down**

7. Abortion  
8. Parturition  
9. Breech birth  
10. Chorion  

2. i) Lungs ii) Carbon dioxide  
iii) Sweat iv) Water v) Urea,  
Process (a) – Breathing out,  
Process (b) – Urination,  
Process (c) - Sweating  

C. Flashback

1. (a) W - Oviduct  
X - Womb  
Y - Ovary  
Z - Vagina  
(b) i) Female sex cells (ova) will not develop.  
ii) Fertilisation will not take place.  

2. (a) Allows air in and out of lungs.  
(b) Allows expansion and contraction of lungs.  
(c) Facilitates exchange of gases in the lungs.  

3. (a) Can’t hear  
(b) Happy / hallo / greeting  
(c) Keep quiet  

4. B  

5. (a) Grinding  (b) Tearing  
(c) Grinding and chewing  
(d) Cutting  

6. B  

7. (a) milk / deciduous  
(b) three (3)  

9. (a) P – Trachea  
Q – Ribcage  
R – Lungs  
T – Diaphragm  
(b) i) Moves down  
ii) Moves up  
(c) Q  
(d) Lungs expand  

10. faeces, rectum  

11. D  

12. Small intestine  

13. (a) M – Urethra;  
N – Penis  
P – Sperm duct; Q - Testis  
(b) M – Passage of sperms and urine.  
N – Deposit sperms into the vagina.
P – Passage of sperms to the urethra.
Q – Production of sperms.
(c) No sperms will pass out.
14. (a) Period when adolescent attains sexual maturity and are capable of reproducing.
(b)

<table>
<thead>
<tr>
<th>Boys</th>
<th>Girls</th>
</tr>
</thead>
<tbody>
<tr>
<td>i) Breaking of voice</td>
<td>i) Breasts enlarge</td>
</tr>
<tr>
<td>ii) Shoulders broaden</td>
<td>ii) Hips broaden</td>
</tr>
<tr>
<td>iii) Beards appear</td>
<td>iii) Menstruation starts</td>
</tr>
<tr>
<td>iv) Wet dreams begin</td>
<td></td>
</tr>
</tbody>
</table>

15. i) Veins have valves while arteries lack.
      ii) Arteries have thick walls while veins have thin walls.

16.

17. C

18. i) Plasma
      ii) Transports oxygen
      iii) White blood cells
      iv) Clotting of blood

19. (a) i) Artery
      ii) Capillary
      iii) Vein
      (b) i) Carries oxygenated blood.
      ii) Site for exchange of gases.

20. (a) Cutting and chewing food.
      (b) Mixes and lubricates food. It has chemicals which break down food.
      (c) Manufactures bile
      (d) Absorbs digested food
      (e) Produces pancreatic juice
      (f) Removal of faeces

21. Vena cava, lungs, pulmonary artery, pulmonary vein, left ventricle, aorta in that order.

22. (a) Stomach
      (b) Oesophagus
      (c) Large intestine
      (d) Rectum

23. Regular movement of blood as pumped by the heart.

24. Lungs


26. (a) Produces ova
      (b) Is where the baby develops from (houses the baby)
      (c) Produces sperms
      (d) Passage of sperms and urine

Unit 2: Health education

B. Unit review

Part 1: Self – check quiz

Meaning of sexually transmitted infections

1. Infections spread from a sick person to a healthy person mainly through sexual intercourse.

2. i) Syphilis  ii) Gonorrhoea  iii) Chancroid
Causes, signs & symptoms and control measures of common STIs

3. STI Cause
   i) Syphilis Bacteria
   ii) Gonorrhoea Bacteria
   iii) Chancroid Bacteria
   iv) AIDS Virus

4. i) Sexual intercourse.
   ii) Transfusion with infected blood.
   iii) Mother to child at birth.

5. 
<table>
<thead>
<tr>
<th>STI</th>
<th>Cause</th>
</tr>
</thead>
<tbody>
<tr>
<td>Syphilis</td>
<td>Bacteria</td>
</tr>
<tr>
<td>Gonorrhoea</td>
<td>Bacteria</td>
</tr>
<tr>
<td>Chancroid</td>
<td>Bacteria</td>
</tr>
<tr>
<td>AIDS</td>
<td>Virus</td>
</tr>
</tbody>
</table>

6. Males – burning sensation when urinating.
   - discharge of pus from penis.
   - blockage of urethra.

Females – Pain in the lower abdomen.
   - Discharge of pus from the vagina
   - Blockage of fallopian tube.

7. i) Abstaining from sexual intercourse.
   ii) Being faithful to your spouse.
   iii) Screening blood before transfusion.
   iv) Testing pregnant mothers before giving birth.

8. i) Abstaining from sexual intercourse.
   ii) Being faithful to your spouse.

iii) Screening blood before transfusion.
iv) Testing pregnant mothers before giving birth.

v) Avoiding peer pressure.
vi) Creating public awareness on STIs.

vii) Seeking medical treatment if infected.

9. Chancroid
10. i) Abstaining from sexual intercourse.
    ii) Being faithful to your spouse.
    iii) Avoiding peer pressure.
    iv) Seeking medical treatment if infected

11. -
12. B
13. B
14. i), ii), iv), v), vi)
15. i) Traditional practices like wife inheritance.
    ii) Sharing unsterilised cutting tools e.g. during circumcision, tattooing, ear piercing, etc.
    iii) Unfaithfulness in married couples.
    iv) Lack of proper facilities in rural areas to carry out blood screening before transfusion.
    v) Stereotyping and I don’t care attitude.
    vi) Willingful spread by people of bad intention.

16. i) Use of radio.
    ii) Use of television.
    iii) Use of print media such as newspapers.
    iv) Use of leaflets, posters, bronchures, etc.
    v) Use of computers and phones through internet services
    vi) Advertising on billboards.

17. (a) Widely available hence the message reaches many people.
(b) Can be written in any language and the message can be stored for future use.

(c) People are able to both listen and see the picture. The message is communicated more seriously.

(d) Allows exchange of both text and voice messages. The message can reach many people within a short period of time.

(e) The message can be passed over a wide area (like the whole world) within a very short time. Anybody connected to the internet can access the information regardless where he/she is.

18. (a) Educating a large group of people about something.
   (b) i) Drama and story telling  
          ii) Films  
          iii) Videos  
          iv) Games  
          v) Public lectures

19. i) Barazas  
      ii) Funeral meetings  
      iii) Church services  
      iv) In market places  
      v) Community meetings  
      vi) During weddings

20. i) Helps one plan for the future.  
      ii) Helps positive individuals stay positively.  
      iii) Advises on the steps to take to remain negative.  
      iv) Prevents stigmatisation.

21. i) Creating awareness of the disease. 
      ii) Encouraging people to go for testing. 
      iii) Educating people on prevention measures. 
      iv) Educating people on control measures. 
      v) Educating people on how to stay positively with infected individuals. 
      vi) Creating awareness on spread at birth and through breastfeeding to prevent mother to child transmission.

      vii) Advising people to insist on screening of blood before transfusion.

      viii) Advising the public on importance of ARVs and where to get them.

      ix) Giving information on management of HIV/AIDS.

      x) Educating people about traditional practices in relation to HIV/AIDS.

Part 2: True or false

1. False  2. False  3. False  
4. True  5. False  6. True  
10. True  11. False

Part 3: Jog your mind

1. Two
2. 1, 3, 6, 9, 10, 11, 12, 14, 15 and 1, 3, 11, 13, 12, 15

C. Flashback

1. Head, nose, teeth, eyes, whole body, hair.
2. Sharing personal items can lead to spread of diseases.
3. i) Handkerchief – wiping nose, face; for removing mucus.
     ii) Socks – protecting feet or keeping them warm.
     iii) Toothbrush – cleaning teeth and tongue.
     iv) Comb/hairbrush – keeping hair neat.
     v) Towel – wiping body after bathing
4. i) To prevent injury like being hurt by sharp objects.
     ii) To prevent spread of diseases.
iii) To make the environment look beautiful.

5. i) Ensure that toilets have water and flushing system.
   ii) Clean toilets and latrines regularly.
   iii) Latrines should have a cover for the hole.
   iv) When using latrines, ensure the wastes go into the hole.

6. i), ii), iv), v), vii)

7. i) Brush teeth after every meal.
   ii) Eat foods rich in calcium and vitamins.
   iii) Avoid sugary foods like sweets and chocolates.
   iv) Exercise your teeth by chewing hard things like soft bones, carrots, sugarcane.
   v) Go for dental check-ups regularly.

8. Bad breath, bleeding gums, dental carries, tooth decay.

9. i) Always follow doctor’s instructions.
   ii) Never take expired drugs.
   iii) Do not share your medicine with another person.
   iv) Take the full dose even after getting well.
   v) Do not use medicine container for other purposes at home.
   vi) Do not buy medicine without doctor’s prescription.

10. A

11. i) Read the instructions carefully.
   ii) Do not use chemical containers for other purposes.
   iii) Store chemicals away from foodstuff and children.
   iv) Use protective clothing when using chemicals.
   v) Do not inhale fumes from chemicals.
   vi) Wash hands thoroughly with soap after use.
   vii) Do not smoke, eat or drink when handling chemicals.

12. i) Window stage.
   ii) The test is positive but there are no signs and symptoms.
   iii) Full-blown AIDS.
   iv) Signs and symptoms of AIDS start showing.

13. Semen, vaginal fluid, blood.

14. i) Persistent coughs, fever that lasts for a long time, sores in the mouth, skin infections, opportunistic diseases like TB and pneumonia appear.

15. i) Sexual intercourse.
   ii) Blood transfusion using infected blood.
   iii) Sharing skin piercing and cutting instruments like blades and needles.
   iv) Infected mother to child at birth or during breastfeeding.
   v) Kissing with sores or cuts in the mouth.

16. Diseases that are easily transmitted from one person to another.

17. i) 
   Cause – Bacteria
   Signs and symptoms - Frequent and prolonged cough.
   - Sputum with blood stains.
   - Chest pains.
   - Pale, week and thin body.
   - Fever.
   Control and prevention
   - Immunisation with BCG vaccine.
   - Avoid overcrowded places.
   - Ensuring that rooms are well ventilated.
   - Observing personal hygiene.
   - Taking antibiotics.
   ii) Cause – Plasmodium
Signs and symptoms:
- Pain in the joints.
- Shivering then sweating.
- Fever.
- Loss of appetite.
- General body weakness.

Control and prevention:
- Draining unwanted stagnant water.
- Clearing bushes around homes and houses.
- Spraying layer of oil on water.
- Using treated mosquito nets.
- Applying mosquito repellants.
- Taking anti-malarial drugs.

18. i) Malaria ii) Tuberculosis iii) Malaria iv) Tuberculosis v) Tuberculosis vi) Malaria

19. The process of injecting somebody with a vaccine to protect him/her from a particular disease.

20. Plaque

21. i) BCG, injection at left forearm. iii) DPT, injection at left upper arm. iv) 6 weeks, 10 weeks and 14 weeks. v) Vitamin A vi) 9 months, injection at left upper arm.

22.

<table>
<thead>
<tr>
<th>Pre-test counselling</th>
<th>Post – test counselling</th>
</tr>
</thead>
<tbody>
<tr>
<td>i) To prepare the person for the test.</td>
<td>i) To prepare you to deal with your status.</td>
</tr>
<tr>
<td>ii) To remove fear.</td>
<td>ii) To be able to live positively if found with the virus.</td>
</tr>
<tr>
<td>iii) To make the person ready to accept the outcome.</td>
<td>iii) To plan for the future and start taking ARVs.</td>
</tr>
</tbody>
</table>

23. i) Individual iii) Family

24. Take one tablet or a spoonful of the medicine three times a day.

25. A substance other than food that when taken affects the way our bodies or mind work.


27. Khat, bhang, mandrax, cocaine, inhalants, alcohol, heroine or any other drug.

28. (a) Meaning – use of drugs for other purposes other than medical. Examples: Smoking, taking alcohol, injecting with heroine, cocaine, etc.

(b) Meaning – using a drug in a wrong way. Examples: taking overdose, sharing drugs with a friend, not completing dosage, buying drugs without doctor’s prescription, etc.

29.

<table>
<thead>
<tr>
<th>Health effects</th>
<th>Social effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>i) Cause diseases</td>
<td>i) Marital conflicts</td>
</tr>
<tr>
<td>ii) Poor health</td>
<td>ii) Dropping out of school</td>
</tr>
<tr>
<td>iii) Lack of concentration</td>
<td>iii) Truancy</td>
</tr>
<tr>
<td>iv) Impaired judgement</td>
<td>iv) Rape</td>
</tr>
<tr>
<td>v) Withdrawal effects or any other health effect given.</td>
<td>v) Accidents</td>
</tr>
</tbody>
</table>

30. (a) A false story or an idea that many people believe in but which is not true

(b) A misunderstanding or a wrong idea about something
(b) i) AIDS is caused by HIV. ii) HIV cannot survive inside mosquito body. iii) AIDS is transmitted by getting in contact with infected blood, semen or vaginal fluid. iv) HIV/AIDS patient can live a normal productive life. v) AIDS is caused by HIV virus. vi) AIDS can be gotten from any person who is HIV positive. vii) AIDS is spread through contact with infected body fluids. viii) AIDS has no cure. ix) HIV positive mother can give birth to a HIV negative child with proper advice. x) HIV/AIDS has no cure.
32. (a) i) Provide adequate and balanced diet. ii) Proper hygiene. iii) Love and care. iv) Medical care.
(b) i) Provides nutrients to the patient. ii) Prevents infection by other diseases-causing organisms. iii) The patient feels accepted in the society. This helps to avoid stigmatisation. iv) Treats opportunistic infections, ARVs helps to boost CD4 count or reduce viral load.

Unit 3: Plants

B. Unit review

Part 1: Self-check quiz

Adaptations of plants to their environment

1. (a) Features that make a plant to survive in its habitat. (b) The surroundings of any living or non living thing.
2. (a) i) High day temperatures, low night temperatures. ii) Loose soil which can easily be carried away. iii) Low rainfall. (b) i) Moderate temperatures ii) High rainfall iii) Compact soil which is good for plant growth.
3. (a) Water lily, water hyacinth, rice, butter cup. (b) Baobab, euphorbia, acacia, cactus, sisal, etc.
4.

<table>
<thead>
<tr>
<th>Dry conditions</th>
<th>Wet conditions</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) Deep roots with several root hairs</td>
<td>Short roots, breathing roots.</td>
</tr>
<tr>
<td>(b) Fleshy (succulent) stems</td>
<td>Flexible stems</td>
</tr>
<tr>
<td>(c) Needle-like leaves, shedding of leaves, few/sunken stomata, thick cuticle.</td>
<td>Broad leaves, many stomata, thin cuticles.</td>
</tr>
</tbody>
</table>
5. (a) Rice, butter cup.
   (b) Cactus, baobab.
   (c) Water lily, water hyacinth, etc.
   (d) Cactus, euphorbia, acacia, sisal.
6. Cuticle
7. Tendrils
8. (i) To reduce amount of water absorbed by the plant.
    (ii) To store and preserve water for future use.
    (iii) To reduce loss of water through transpiration.
    (iv) To reduce water loss by reducing surface area of the leaf.
    (v) Reduce water loss by reducing evaporation.
    (vi) To discourage water loss thereby retaining the water inside the plant.
9. (a) Have needle-like leaves, thick stems, stems are green to allow photosynthesis to occur, have succulent stems that store water for future use.
    (b) Has flexible stems to prevent breakage, leaves are broad to increase amount of water lost, leaves have large air spaces to enable them float on water, etc.
10. Succulent stems store water for future use.

**Signs of unhealthy crops**

11. i) Stunted growth.
    ii) Discoloured leaves.
    iii) Wilted plants.
    iv) Curled leaves.
    v) Spots and streaks on leaves.
    vi) Diseased stems.
12. i) Curled leaf     ii) Spots
13. Spots are patches or dots of a different colour on a leaf. Streaks are thin lines appearing on a leaf.

14. i) Stunted growth   ii) Spots
    iii) Wilting     iv) Streaks
15. i) Cassava mosaic
    ii) Maize streak
    iii) Potato blight or any other crop disease given.
16. i) Reduced yields.
    ii) Low quality produce.
17. i) Produce from diseased crops may be discoloured.
    ii) Holes in seeds.
    iii) Produce with toxin.
    iv) Deformed fruits, tubers, etc.
    v) Holes in stems like sugarcane.
18. i) Stunted crops do not grow to maturity.
    ii) Wilting leads to death of plants.
    iii) Diseased seeds fail to germinate.
    iv) Leaves with streaks, spots or discoloured leaves do not carry out photosynthesis well.

**Part 2: True or false**

1. False   2. False
3. True     4. False
5. False    6. False
7. True

**Part 3: Jog your mind**

**Across**

1. Discolouration     2. Halophytes
5. Hydrophytes       6. Cactus
7. Onion

**Down**

8. Xerophytes        9. Transpiration
10. Stomata
C. Flashback

1. E – Bud/flower
   F – Leaf
   G – Stem
   H - Root

2. Roots – Absorption of water and mineral salts.
   - Anchoring the plant.
   - Storage of food.
   - Breathing in some plants.

   Stem
   - Supporting the plant.
   - Transportation role.
   - Storage of food material manufactured by the plant.
   - Breathing in certain plants.

   Leaves
   - Manufacture of food.
   - Transpiration.
   - Storage of food.
   - Protection (thorns).

3. i) Carrot    ii) Onion
   iii) Tomatoes   iv) Sweet potatoes
4. i) Flower    ii) Seed
   iii) Fruit     iv) Bud
5. i), iii)
6. i) Epigeal – dicots
   ii) Hypogeal – monocots
7. i) Weeding   ii) Watering
   iii) Application of pesticides
   iv) Prunning
8. This topic may not be covered at this level, however, you can use it for fast learners and as a way of practice for the pupils for them to appreciate different types of leaves.

<table>
<thead>
<tr>
<th>Leaf</th>
<th>Simple or Compound</th>
<th>Venation</th>
<th>Tip</th>
<th>Shape</th>
<th>Margin</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Compound</td>
<td>Network</td>
<td>Pointed</td>
<td>Owate</td>
<td>Rough</td>
</tr>
<tr>
<td>B</td>
<td>Simple</td>
<td>Parallel</td>
<td>Pointed</td>
<td>Oblong</td>
<td>Smooth</td>
</tr>
<tr>
<td>C</td>
<td>Compound</td>
<td>Parallel</td>
<td>Pointed</td>
<td>Linear</td>
<td>Smooth</td>
</tr>
<tr>
<td>D</td>
<td>Simple</td>
<td>Network</td>
<td>Pointed</td>
<td>Owate</td>
<td>Rough</td>
</tr>
<tr>
<td>E</td>
<td>Simple</td>
<td>Parallel</td>
<td>Pointed</td>
<td>Linear</td>
<td>Smooth</td>
</tr>
</tbody>
</table>

b) Accept local names of plants.

9. a) Removal of excess water (moisture content) from the plants through the leaves using the small openings (pores)
b) Pores

    Oil crops – Coconut, maize, sunflower
    Fibre crops – cotton, sisal.

    Legumes: Beans, Green Grams, Cow pea.
    Vegetables: Cabbage, Tomato, Carrot,
    Spinach.
    Fruits: Banana, Pineapple
    Tubers: Potato, Cassava, Sweet Potato.

12. a) Beverage, fuel.
b) Flour, cooking oil, fuel.
c) Rope, basket, sack.
d) Beverlage, fuel.
e) Spice, fuel.
f) Cooking oil, building material, alcohol, poles, fuel.

13. a) A plant growing where it is not wanted.
    A–. black jack
    B–. Oxalis
C–. Mexican Merigold  
D–. Sodom Apple

14. • Reduce quantity of produce.  
• Compete with main crops for nutrients, water and light.  
• Transmit pests and diseases to main crops.  
• They are expensive to control.  
• Some weeds are poisons to both human beings and other animals.  
• Increase the amount of labour on the farms.

Non green: mushroom, lichen, mould, fungi, bacteria.

16. Flowering plants reproduce by means of flowers, non flowering plants do not produce flowers.

17. Chlorophyll

18. a) i) Tap root  ii) Fibrous root  
b) i) Carrot, beans, cowpea, etc.  
ii) Grass, wheat, rice, maize, etc.

19. a) i) Stigma  ii) Style  
iii) Petals  iv) Ovary  
v) Sepal  vi) Filament  
vi) Anther  vii) Ovule

b) K - Anther  L - Petal  
N - Filament  N - Sepal  
P - Stigma  Q - Style  
R - Ovary

20. a) Collection of petals.  
b) Male parts of a flower.  
c) Female parts of a flower.  
d) Collection of sepals.

21. a) Transfer of pollen grains from anther to stigma of a flower.  
b) i) Water  ii) Wind  
iii) Animals e.g. birds and insects

22. a) i) Wind pollinated  
ii) Insect pollinated  
b) i) –Petals not pronounced

–Anthers hanging loosely  
–Feathery stigma, lying outside the flower.  

ii) –Stigma, – inside the flower not feathery.  
–Stiff petals located inside the flower.

23. Fertilization

24. a) i) Root  ii) Shoot  
b) Epigal – Cotyledon emerges above the ground.  
Hypogal – Cotyledon remains underground.

25. W – Style  X–Pollen tube  Y – Egg cell  
Z- Ovary  
i) Seeds  ii) Fruit

26. I – Endosperm  J – Cotyledon  
K- Plumule  L – Radicle  
M- Cotyledon  N- Testa  
K- Becomes the shoot of the plant.  
L- Grows into the root of the plant

27. a) 

Cross pollination

Note: Mark correctly for a drawing involving cross pollination on two different flowers on the same plant.
b) – Pollen is transferred from anther to stigma on same flower on different flowers but or the same plants.

28. A condition whereby plants depend on other plants and animals depend on one another.

29. a) Shade b) Habitat c) Support

30. Field pests e.g. aphids, worms, stalk borers, weaver bird, etc.
   ii) Storage pests e.g. weevils, rodents, mite, etc.

31. i) – Stunted growth
   ii) – Poor quality yields
   iii) – Reduced crop yields
   iv) – Transmit diseases to crops
   v) – Death or dying off of crops

32. a) Leaves and fruits
   b) Seeds and fruits
   c) Seeds
   d) Stems
   e) Seeds and fruits

33. Scaring away, trapping, spraying, weeding, pruning, hand picking.

34. Food
   ii) Carbon dioxide
   iii) Shelter
   iv) Oxygen
   v) Mediane
   vi) Mineral salts
   vii) Pollination
   viii) Nutrients
   ix) Decomposition

35. Producers, decomposers.

36. Decay

37. i) Animals that feed on plant materials only.
   ii) Animal that feed on flesh of other animals.
   iii) Animals that feed on both plants and flesh of other animals.

38. – Help in the decomposition process.

39. – Plants use carbon dioxide to make food during photosynthesis.
   – Both plants and animals require oxygen for respiration.

Unit 4: Animals

B. Unit review

Part 1: Self-check quiz

Adaptations of animals

1. They are characteristics and behaviour of the animal that enable it to survive in a particular environment.

2. i) Environment/habitat
   ii) Type of food
   iii) Weather
   iv) Movement

Feeding habits of mammals

3. a) Mammals that feed on vegetation or plants only.
   b) Mammals that feed on flesh of other animals.
   c) Mammals that feed on both flesh and plant materials also known as mixed diet eaters.

4. ii) Carnivore
   iii) Carnivore
   iv) Herbivore
   v) Herbivore
   vi) Omnivore
   vii) Omnivore

5. i) Incisors
   ii) Canines
   iii) Pre-molars
   iv) Molars

6. a) i) grazers
   ii) browsers
   b) i) Antelopes, cows, sheep, horse, donkey, buffalo etc.
   ii) Giraffes, goats, gazelles, camels, etc.

7. a) Helps the lower incisors to cut vegetation.
   b) It allows the tongue to grasp, mix and roll the food in the mouth for proper chewing.

8. a) They have ridges that help in grinding tough material.
b) It is long and rough. The length helps in gripping grass. The rough surface prevents injury.

9.

10. a) - ii) b) - iv) 
    c) - i) d) - iii)
11. i) Crocodiles ii) Lions iii) Leopards iv) Dogs 
    v) Cats, hyenas, jackals, wild dogs.
12. i) Powerful jaws to hold prey. ii) Canines are long and pointed for tearing meat and holding prey. iii) Carnassial teeth used for slicing tough flesh and cracking bones. iv) Molars for crushing bones. v) Streamlined bodies for fast running to catch prey.
13. They are strong scissor-like teeth on both upper and lower jaws used for slicing tough flesh and cracking bones.
14. i) Sharp for biting and cutting flesh. ii) Sharp, pointed and elongated for tearing flesh and holding prey. iii) Have flat and ridged surfaces for crushing flesh and bones before swallowing.
15. i) Their streamlined bodies make them run after prey very fast. ii) Their teeth are adapted to catching, holding and killing the prey. iii) Long and sharp claws that grip and tear flesh. iv) Powerful jaw muscles to hold prey.
16. Flesh does not get stuck between the teeth.

17. i) Human beings, gorillas, ii) Monkeys, baboons, iii) Chimpanzees, pigs, etc
18. Cutting or biting, tearing and grinding.
19. a) Chisel-shaped and used for cutting and biting, b) Sharp and pointed for tearing, c) Have broad surfaces for crushing and grinding food.
20. The tough jaw muscles.
21. beak, feet.
22. Hen-grains 
   Duck-small animals in water: filters food from dirty water and mud. 
   Sunbird - nectar 
   Vulture - flesh 
   Hawk - flesh 
   Weaver-bird - seeds/grains
23. i) Sunbird ii) Humming bird iii) Filter feeders iv) Chicken v) Weaver bird, pigeons, doves, etc vi) Flesh eaters
24. a) i) Long, strong flat and serrated/saw like beaks. ii) Strong, sharp, curved, hooked beaks. iii) Thin, long, slightly curved beaks. b) i) Allows the animal to filter small food particles from water and mud. ii) Helps them to kill their prey and tear flesh from it. iii) Helps them to reach the nectar inside a flower.
25. i) Walking or swimming in water. ii) Holding and tearing flesh.
Adaptations to movement

27. i) Search food  
   ii) Search shelter  
   iii) Escape from predators  
   iv) Search favourable environmental conditions.  
   v) Seek mates and reproduce  
   vi) Migrate

28. i) Slithers  
   ii) Swimming/hopping and leaping  
   iii) flying  
   iv) glides  
   v) Swimming, walking  
   vi) Walking/running

29. i) Wings  
   ii) Streamlined bodies

30. Fold a paper into a streamlined shape e.g boat shape then throw it in the air and observe rate of movement. Throw an unfolded piece of paper into air and observe how it moves. Boat-shaped paper moves faster; mark correct any other relevant experiment.

31. Streamlined bodies reduce the resistance between the body and the air.

32. It makes the birds light and to easily glide through the air.

Adaptations to swimming

33. Streamlined bodies

34. Fins

35. webbed

36. G - tail fin / caudal fin  
I - dorsal fin  
H - anal/ventral fin  
J - pectoral fin

37. a) Caudal / tail fin  
   b) Pectoral and pelvic  
   c) Pectoral and pelvic  
   d) Dorsal, ventral and caudal  
   e) Caudal  
   f) Pelvic and pectoral  
   g) Pectoral and pelvic

38. flippers

39. a) Lateral line  
   b) Swim bladder/air bladder.

40. a) Spring with two or all feet at once, move or go quickly.  
   b) Jumps or springs forcefully

41. i) Grasshoppers, locusts  
   ii) toads  
   iii) frogs  
   iv) flea, cricket, etc

42. The strong hind limbs have strong muscles which helps them to leap and hop.

Signs of sickness or ill health in livestock

43. They are farm animals except pets. They are animals kept in the farm for production purposes.

44. (a) i) Cattle  
   ii) Nagana, anthrax, mastitis, foot and mouth.  
   iii) Cattle  
   iv) Newcastle, fowl pox, fowl typhoid, coccidiosis, fowl typhoid. (Note: this may not be in syllabus but can be used to test bright pupils)

   b) Ticks

45. i) Stunted growth, loss of weight.  
   ii) Coughing, blood in stool.  
   iii) Reduced yields, rough coat.  
   iv) Watery dung or stained urine.  
   v) Difficulties in breathing.  
   vi) Difficulties in walking.  
   vii) High body temperature.

46. b) i) Alert  
   ii) Animal sleeps most of the time  
   c) i) Smooth   
   ii) rough coat
d) i) Clear and normal  
   ii) Stained, smelling awful  
e) i) Normal, hard.  
   ii) Stained and coloured, watery, too hard.  
f) i) Normal  
   ii) Red, running and dull  
g) i) Wet and smooth  
   ii) Dry and running  

47. i) Death iii) Reduced availability of products  
   ii) Lower yields  
   iv) Transmission of disease to humans  

48. i) Chicken may produce small eggs with soft egg shells.  
   ii) Low quality beef, mutton, milk low quality hides, wool, skin.  
   iii) Cows may produce milk with low butter fat content.  
   iv) Sick donkey and oxen offer less service.  

49. Animal diseases interfere with the health of the animal and therapy reducing the yields or stops producing altogether.  

**Part 2: True or false**  
1. False  
2. True  
3. True  
4. True  
5. True  
6. False  
7. True  
8. False  
9. True  
10. True  
11. False  

**Part 3: Jog your mind**  

**Questions for snakes and ladders game**  

<table>
<thead>
<tr>
<th>Square</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Diastema</td>
</tr>
<tr>
<td>13</td>
<td>Carnassial teeth</td>
</tr>
<tr>
<td>23</td>
<td>Serrated</td>
</tr>
<tr>
<td>28</td>
<td>Flippers</td>
</tr>
<tr>
<td>30</td>
<td>Chisel</td>
</tr>
<tr>
<td>40</td>
<td>Webbed-feet</td>
</tr>
<tr>
<td>45</td>
<td>Horny pad</td>
</tr>
<tr>
<td>46</td>
<td>Swim bladder / air bladder</td>
</tr>
<tr>
<td>58</td>
<td>Bone marrow</td>
</tr>
</tbody>
</table>

**C Flashback**  
1. a) Cows, sheep, etc.  
   b) Camels, goats, etc.  

2. **Domestic animals**  
   i) goats  
   ii) chicken  
   iii) donkeys  
   iv) dogs  
   v) cows  
   vi) cats, etc  

**Wild animals**  
   i) Eagles  
   ii) Antelopes  
   iii) Elephants  
   iv) Giraffes  
   v) Lions  
   vi) Cheetahs  

3. a) Milk, hide, meat, manure.  
   b) Ploughs, transport.  
   c) Wool, mutton, skin, manure.  
   d) Skin, milk, manure mutton.  
   e) Hide, meat, milk, transport.  
   f) Honey, wax, pollination; royal jelly, medicine.  
   g) Makes soil fertile, aerated, add humus to soil.  
   h) Eggs, meat, feathers.  

4. i) Swimming  
   ii) frogs, toads, grasshoppers.  
   iii) Crawling  
   iv) Birds, Bats  

5. i) Watering ii) Feeding  
   iii) Housing iv) Medical care  

6. i) -(f) ii) -(e) iii) -(d)  
   iv) -(c) v) -(b) vi) -(a)  

7. i) Eggs ii) Beef, cattle  
   iii) Milk iv) Broilers  
   v) Milk vi) Sheep and goats  

8. i) Animals with a vertebral column or backbone.  
   ii) Animals without a backbone.
9. a) i) Have fins.  
   ii) Body covered with scales.  
   iii) External fertilisation.  
   iv) Lay eggs.  
   v) Breath through gills.  

b) Amphibians  
c) i) Body covered with feathers  
   ii) Bones are hollow  
   iii) Scales on legs  
   iv) Have a beak  
   v) Lay eggs on land  
   vi) Warm-blooded  
   vii) Internal fertilisation  

d) i) Snakes  
   ii) Crocodiles  
   iii) Lizards  
   iv) Gecko  
   v) Tortoise  
   vi) Terrapins, etc.  

e) i) Body covered with fur or hair.  
   ii) Females have mammary glands.  
   iii) Breath through lungs.  
   iv) Give birth to live young except the ones that lay eggs.  
   v) Teeth of different types.  
   vi) warm-blooded.  

10. i) Insects, worms,  
   ii) Millipedes, centipedes; snails, slugs  
   iii) Ticks and mites, worms  
   iv) Spiders, cockroach, etc.  

11. i) Pasture  
   ii) Fodder crops  
   iii) Commercial feeds/concentrates  

12. i) - (d)  
   ii) - (a)  
   iii) - (b)  
   iv) - (c)  
   v) - (e)  

13. i) Carbohydrates—provide energy which enable animals to move.  
   ii) Fats and oils—also provide energy.  
   iii) Proteins—growth and repair of worn out tissues.  
   iv) Mineral salts—protect body against diseases.  
   v) Vitamins—protect body against diseases.  
   vi) Water—transport waste, removal, farm body fluids.  
   vii) Roughage—helps in digestion  

14. a) i) Ticks  
   ii) Lice  
   iii) Mites  
   iv) Tsetse flies  
   v) Fleas  
   vi) Flies  

b) i) roundworms, hookworms,  
   ii) liverflukes,  
   iii) tapeworms, etc.  

15. a) External  
   b) External  
   c) Internal  

16 a) i) Poor health  
   ii) Anaemia  
   iii) Irritation  
   iv) Poor quality products  
   v) Slow growth rate  
   vi) Loss of income on treatment  
   vii) transmit diseases  
   viii) Blockage of internal organs  

17. i) - (d)  
   ii) - (c)  
   iii) - (a)  
   iv) - (b)  

18. i) Tapeworms, threadworms, Pinworms  
   ii) Hookworms,  
   iii) Roundworms.  

19. i) Proper sanitation  
   ii) Proper washing of foods eaten raw  
   iii) Proper cooking  
   iv) regular deworming  
   v) washing hands after use of toilet and before handling of food.  

20. A parasite  

21. i) -(b)  
   ii) -(a)  
   iii) -(d)  
   iv) -(c)  

23. i) Liverfluke—infets liver, loss of blood, coughing, loss of weight.  
   ii) Tick—cause anaemia, irritation, damage hide or skin.  
   iii) Tapeworm—swollen belly, loss of weight, hunger, body weakness.  

24. Mite
Unit 5: Water

B. Unit review

Part 1: Self - check quiz

Soft and hard water
1. i) Contains dissolved and usually suspended solids.
   ii) Contains invisible disease-causing germs.
2. hard
3. soft
4. i) hard  ii) soft  iii) hard  iv) hard  v) hard  vi) hard
   vii) hard  viii) hard  ix) soft
   x) hard
5. Take a little water and soap and rub lightly between your palms it may or it may not foam easily. Water which forms lather easily and fast is soft water; water that does not lather easily is hard water.
6. Solids suspended in water when dissolved minerals react with soap.
7. i) Magnesium, calcium

Disadvantages of hard water
8. i) hard water wastes soap.
   ii) hard water wears out clothing.
   iii) hard water stain clothes.
   iv) hard water wastes energy used to wash dirty clothing.
9. a) Fur formed on boilers when minerals react with the inside of hot water pipes.
   b) i) Scales deposited on kettle make the water to take longer to heat leading to wastage of fuel.
ii) Scales deposited on the inner side of the pipes can block the pipes and interfere with water circulation and heating.
10. The water was hard. When hard water boiled the dissolved mineral salts break down and are deposited in the sufuria as scale. The scale stains the sufuria.
11. i) Disadvantage
   ii) Advantage
   iii) Disadvantage
   iv) Disadvantage
   v) Disadvantage
   vi) Advantage

Softening of hard water
12. softening
13. i) Temporary hardness
    ii) Permanent hardness
14. i) Calcium  ii) Magnesium
15. True
16. Boiling breaks down mineral salts present in water making the water soft.
17. boiling, use of chemicals

Part 2: True or false
1. True  2 False
3. False  4. False
5. True  6. False
7. True  8. False
9. True  10. True
Part 3: Jog your mind

C Flashback

1. i) Rain v) Lake
   ix) Sea ii) River
   vi) Ocean iii) Well
   vii) Borehole iv) Dam
   viii) Springs
2. It does not give its own water rather a method of getting water from other sources.
3. | At home      | In the farm          |
   | Drinking     | Watering plants      |
   | Cooking      | Watering animals     |
   | Washing      | Keeping animals      |
   | Bathing      | Mixing chemicals     |

Swallowing Growing crops e.g rice
   Medicine Cleaning
   Diluting fruit juices

In industry For recreation
   Cooling machines Boat riding
   Dyeing clothing Swimming
   Electricity Surfing
   Making soft drinks Water rafting
   Fire extinguisher Fishing

4. i) Boiling (ii) Use of chemicals
5. i) Pots (ii) Buckets
     iii) Tanks (iv) Jericans
5. Plastic bottles
6. Chlorine (chlorination)
7. i) True ii) False iii) True iv) True
8. Diseases transmitted through coming in contact with contaminated water.
   i) Drinking contaminated water. ii) Swimming in water with disease – causing germs. iii) Walking in contaminated water.
9. a) Bacteria b) Worms c) Bacteria
10. a) Cholera b) Bilharzia c) Bilharzia d) Cholera e) Cholera
11. a) Cholera b) Bilharzia c) Bilharzia d) Cholera e) Cholera
12. i) - Avoid swimming or walking in stagnant water. - Proper sewage disposal. - Proper use of toilets. - Drain stagnant water. ii) - Washing hands before eating food. - Drinking boiled or treated water. iii) - Wearing protective clothing when working in stagnant water. - Washing fruits thoroughly.
13. To prevent bilharzia.
14. a) i) Disposing faeces and urine properly ii) Keeping toilets and latrines free from flies iii) Wash fruits and vegetables thoroughly iv) Boil or treat water v) Wash hands before handling food. vi) Take infected persons to hospital. vii) Wear protective clothing. b) i) Drinking boiled or treated water.
15. a) It is the introduction of foreign organisms, chemicals and other substances in water that make it unsafe for use. b) Industrial waste, flooding, raw sewage, washing in rivers, farm chemicals, fertilizers, oil spillage.
16. a) Plants  
   b) Animals  
   i) Infections ii) Restricts movement of wading and swimming birds. iii) Disrupts natural food chains. 
   c) Soil  
v) Control air pollution.
vi) Proper hygiene and sanitation.
vii) Do not wash vehicles in open water.

18. a) Proper and careful use of water sources for future use by living things.
b) i) Proper methods of irrigation eg. drip irrigation.
   ii) Harvesting as much rainwater as possible and storing in tanks.
   iii) Recycling – treating used water to make suitable for use again.
   iv) Re-using – water that has been used for different purposes.
   v) Using water sparingly – just using enough water.
   vi) Storing water in dams – collecting water during rainy season and directing it into dams for use in future.
   v) Mulching – gathering dry vegetation at the foot of the plant to reduce evaporation.

19. i) Cleaning the house/mopping
   ii) Cleaning the car
   iii) Pouring in a dusty floor.
   iv) Washing farm tools and equipment.
   v) Watering plants

**Unit 6: Environment**

**B. Unit review**

**Part I: Self – check quiz**

1. a) Introduction of harmful substances in the soil that contaminate it.
   b) Pollutants

2. i) Excess fertilisers
   ii) Herbicides and pesticides
   iii) Oils/grease
   iv) Plastics/polythene bags

3. a) - Non-biodegradable materials like polythene bags and plastics thrown on soil.
   - Industrial effluent released on ground.
   b) Farm chemicals/excess fertiliser drain into soils.
   c) Loosening of soils and destruction of plants that support soils.
   d) Oils and grease spills that kill animals and cut off oxygen supply to plants.

**Effects of soil pollution**

4. Pour oil on soil where plants are growing leaving out others. Observe the two after some time. Plants that were growing in polluted soil will die.

5. i) Old plastics and polythene bags cut off air supply as they do not decompose.
   ii) Oil kills friendly bacteria and animals in the soil.
   iii) Acid from car batteries have burning effect destroying soil particles hence cannot support plants life. They also kill soil animals.

6. i) Reduces soil fertility; make soil acidic.
   ii) Kills friendly animals that aerate soils e.g earthworms.
   iii) Kills plants that support soil by their roots.

7. i) Earthworms
   ii) Insects (ants)
   iii) Moles
   iv) Snakes

8. i) Aerate soils
   ii) Animals wastes adds to soil fertility / or when they die and decompose.
9. Pour some oil on garden soil. Small animals tend to move away from it. Pour acid on soil animals like earthworms, they die.

10. i) Animals fall sick and die.
    ii) Animals lack food because plants die.
    iii) Destruction of homes for animals that live in soil.
    iv) Animals do not get oxygen from plants.

Soil conservation

11. This is the preservation and protection of soil to maintain its fertility status.

12. i) Planting of trees and cover crops
    ii) Proper farming methods
    iii) Construction of porous dams
    iv) Not over-grazing
    v) Afforestation
    vi) Not cutting down trees

13. i) Build gabions
    ii) Build cut-off drains
    iii) Contour farming
    iv) Strip cropping
    v) Growing cover crops
    vi) Construction of terraces
    vi) Mulching

14. gabions

15. a) Covering soil with grass or plant remains to conserve moisture.
    b) i) Retains soil moisture.
        ii) Adds humus when materials rot.

16. i) Roots hold soil firmly preventing soil erosion.
    ii) Checks on overgrazing which would lead to soil erosion.
    iii) Stops running water carrying away soil downwards.
    iv) Slows down running water to prevent soil erosion

17. Excess chemicals pollutes soil. This helps in maintaining soil fertility and does not kill friendly animals in the soil.

18. a) i) Organic (biodegradable)
    ii) Inorganic (non-biodegradable)
    b) i) Make compost manure
        ii) Re-using
        iii) Burning or incinerator
        iv) Use of local authorities
        v) Use of dustbins and private firms to collect garbage

19. Recycling

20. a) Terracing
    b) Gabions or porous dams

21. A special house where wastes are burnt completely.

22. Government legislation

23. i) Use of incinerators
    ii) Treatment
    iii) Recycling

24. a) Planting trees where there were no trees.
    b) Planting trees where they have been cut.

25. i) Roots hold soils firmly.
    ii) Leaves fall and decompose forming manure.
    iii) Retains soil moisture (covering soil to prevent evaporation).
    iv) Wind breakers to prevent erosion.
    v) Aerates soil through the roots.

Air pollution

26. a) i) Smoking
    ii) Exhaust fumes
    iii) Burning tyres & plastics
    iv) Aerosal sprays
    v) Industrial gas wastes
    vi) Farm chemicals
    b) i) Smoke from cigarettes mixes with air.
ii) Cars producing carbon monoxide.

iii) Smoke from tyres produce harmful substances e.g. carbon dioxide, tar.

iv) When released in the air increase amount of chemicals in air.

v) Industrial gases lead to ozone destruction.

vi) When sprayed the fumes mixes with air.

**Effects of air pollution**

27. a) Plants growing on road sides compared with those in deep forest; scorched lant leaves due to acid rain.

29. a)

<table>
<thead>
<tr>
<th>Plants</th>
<th>Animals</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Reduction of air</td>
<td>1. Oxygen supply is cut off</td>
</tr>
<tr>
<td>2. Slows down growth</td>
<td>2. Diseases and death</td>
</tr>
<tr>
<td>3. Poor yields</td>
<td>3. Accidents due to low vision by drivers</td>
</tr>
<tr>
<td>4. Cutting sunlight from reaching plants</td>
<td>4. Acid rain destroys crops for animals or kills animals altogether</td>
</tr>
<tr>
<td>5. Acid rain</td>
<td></td>
</tr>
</tbody>
</table>

b) i) Less oxygen supply

ii) Respiratory-related diseases

iii) Discomfort

iv) accidents - not able to see ahead by drivers

v) death when inhaled e.g. carbon monoxide and carbon dioxide.

30. Smoke make a black soot on sufurias. Acid rain is a result of polluted air. This destroys iron sheets. Acid rain makes soil acidic corrodes rocks.

b) When chemicals are sprayed on plants animals inhale the poisonous gases that lead to diseases and death.

- Dead fish in ponds, rivers, lakes and oceans due to acid rain.

28. - This is the warming up of the earths surface due to pollution.

- This is caused by gases like carbon dioxide which form a ‘blanket’ in the atmosphere. Heat from the sun cannot escape increasing earth’s temperature.

**Part 2: True or false**

Part 3: Jog your mind

1. a)

A I C O N S E R V A T I O N E
C O W A T E R C R O P S I T X
T R E A T L I V I N G A N E H
N T E R R A C E S A F E E E H T
O O S T O C K R A T E S A F E
I A E R O S O L I N A H I I N
T P O L L U T I O N R R D S T
A S P A U S T R U T O W A N A
T M U L C H I T A R E A E I W
E N V I N V O I E A N N N A T A
G A N D N A R A I S O I L A T
E F F E C T S I T P L A N T S
V G A B I O N S M E T R E E S
G A S E S O C O N T O R O A
W A S T E S C A A N I M A L S

b) i) Water, animals, air, soil, plants.
   ii) Gases, tax, fins, soot, aerosol, wastes.
   iii) Mulch, terrace, stockrate, contour, gabions
   iv) Die

C. Flashback
1. All that surrounds us, living or non-living things.
2. Water and air are non-living while animals are living.
3. D.

Unit 7: Foods and nutrition

Part 1: Self-quiz

Nutritional requirements for special groups
1. The components of food required for proper functioning of the body.
2.

<table>
<thead>
<tr>
<th>Vitamin</th>
<th>Importance</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Prevents night blindness, promotes healthy skin, fights infection.</td>
</tr>
</tbody>
</table>
C Maintains healthy gums, assists in healing wounds, helps body use iron.

D Helps in building strong bones.

E Important in reproduction.

K Helps in the clotting of blood and in building proteins.

b) i) Formation of haemoglobin in the red blood cells.
ii) Prevention of goitre.

3. Category | Nutritional requirements
--- | ---
i) Pregnant mothers | Proteins (balanced diet), iron-rich foods, lots of fluid, plenty of fruits and protective foods.
ii) Lactating mothers | Calcium-rich foods, balanced diet, foods rich in iron, vitamins, more fluids (water).
iii) Infants | Continuation of breast feeding even after weaning, plenty of fruits and energy giving foods.
iv) People living with HIV/AIDS | Balanced diet, well prepared foods, plenty of fluids, soft foods, protective foods.

4. Breast milk, all nutrients.

5. Mothers who are breast feeding.

6. i) Hygiene is hardly maintained.
ii) Takes a while before preparation – depriving the baby.
iii) Doesn’t contain antibodies.
iv) Doesn’t build bond between mother and child.
v) Food not at the right temperature.

7. a) Helps in cell growth and production of blood for the foetus.
b) Production of red blood cells.
c) Source of energy for mother
d) Bone formation for foetus.

8. For production of milk.

9. The first breast milk produced after birth; contains antibodies which protect the new born from attack by germs.

10. i) Complete food, containing right proportions of nutrients.
ii) Always fresh, clean and right temperature, readily available.
iii) Contains antibodies from the immune system of mother.
iv) Saves time in terms of preparation.
v) Encourages emotional bondage between mother and child.
vi) Always at the right temperature for the baby.

11. a) For baby’s growth.
b) Source of energy - infants are active hence require plenty of energy.
c) For protection of the body against germs.

12. a) Their immune system is compromised hence cannot fight disease-causing germs.
b) i) Cells are lost rapidly so should be replaced. Proteins are required for this.
ii) Lots of fluid is lost (due to diarrhoea) replacement done to avoid dehydration.
iii) For white blood cells replacement and body protection due to optimistic diseases and attacks.

13. a) Oral Rehydration Salts (ORS)
b) Dissolve one teaspoonful of salt and 8 teaspoonfuls of sugar in 1 litre of water. Shake well and keep in a clean bottle and close tightly. One glass of this solution should be taken after each diarrhoea.

14. a) The gradual removal of an infant from breast milk and introduction of other foodstuff in the diet.
b) Six months

**Food poisoning**

15. Any illness caused by eating contaminated food.

16. a) i) Chemicals
    ii) Micro-organisms
b) i) Insecticides, pesticides, herbicides, soaps, detergents, paints, kerosene, chemicals from containers, aerosols, etc.
    ii) Microbes like bacteria, moulds, fungi, etc.

17. i) The raw meat may contain diseases - causing germs.
ii) Raw or undercooked meat do not have good taste.

18. i) Poisonous fruits
ii) Contaminated maize, groundnuts, etc.
iii) Milk from sick cows, etc.

19. i) From chemicals like insecticides and aerosols sprayed in the house.
ii) Harvesting farm produce immediately after spraying e.g. tomatoes.
iii) Preservatives used to preserve food.
iv) Handling food without properly washing your hands after handling chemicals.
v) Storing grains e.g. maize in dump places.
vi) Some fruits and tubers are naturally poisonous.
vii) Poor storage of food allowing flies to contaminate food.

20. i) Violent vomiting
ii) Severe stomach ache
iii) Diarrhoea
iv) Fever
v) Feeling dizzy and weak

21. i) Use well-washed and cooked foodstuff.
ii) Practice proper sanitation and hygiene when handling foodstuff.
iii) Wash your hands all the time after visiting latrines/toilets.
iv) Wash thoroughly all raw food using clean water before eating.
v) Preserve and store all foodstuffs properly.
vi) Avoid taking expired or rotten foodstuff.
vii) Avoid handling chemicals immediately before eating or handling food.

**Part 2: True or false**


**Part 3: Jog your mind**

a) Colostrum     b) Iron

c) Contaminate     d) Breasts
C. Flashback

1. **What it does in the body**

<table>
<thead>
<tr>
<th>What it does</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Gives energy to the body</td>
<td></td>
</tr>
<tr>
<td>b) Protects the body</td>
<td></td>
</tr>
<tr>
<td>c) Body building and repair of cells</td>
<td></td>
</tr>
<tr>
<td>d) Source of energy</td>
<td></td>
</tr>
</tbody>
</table>

2. a) Butter  
   b) Protein  
   c) Calcium  
3. a) Eggs, meat, fish, etc.  
   b) Bread, potatoes, ugali (maize), etc.  
   c) Cooking oil, coconut, sunflower, etc.  
   d) Fruits and vegetables e.g. oranges, pineapples, cabbages, etc.  
4. i) Inadequate protein mango etc  
   ii) Marasmus  
   iii) Soft/weak bones, bow legs, knock knees.  
   iv) Scurvy  
   v) Goitre  
   vi) Pale skin, tiredness, lack of appetite, increased heartbeat.  
   vii) Night blindness  
5. To prevent food from getting contaminated by using traditional and modern methods.  
6. a) i) Salting  
   ii) Drying  
   iii) Use of honey  
   iv) Smoking etc.  
   b) i) Canning  
   ii) Refrigeration  
   iii) Bottling  
   iv) Freezing  
   v) Drying  
7. i) Preserving food using concentrated salt (brine) and vinegar.  
    ii) To subject to a process that will kill all disease-causing organisms like bacteria e.g. by heating.  
8. a) To allow for the flow of digested food easily; media for most reactions in body.  
   b) Helps in digestion and movement of faeces.  
9. Food containing all the nutrients in correct proportions.  
10. Refrigeration  
   11. i) Marasmus  
    ii) Kwashiorkor  
    iii) Anaemia  
    iv) Rickets  
    v) Anaemia

B. Unit review

**Part 1: self-check quiz**

1. The ability to do work.

2. a) From the food he or she eats  
   b) From fuel  
   c) Electricity, a car battery, solar.  
   d) Sunlight  
   e) Bulb uses energy from dry cells

3. i) Potential energy  
   Energy which is stored in an object.  
   ii) Kinetic energy  
   Energy that is possessed by a moving object.

4. a) i) Food  
    ii) Dry cell  
    iii) Fruit on a tree  
    iv) Fuel  
    v) Fire  
    vi) Sun  
   b) i) Ball in motion  
    ii) Dynamo  
    iii) Moving car  
    iv) Fruits falling from a tree  
    v) Hydroelectric power line  
    vi) Bicycle in motion  
   v) potential, energy in motion  
   6. i) Chemical  
      ii) Magnetic
7. Electricity
   i) Chemical    ii) Electrical
   iii) Sound    iv) Heat
   v) Light
8. Charcoal has stored chemical energy.
9. i) When cooking, food becomes soft due to the effect of heat.
   ii) We feel warm when the sun shines.
   iii) A metal or solid melts when subjected to heat etc.
10. Light
11. a) Iron fillings, magnet, piece of paper. Place magnet under the paper and place iron fillings. Move the magnet below and observe movement of iron fillings.
   b) -Magnetic materials: attracted to a magnet (Examples, iron, steel)
      -Non-magnetic materials – not attracted to a magnetic e.g. copper
12. a) i) Current     ii) Static
   b) Dry cell, dynamo, car batteries, generator, hydro electric power station, solar panels etc.
13. Fats or glycogen
14. i) Plants      ii) Biogas
   iii) Charcoal
   iv) Petroleum products like paraffin
15. (a) i) Burnt     ii) Lit
   (b) Lense focused light onto the match stick and paper which later lit the matstick or burnt the paper.
16. (a) Rubbing creates friction leading to production of heat.
   (b) i) sunlight    ii) fuel (burning)
        iii) Using electric appliances like heater.
        iv) Focusing light on paper using convex lens.

Transformation of energy
19. The change in state from one form of energy to another form which might have a chemical change.

20. Bulb
21. Light $\rightarrow$ chemical $\rightarrow$ heat + light
22. Potential $\rightarrow$ chemical $\rightarrow$ heat + light
23. Chemical $\rightarrow$ heat $\rightarrow$ light
24. Chemical $\rightarrow$ electrical $\rightarrow$ magnetic $\rightarrow$ kinetic $\rightarrow$ sound
25. Chemical $\rightarrow$ electrical $\rightarrow$ magnetic
26. - Windmills propelled windmills used to drive dynamo which produce electricity.
       - Wind can be harvested to drive pumps
27. Bio-gas
28. a) Jiko with a clay lining which conserves energy.
   b) i) Conserves energy.
        ii) Makes the heat last longer.
        iii) Uses less fuel (charcoal).
29. i) Charcoal    ii) Firewood
   iii) Saw-dust
30. Improved devices
31. Light, heat
32. Potential $\rightarrow$ kinetic $\rightarrow$ electrical $\rightarrow$ heat + light
33. A -Chemical
    B -Electrical
    C -Light + heat

Methods of conserving energy
34. a) Protecting, preserving, and managing our energy resources well.
   b) (i) Sparing use of energy (usage sparingly)
        (ii) Use of energy efficient devices
        (iii) Use of renewable energy.
35. i) Use of public transportation instead of private cars.
       ii) Sharing of transportation
       iii) Use of vehicles with low fuel consumption.
iv) Use of the (rail or water) for bulky transportation
v) Cycle instead of using vehicles or walk

36. i) Burnt as firewood.
   ii) Converted to charcoal.
   iii) Used to generate electricity through burning and using heat to heat water to produce steam, etc.

37. -Uses less charcoal.
   -Clay prevents heat loss.
   -Retains heat for longer periods.

38. a) Renewable – re-used or recycled cannot be exhausted.
     Non-renewable – once used cannot be recovered
   b) i) Solar, wind, trees, biogas, etc.
     ii) Petroleum products like petrol, paraffin, etc

39. Biogas
40. Windmill
41. a) Planting of trees where non-existent before.
    b) Excess cutting down of trees creating desert.
    c) Replacement of cuttig down trees.
    d) Excessive cutting down of trees.
42. Renewable energy, cover vast areas of land and can be re-planted.

43. i) Solar panel ii) Solar drier
    iii) Solar heater
44. a) For drying purposes and warming ourselves.
    b) Used to generate large scale electricity (solar energy) or heat energy or can be used to dry garments especially in textile industry.

Part 2. True of false
1. True 2. True
3. True 4. False
5. True 6. False
7. False 8. False

Part 3. Jog your mind

The words
1. Electromagnet 2. Current
3. Chemical 4. Light
5. Kinetic 6. Sound
9. Biogas 10. Switch
11. Fire fly 12. Static
15. Battery
Part 3: Jog your mind

<table>
<thead>
<tr>
<th>T</th>
<th>S</th>
<th>R</th>
<th>M</th>
<th>L</th>
<th>O</th>
<th>E</th>
<th>V</th>
<th>J</th>
<th>R</th>
<th>E</th>
<th>H</th>
<th>T</th>
<th>A</th>
<th>L</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>E</td>
<td>L</td>
<td>E</td>
<td>C</td>
<td>A</td>
<td>L</td>
<td>C</td>
<td>I</td>
<td>U</td>
<td>M</td>
<td>V</td>
<td>P</td>
<td>O</td>
<td>K</td>
<td>E</td>
<td>T</td>
</tr>
<tr>
<td>M</td>
<td>O</td>
<td>T</td>
<td>A</td>
<td>N</td>
<td>C</td>
<td>I</td>
<td>O</td>
<td>T</td>
<td>S</td>
<td>I</td>
<td>B</td>
<td>L</td>
<td>M</td>
<td>C</td>
<td>L</td>
</tr>
<tr>
<td>P</td>
<td>W</td>
<td>A</td>
<td>I</td>
<td>G</td>
<td>D</td>
<td>E</td>
<td>X</td>
<td>E</td>
<td>O</td>
<td>U</td>
<td>O</td>
<td>W</td>
<td>A</td>
<td>O</td>
<td>R</td>
</tr>
<tr>
<td>O</td>
<td>J</td>
<td>W</td>
<td>M</td>
<td>L</td>
<td>M</td>
<td>Z</td>
<td>L</td>
<td>J</td>
<td>F</td>
<td>A</td>
<td>I</td>
<td>C</td>
<td>G</td>
<td>U</td>
<td>O</td>
</tr>
<tr>
<td>R</td>
<td>G</td>
<td>D</td>
<td>O</td>
<td>U</td>
<td>K</td>
<td>A</td>
<td>E</td>
<td>D</td>
<td>T</td>
<td>L</td>
<td>L</td>
<td>M</td>
<td>N</td>
<td>R</td>
<td>N</td>
</tr>
<tr>
<td>A</td>
<td>H</td>
<td>R</td>
<td>L</td>
<td>Q</td>
<td>C</td>
<td>L</td>
<td>H</td>
<td>E</td>
<td>W</td>
<td>O</td>
<td>I</td>
<td>S</td>
<td>E</td>
<td>S</td>
<td>U</td>
</tr>
<tr>
<td>R</td>
<td>E</td>
<td>A</td>
<td>V</td>
<td>S</td>
<td>T</td>
<td>S</td>
<td>W</td>
<td>X</td>
<td>A</td>
<td>E</td>
<td>N</td>
<td>F</td>
<td>S</td>
<td>E</td>
<td>G</td>
</tr>
<tr>
<td>Y</td>
<td>D</td>
<td>H</td>
<td>Y</td>
<td>P</td>
<td>Q</td>
<td>E</td>
<td>F</td>
<td>S</td>
<td>T</td>
<td>V</td>
<td>G</td>
<td>B</td>
<td>I</td>
<td>H</td>
<td>N</td>
</tr>
<tr>
<td>Z</td>
<td>I</td>
<td>F</td>
<td>X</td>
<td>D</td>
<td>I</td>
<td>J</td>
<td>L</td>
<td>K</td>
<td>E</td>
<td>E</td>
<td>Q</td>
<td>N</td>
<td>U</td>
<td>V</td>
<td>I</td>
</tr>
<tr>
<td>W</td>
<td>A</td>
<td>S</td>
<td>T</td>
<td>E</td>
<td>G</td>
<td>A</td>
<td>K</td>
<td>T</td>
<td>R</td>
<td>R</td>
<td>L</td>
<td>T</td>
<td>M</td>
<td>C</td>
<td>N</td>
</tr>
<tr>
<td>P</td>
<td>E</td>
<td>H</td>
<td>W</td>
<td>X</td>
<td>R</td>
<td>I</td>
<td>S</td>
<td>M</td>
<td>S</td>
<td>A</td>
<td>M</td>
<td>Z</td>
<td>A</td>
<td>D</td>
<td>E</td>
</tr>
<tr>
<td>O</td>
<td>G</td>
<td>V</td>
<td>D</td>
<td>E</td>
<td>H</td>
<td>K</td>
<td>Q</td>
<td>F</td>
<td>T</td>
<td>S</td>
<td>F</td>
<td>X</td>
<td>B</td>
<td>X</td>
<td>T</td>
</tr>
<tr>
<td>T</td>
<td>F</td>
<td>K</td>
<td>N</td>
<td>V</td>
<td>O</td>
<td>M</td>
<td>N</td>
<td>E</td>
<td>U</td>
<td>J</td>
<td>Z</td>
<td>U</td>
<td>W</td>
<td>M</td>
<td>F</td>
</tr>
<tr>
<td>Y</td>
<td>C</td>
<td>I</td>
<td>S</td>
<td>F</td>
<td>D</td>
<td>I</td>
<td>S</td>
<td>C</td>
<td>O</td>
<td>L</td>
<td>O</td>
<td>U</td>
<td>R</td>
<td>T</td>
<td>O</td>
</tr>
<tr>
<td>X</td>
<td>M</td>
<td>P</td>
<td>E</td>
<td>R</td>
<td>M</td>
<td>A</td>
<td>N</td>
<td>E</td>
<td>N</td>
<td>T</td>
<td>S</td>
<td>Q</td>
<td>V</td>
<td>T</td>
<td>S</td>
</tr>
</tbody>
</table>

C Flashback

1. i) Electric ii) Heat iii) Sound, magnetic. iv) Light
2. i) Air ii) Liquid iii) Solid
3. a) Sound which hits an object and travels back. b) Unwanted/uncomfortable sound c) Highness or lowness of sound
4. i) True ii) False iii) False iv) True v) True
5. a pollutant 6. Light
7. i) Has straight path. ii) Travels in all directions. iii) Obstructed by opaque objects to form shadows. iv) Can be reflected, dispersed or refracted.
8. a) Objects that don’t allow light to pass through them and you cannot see through them. They form a shadow.
  b) Objects that allow light to partly pass through them, you partially see through them.
  c) Objects that allow all light to pass through them.
9. Dispersion
10. i) True ii) True iii) False iv) False v) True
11. Violet, indigo, blue green, yellow, orange, red.
12. Light travels in a straight line.
13. a) Conversion b) Conduction c) Radiation and connection
14. a) These are objects which do not conduct heat/electricity.
b) Objects that allow heat or electricity to pass through them

15. Convection
16. i) changes their states
   ii) May lead to expansion of matter.
   iii) Rises the temperature
   iv) May lead to decomposition of matter.
17. a) i) Current ii) Static
   b) i) Plastic or any body rubbed together causing friction.
     ii) Electricity
18. **Conductors**: Iron, copper, aluminium, silver, zinc.
    **Insulators**: Plastic, dry clay, rubber, glass, stone, graphite
19. i) Ironing clothes.
    ii) Improve air circulation in stuffy rooms.
    iii) For entertainment.
    iv) Heating of water or foodstuffs.
20. i) Don’t touch live wires or naked wires.
    ii) Don’t place objects in electricity outlets.
    iii) Don’t touch electric wires with wet hands.
    iv) Always use insulated tools.
    v) Seek professional advice when dealing with electricity.
    vi) Do not overload electric sockets.
21. i) Don’t shelter under a tree when raining.
    ii) Don’t walk in the open when raining.
    iii) Install lighting arrestor in tall buildings.
    iv) Don’t stand or touch electric posts or gadgets when it is raining.
    v) Avoid carrying metallic and sharp-pointed objects when it is raining.
    vi) Always put on shoes while in rain.

**Unit 9: Making work easier**

**B. Unit review**

**Part 1: Self-quiz**

**Inclined planes**

1. This is a slope or a ramp (flat surface placed at an angle.
2. i) Reduce effort used
    ii) Change direction of force
    iii) Increase the speed of working
    iv) Increases efficiency
    v) Transferring force from one point to another
3. friction
4. i) Screw ii) Axe
    iii) Wedge iv) Staircase
    v) Ladder vi) Winding uphill
5. D
6. The one who use a ramp
7. ramp, inclined plane
8. inclined planes
9. Ask two pupils to climb a wall one with a ladder the other one without.
   The one with the ladder does it with much ease. Also, examine the answer given by the learner and mark accordingly.
10. a) It creates also to the high point thereby reducing amount of force required to climb.
    b) This is a slope with steps cut into it. Less force is used lifting the legs up the steps compared to effort required to move once.
11. a) Alvins
    b) The slope is less steep.
12. A
13. It makes climbing less difficult.
Single fixed pulleys

14. A simple machine that changes direction of force. It has a wheel with a groove that a rope turns on.
15. By changing direction of force. It is easier to pull down than upwards.
16. of friction
17. Lift the same load at equal distance using a single fixed pulley and pulling it up using a rope. Find out where most force is used.
18. i) Hoisting the flag.
   ii) Builders lifting materials.
   iii) Drawing water from a borehole.
19. Single fixed pulley
20. A

Part 2: True or false

1. False  2. False
3. False  4. False
5. False  6. True
7. False  8. True

Part 3. Jog your mind

Across
1. Pulley  2. Friction
3. Ramp  4. Elevator
5. Lever  6. Screw

Down
7. Newton meter
8. Ladder

C. Flashback

3. Banana fibres
4. a) Effort in the middle: Spade, fishing rod.
   Fulcrum in the middle: Crow bar, hammer, nail cutter, scissors.
   Load in the middle: Wheel barrow, bottle opener
   b) i) 3rd class levers
       ii) 1st class levers
       iii) 2nd class levers
5. D
6. Using a tool for wrong purpose.
7. D
8. a) Cutting things
     b) Scoopings and or soil or digging ground.
    c) Digging/weeding
    d) Cutting grass
    e) Cutting wood
    f) Cutting grass and shrubs
    g) Removing or driving nails
    h) Transporting small loads
9. When weighed the weights were different. Saw dust had more volume but less in weight followed by sand, salt and iron powder in that order.
10. D 11. Newtons
12. Fulcrum or pivot
13. a) cleaning after use and greasing or oiling the wheel
     b) Sharpening and using for the right purpose.
    c) Fixing the handle tightly.
    d) Cleaning after use, fixing handle tightly.
14. inertia 15. Mark accordingly
16. A
17. a) Force that opposes motion.
     b) Advantages: stopping, striking a match box, walking, etc.
    Disadvantages: hinders movement, wears out things, etc.
18. i) Oiling or lubricating
     ii) Use of ball bearings
19. When balanced, the weight of the load is equal to the standard weight.
20. a) Balloon A side moves down.
     b) Air has weight.
Model Test Papers

Test paper one

50. A

Test Paper two

50. B

Test Paper three

50. B

Test Paper four

50. C
Test Paper five

50. D

Test Paper six

50. D

Test Paper seven

50. D

Test Paper eight

50. C

Test Paper nine

Test Paper ten

50. B
Living together in Kenya and the world

Do you remember?
1. Longitudes, Latitudes
2. a) Tropic of Capricorn
   b) Arctic circle
   c) Antarctic circle
   d) Tropic of cancer
3. Climate, time
4. a) International date line (Prime Meridian)
   b) Regions to the East we add time.
   c) Regions to the West we subtract time
5.

<table>
<thead>
<tr>
<th>Natural physical features</th>
<th>Human made physical features</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Mountains</td>
<td>a) Dams</td>
</tr>
<tr>
<td>b) Valleys</td>
<td>b) Rivers</td>
</tr>
<tr>
<td>c) Rivers</td>
<td>c) Canals</td>
</tr>
<tr>
<td>d) Swamps</td>
<td></td>
</tr>
<tr>
<td>e) Lakes</td>
<td></td>
</tr>
<tr>
<td>f) Mountains and highlands</td>
<td></td>
</tr>
<tr>
<td>g) Plateaus</td>
<td></td>
</tr>
<tr>
<td>h) Basins</td>
<td></td>
</tr>
</tbody>
</table>

6. a) i) It is the spinning of the earth
   ii) It is the complete movement of the earth around the sun
   b) i) The earth takes 24 hours to rotate on its own axis,
   revolution takes 365 ¼ or 366 days
   ii) Earth rotates on its own axis, during revolution it follows its own orbit

7. iii) Rotation causes day and night,
        revolution causes seasons

<table>
<thead>
<tr>
<th>Process</th>
<th>Type of mountain</th>
<th>Examples in Africa</th>
</tr>
</thead>
<tbody>
<tr>
<td>Volcanicity</td>
<td>Volcanic mountains</td>
<td>Mt Kilimanjaro</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mt Kenya</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mt Cameroon</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mt Nyirangongo</td>
</tr>
<tr>
<td>Folding</td>
<td>Fold mountains</td>
<td>Atlas</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Cape Ranges</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Drakensberg</td>
</tr>
<tr>
<td>Faulting</td>
<td>Block mountains or horsts</td>
<td>Ruwenzori</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Usambara</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Pare</td>
</tr>
</tbody>
</table>

8. a) A very hot liquid rock found below the earth’s surface
   b) Lava is a molten rocks flowing on the earths’s surface

9. 

10. a) Equatorial   b) Tropical/Savanna
    c) Mountain      
    d) Humid subtropical
    e) Mediterranean
    f) Desert, semi desert
    g) Temperate
11. a) Reduced yields from farms due to less rainfall
   b) Poor vegetation will lead to death of animals and people
   c) Soil erosion due to absence of soil cover
12. a) Climate change b) Relief
    c) Vegetation d) Pest and diseases e) Urbanisation
13. a) i) Shortage of social amenities
     ii) Inadequate land
     iii) Stress on natural resources
     iv) Unemployment
     v) Too many dependants especially the young
12. b) i) Too many dependants especially the old.
     ii) Small workforce
     iii) Shortage of unskilled labour
     iv) Slow growth
14.

<table>
<thead>
<tr>
<th>Responsibility of parents</th>
<th>Responsibility of children</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heading the family</td>
<td>Children should respect and assist their parents and community</td>
</tr>
<tr>
<td>Creating good environment – in the home</td>
<td>Help the family to live in unity and harmony</td>
</tr>
<tr>
<td>Provision of basic needs</td>
<td>Serve the community to the best of their talents and abilities.</td>
</tr>
<tr>
<td>Respect of family members</td>
<td>To support the family and the home by helping out with domestic chores.</td>
</tr>
<tr>
<td>Protection</td>
<td></td>
</tr>
<tr>
<td>Help their children grow physically, mentally and spiritually</td>
<td></td>
</tr>
</tbody>
</table>
15. a) Prophets
    i) They tell people what will happen in future
    ii) They are God’s messengers
b) Rainmakers
    i) Are believed to have the power to make rain
    ii) Are believed to have power to stop rain
    iii) They predicted prolonged drought and heavy rain
c) Medicine men
    i) They treat different diseases
    ii) They were famous leaders in the society
16.

<table>
<thead>
<tr>
<th>Cash crop</th>
<th>Countries in Africa where they are grown</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cocoa</td>
<td>Ghana, Cote d’ Ivore, Nigeria, Sierra Leone, Togo and Benin</td>
</tr>
<tr>
<td>Cloves</td>
<td>Tanzania, Madagascar, Mauritius</td>
</tr>
<tr>
<td>Pyrethrum</td>
<td>Kenya</td>
</tr>
<tr>
<td>Coffee</td>
<td>Kenya, Ethiopia, Uganda, Cameroon, Tanzania</td>
</tr>
<tr>
<td>Rubber</td>
<td>Liberia</td>
</tr>
<tr>
<td>Tea</td>
<td>Kenya, Malawi</td>
</tr>
<tr>
<td>Sisal</td>
<td>Kenya, Madagascar, Tanzania</td>
</tr>
</tbody>
</table>
17. a) It promotes peace  
   b) It promotes social and economic activities  
   c) It leads to promotion of security  
   d) It promotes individual development  
   e) It enhances respect towards others  
   f) It enhances International co-operation  

18. a) Lack of enough capital  
   b) Tribalism  
   c) Corruption  
   d) Uneven distribution of resources  
   e) Nepotism  
   f) Racism  

19. a) The Nandi  
   i) They feared losing their land  
   ii) They did not want the railway to pass through their territory  
   iii) British discouraged cattle raiding  
   iv) Nandi did not want to be ruled by outsiders  

b) The Ababukusu  
   i) They were not ready to recognise the IBEAC authority  
   ii) They were not ready to surrender their independence to Nabongo Mumia and the British  

UNIT 1: PHYSICAL ENVIRONMENT

Know more  
1. A map is a representation of the earth on a flat surface.  
2. a) Atlas maps  
   b) Wall maps  
   c) Sketch maps  
3. a) Key  
   b) Compass direction  
   c) Scale  
   d) Title  
   e) Frame  
4. A scale is the relationship between the length of a place and that on the actual ground.  
5. Key  
6. Smaller  

7. a) Statement scale  
   b) Linear scale  
   c) Representative fraction - R.F  
8. Marginal information is information found at the sides of a map.  
9. An atlas is a collection of maps.  
10. A globe is a round object.  
11. Scale assists the map reader to know or calculate the area of a place  
12. Blue, green, brown, yellow, purple, Black  
13. Representative fraction  
14. a) 1/250,000  
   b) 1:250,000  
   c) 1 cm represent 1 km  

a. Map reading and interpretation  
1. Map reading refers to the keen looking of a map to understand what it contains or what is written on it.  
2. This is analysing, criticizing and relating information found on a map.  
3. a) vegetation  
   b) Population- settlements  
   c) Crops and animals kept  
4. Physical factors like; attitude, terrain, drainage and Climatic factors  

i) Use of symbols to read and interpret a map  
1. A sign that stands for something in the map.  
2. a) Hill – This shows there is a hill where the symbol has been put  
   b) Quarry – The presence of a quarry is an indication that mining is carried out in the region  
   c) Lake – It shows presence of a lake in the area represented  
   d) Forest – This shows there is a forest in the area  
   e) Bridge – This shows there is a river  
   f) Post office – There is a post office in the area  
   g) School – There is a school in the area
h) Municipal council office - The area is a municipality
i) Cattle dip – This shows there is livestock farming practiced in the area
j) Church – This shows that people in the area are Christians
k) Railway line – This shows railway transport
l) Police station – This shows that there is security in the area
m) National flag – It shows presence of Government offices like a chiefs camp
n) Settlement – These are symbols that show where people have settled
o) Market – This shows there is business taking place in the area
p) River – This shows a permanent river flows in the area

3. a) Symbols make it possible to show the information of a certain area on a piece of paper
b) It stands for something on a map
c) Used in maps to represent physical features and human activities
d) Relief, drainage, population and vegetation

4. a) Presence of Muslims
b) Presence of traditional believers
c) Presence of Hindus
d) Presence of Christians

5. Different symbols of crops
6. Roads, railways, airport/airstrip and sea routes
7. Mining
8. District Officer
9. County council
10. a) Linear  b) Nucleated
11. a) Dense  b) Sparse  c) Moderate
12. a) The area receives very little rain

b) The area receives moderate rain which can support wildlife and pastoralism
c) Tourism is carried out in the area

ii) Direction of places using compass points
1. Compass direction, Primary or cardinal points, Subsidiary points
2. Compass
3. North, East, South and West
4. North
5. 

Subject teacher to assist in drawing the sixteen compass point

iii) Measuring distance on a map
1. a) i) Straight edge of a paper
   ii) Pair of dividers
   iii) A ruler
b) i) Using a straight-edge of paper
   Step 1 - Mark the two points A and B on the map and join points using a ruler
   Step 2 - Fold the paper to make a sharp edge. Place the edge of the paper on the scale, so that – A is on O, and then read out the place on B on the scale. What you get is the distance between A and B.
ii) Using a pair of dividers
   a) Join the two places using a straight line. Name the line AB
   b) Place one end of the dividers on Point A
   c) Open the dividers carefully until the free end is at point B
   d) Lift the dividers carefully without interfering with the measurement taken and place it on the scale given
   e) Read the distance from the scale

iii) Using a ruler
   a) Place the ruler along the line that joins the two points and read the measurement on the ruler
   b) Place the ruler on the scale given and read the corresponding distance

2. a) A piece of string, a thread or a straight edge of a piece of paper
   b) i) Identify the section of the distance and mark the ends A and B.
   ii) Place one end of the string at point A and mark.
   iii) Lay the string carefully along the line until it joins point B. Mark the point.
   iv) Stretch out the string and place it on the linear scale.
   c) i) Identify the distance and mark the two end points A and B.
   ii) Divide the section into small straight sections.
   iii) Fold a piece of paper into two to get a straight edge.
   iv) Place one end of the edge at point A and mark on the paper.
   v) Twist the straight edge and mark point B on the paper
   vi) Place the piece of paper along the scale given and read the distance.

3. Linear scale

iv) Calculation of area on a map
1. Mathematical formulae
   a) Measure the length of the square and multiply by 4.
   b) Measure the length of the rectangle and the width and multiply by 4.
   c) Measure the base and the height and use the formulae \( \frac{1}{2} b \times h \)
   d) Use the formulae \( r \times r \times \pi \) after establishing the radius.

3. Area = \( \frac{1}{2} b \times h = \frac{1}{2} \times 16 \times 8 = \frac{1}{2} \times 16 \times 8 = 1 \times 16 \times 8/2 = 84cm^2 \)

4. a) Strip method
   b) Rectangle method
   c) Triangle method

5. a) Area of each square = \((1 \times 1) \text{ km}^2\)
   b) Number of complete squares = 27
   c) Number of incomplete squares = \( \frac{20}{2} = 10 \)
   d) Total number of squares = \(27 + 10 = 37\)
   e) Ground area of each square is 1 \text{ km}^2. Therefore, the area of L. Erie equals \((37 \times 1) \text{ km}^2 = 37\text{km}^2\)

b. Physical features
1. Physical features are natural forms that are found on the earth’s surface.
2. Natural physical features, Man-made physical features
3. a) Mountains and hills
   b) Valleys
   c) Plains
   d) Plateaus
   e) Island
4. a) Rivers
   b) Swamps
   c) Lakes
   d) Basins
   e) Oceans
   f) Boreholes
5. a) The coastal plains  
   b) The Rift Valley  
   c) The highlands  
   d) Plateau  
   e) Lake basin  
6. a) Plateau  
   b) Lake basin  

7. | Type of physical features | Examples in Africa |
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Plateaus</td>
<td>Ahaggar, Fouta Djalon, Bie, Tibesti, Jebel Abyad, Teiga, Nyika, Jos</td>
</tr>
<tr>
<td>Basins</td>
<td>Volta, Niger, Djouf, Congo, Zambezi, Limpopo, Orange River, Danakil, Qattara, Chad, Bodel, Lake Victoria</td>
</tr>
<tr>
<td>Mountains</td>
<td>Tibesti, Kenya, Ruwenzori, Atlas, Cameroon, Drakensberg, Jebel marra, Ras Dashan</td>
</tr>
<tr>
<td>Valleys</td>
<td>Great Rift Valley</td>
</tr>
<tr>
<td>Plains</td>
<td>Serengeti, Loita, Bilesa</td>
</tr>
<tr>
<td>Islands</td>
<td>Madagascar, Seychelles, Comoros, Sao Tome and Principe, Mauritius, Cape Verde, Rusinga, Migingo, Mfangano, Zanzibar, Lamu, Pate, Mombasa, Pemba</td>
</tr>
<tr>
<td>Swamps</td>
<td>Okavango, Lake Kyoga, Amboseli, Sudd, Lotikipi, Lorian</td>
</tr>
</tbody>
</table>

i) Effects of physical features on human activities

1. a) Mountains  
   d) Valleys  
   e) Lakes  
   c) Swamps  
   f) Plains  
   g) Hills  
   h) Rivers

2. a) Leeward side of a mountain is on the rain shadow and receives dry winds  

   b) Wind carrying moisture is forced up a mountain and moisture condenses and fall as relief rain

3. a) People living around these region practice fishing and irrigation. Water transport is also available. This leads to increased settlement  

   b) i) Plateau land is mainly covered by grass. Pastoralism is therefore practiced  

   ii) Tourism is also practiced.  

   iii) The levelled surface makes it easier for road and railway construction.  

   iv) Flooding is a problem to those regions e.g. Budalangi  

   c) i) Mountains and hills influence climate, therefore high rain on the windward side which attract dense settlement  

   ii) Leeward side attract sparse or scattered settlement  

   iii) Lumbering is an important activity  

   iv) Construction of roads and railways is difficult  

   v) Small hills and mountains are rich in minerals  

   vi) Some mountains are tourist attraction sites  

   d) i) Discourages settlement – because they are usually infested with mosquitoes and snails
ii) Yala swamp have been drained for cultivation of crops
iii) Papyrus reeds and mangrove trees are found in these regions
iv) Trees such as eucalyptus which require a lot of water are grown
v) Swamps are barriers to communication
e) i) Fertile soils encourage people to settle
ii) Income is gotten from building sand collected from river valleys
iii) Large valleys act as obstacles when constructing roads and railways

4. a) mining b) Crop farming c) Lumbering d) Pastoralism e) Trading f) Tourism

5. a) River Tana b) River Yala c) River Perkerra

6. a) i) Sandy beaches ii) Warm climate and Sandy beaches iii) Warm climate and cultural heritage b) Beautiful scenery c) Lakes e.g. Lake Nakuru, Hot springs and Menengai crater

7. a) Enough rainfall to support agriculture b) Fertile soils c) Variety of minerals

8. a) Diseases e.g. Malaria and Bilharzia due to swampy areas b) Flooding e.g. Budalangi which cause death and destruction
c) Barrier to transport and communication e.g. valleys, swamps, mountains and hills

c. Climate

1. Weather is the day to day condition of a place.
2. Temperature, rainfall, humidity, air pressure, wind, sunshine and cloud cover.
3. Precipitation is the general name for rain, fog and mist.

4. a) rain b) Fog c) Mist

5. 

Teacher to supervise the drawing

6. a) Climate is the average weather condition of a place or it is the study of weather of a place for a long period of time (30-35yrs).
b) Rainfall, temperature, humidity
c) Distance from water bodies d) Shape of coastline e) Latitude f) Altitude g) Relief

7. Climate change is the occurrence of unexpected climate conditions or events on a local or global scale.

i) Traditional methods of observing weather

1.

<table>
<thead>
<tr>
<th>Traditional weather observation</th>
<th>Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Observing the sky</td>
<td></td>
</tr>
<tr>
<td>a) Heavy clouds</td>
<td>People expect rain</td>
</tr>
<tr>
<td>b) Clear sky at night and many</td>
<td>People expect no rain</td>
</tr>
<tr>
<td>stars</td>
<td>No rain</td>
</tr>
<tr>
<td>c) Full moon</td>
<td></td>
</tr>
</tbody>
</table>
Migration of some birds and insects
a) Safari ants moving around  
b) Large swarms of locusts  
c) Quelea birds migration  
d) Flocks of sparrows  

Rain about to fall  
Prolonged dry spell  
Dry period approaching  
Just before onset of the rains  

Animal behaviour
a) Frogs croaking  
b) Cows jumping up and down  

Rainy season is about to start  
Rain about to come  

Weather observation
a) Morning dew  
b) Fall of temperature  
c) Trees shedding leaves and sprouting  

Rainy season about to start  
Rain is going to fall  
Dry spell then rain  

2. a) To prepare the land for planting season  
b) To know the rain pattern  
c) To prepare for a drought season  

3. Humidity, cloud formation, wind direction, sun, moon and stars  

ii) Modern weather observation, recording and measurement  
1. Weather station  
2. Meteorology  
3. Meteorologists  
4. a) Stevenson’s screen  
b) Thermometer, hygrometer and barometer  
5. a) In traditional weather observation people used theories based on local beliefs, religion and astrology to observe and predict weather but modern form of weather observation is based on measuring and recording various types of weather.  
b) Traditional weather observers only dealt with two aspects, the onset of rain and dry spell. Modern weather observers concentrate on all the weather elements.  
6. a) Rain gauge  
c) Wind sock  
e) Barometer  
g) Hygrometer  
b) Anemometer  
d) Thermometer  
f) Wind vane  
h) Windvane  

Rainfall  
1. Amount of rain that fall in a given place. Drops of water falling from above to the ground  
2. a) Relief rainfall  
b) Convectional rainfall  
c) Cyclonic rainfall  
D. Frontal rainfall  
3. a) Funnel  
b) Container  
c) Glass jar  
4. mm – millimetres  
5. a) Total rainfall in a month  
b) Record the rainfall for each day of the month. At the end of the month add together the daily rainfall figures  
6. a) 532 mm  
b) 47.5 mm  

Temperature  
1. Temperature is coldness or hotness of a place.  
2. Degrees Celsius or (centigrade) (°C) or degrees fareinheight (°F)  
3. Mercury, alcohol  
4. Maximum and minimum  
5. Maximum thermometer, mercury  
6. Minimum, alcohol  
7. Rises, falls  
8. a) maximum  
b) alcohol  
c) mercury  
d) metal index
9. Degrees farenheight
10. a) Temperature recorded over a period of one year
   b) The difference between the maximum and minimum temperature experienced in a day
   c) The difference between the maximum and the minimum temperature experienced a day
   d) Mean annual temperature is the difference between the mean temperatures of the hottest and coldest month
11. a) 21˚C   b) 22.2˚C
12. °C or °F (degrees celcius and degrees fahrenheit)
13. Mean annual temperature

**Atmospheric pressure**

1. Barometer
2. Mercury barometer, aneroid barometer
3. It consists of a small metal box that can collapse. It has a flexible side which expand and contracts depending on the air pressure outside. The top of the box contracts as the air pressure rises. The top of the box expands and pushes outwards as the air pressure falls. The springs pushes the top of the box outwards.

System of levers convey the movement of the box to the pointer. The pointer moves across the scale as air pressure changes. Atmospheric pressure is obtained by reading the figure indicated by the pointer.

4.(a) Mercury barometer

**Humidity**

1. Humidity is the amount of water vapour in the air
2. Wet bulb, Dry bulb
3. a) (i) Dry - bulb thermometer
(ii) **Wet bulb thermometer**

b) Cover the wet bulb with a wet cloth whose end is dipped in water to keep it wet. The water will evaporate from the cloth when humidity is low. This reduces the temperature on the wet bulb when the humidity is high, evaporation will not take place. Thermometer readings will be high. Record the amount of water vapour in percentage.

**iii) Factors influencing climate change**

1. It is the unusual occurrence of weather patterns in a place.

2. a) Deforestation
   b) Industrialisation
   c) Damming rivers
   d) Pollution

3. a) Volcanic eruptions
   b) Earth movements
   c) Changes in the shape of the earth’s orbit
   d) Ocean currents

4. a) Warming due to green house effect forms a layer which traps the heat in the atmosphere causing the temperature to fall. Damage to the ozone layer causes harmful rays of the sun to reach the earth.

b) Deforestation leads to reduced rainfall hence causing desertification. It also leads to high temperatures which cause flooding.

c) When carbon-dioxide gas is released into the atmosphere, it creates a blanket like layer in the upper atmosphere and heat is trapped near the earth’s surface. The temperature on the earth starts rising. This is also referred to as global warming.

d) Afforestation changes the rain pattern

**iv) Impact of climate change on human activities**

1. a) Agriculture
   b) Flooding
   c) Production of HEP and irrigation
   d) Health
   e) Environmental conservation

2. a) Higher temperatures may interfere with crops which require low temperatures. This will result in a drop in crop yields.

b) High temperatures will increase rate of evaporation hence high rainfall which will cause flooding.

b) Mountain glaciers and ice will melt causing the sea level to rise. This will lead to displacement of people.

b) High temperatures may cause a reduction of rainfall. Amount available for production of H.E.P will reduce.

e) High temperatures cause heat waves which will lead to deaths. Flooding will cause water-borne diseases. Harmful rays from the sun may cause diseases such as skin cancer and eye problems.
f) Excess radiation from the sun slows down plant growth. This will lead to death of wildlife.

d. Soils
1. Soil is the loose particles of rocks which cover the earth’s surface.
2. a) Weathering  
   b) Parent materials, climate, living organism, topography, time  
3. Mineral particles or rock particles, Water and air, Living organisms,  
4. a) Growing crops  
    b) Building and construction  
    c) Soil contains minerals  
   d) Important raw materials in pottery  
5. a) Volcanic soils   b) Clay soils  
   c) Sandy soils   d) Loamy soils  
   e) alluvial  
6. a) i) Structure   ii) Porosity  
       iii) Permeability   iv) Texture  
   b) i) Soil structure is the shape that soil takes based on physical and chemical properties  
       ii) Porosity- soil has a lot of small holes that air and water can pass through  
       iii) Permeability - soil allows liquids and gases to pass through  
       iv) Texture - this is how coarse soil is. (The proportion of sand silt and clay)  
7. a) It is a vertical cut through the soil showing arrangement of soil layers from the surface to the parent rock  
   b) A – Top soil  
      B – Sub-soil  
      C – Parent material  
      D – Bed rock  
8. a) Soil catena  
    b) Soil in sloppy areas are carried by rain water hence deposited to the floor of the valley making a thick layer.

e) Soil erosion
1. Soil erosion is a process by which the top soil is removed by forces of nature.
2. Wind, rain (water), animals  
3. Gulley, wind, rill, sheet, splash  
4. Soil erosion caused by wind – Sheet erosion  
   Soil erosion caused by moving water.  
   a) Splash erosion   b) Rill erosion  
   c) Gulley erosion  

ii) Causes of soil erosion
1. Deforestation, monocroping, overstocking/overgrazing, poor methods of farming  
2. i) Growing of one type of crop weakens the soil making the loose particles to be carried away by wind and water.  
   ii) Deforestation leaves the soil exposed to agents of soil erosion  
   iii) Overstocking leads to animals clearing everything in the area  
   iv) Ploughing up and down the hill and over cultivation loosen the soil which is then easily carried away by erosion  
3. a) Wind   b) Rain  
    c) Weathering  

iii) Effects of soil erosion on human activities
1. Fertile soils – These soils are important for agriculture. When eroded it leaves the land bare, hence cannot support crops.  
2. Gulley erosion – When soil is eroded, ploughing is impossible hence less important for agriculture.
3. Silting – This is caused by eroded soils carried into dams. This reduces water level thus affecting irrigation and electricity production.

4. Desertification – Uprooting of trees does not support vegetation. This causes displacement of people and change of people’s way of life to pastoralists.

5. Water pollution – Eroded soils which carry dirt into rivers end up polluting the water. This leads to death of marine life.

iv) Soil conservation measures

1. a) Keeping the required number of animal in an area reduces soil erosion.
   b) This is directing water into man-made waterways. Nappier grass is planted along the banks to make the banks strong.
   c) Cover crops such as sweet potatoes, grass and beans allow very little erosion to take place.
   d) This is ploughing across the slopes rather than up and down the slope. Furrows trap and stop the movement of water.
   e) Agro-forestry. Trees and shrubs are planted in and between fields to protect the soil. They act as wind breakers.
   f) Planting trees is one of the best ways of preventing soil erosion because they shelter the soils from above and hold on to it with their roots.

2. a) i) Strip cropping
   ii) Mulching
   iii) Crop rotation
   b) i) This is growing crops in long narrow strips. Different crops are grown alternatively in the same field. This interrupts the flow of water hence reducing soil erosion.
   ii) Covering the soil with decaying materials of plants reduce the effects of rain drops.
   iii) Crop rotation retain soil fertility and helps to maintain the soil structure hence reducing soil erosion.

Creative Corner

a) Across
  4. Relief      5. Compass
  6. Atlas      7. a) Census
  b) Rain      8. Symbols

Down
  1. Quarry      2. Precipitation
  3. Scale

b) Pupils to search for the words on the cross word puzzle. Let them search for all the words and circle them.

Note: Subject teacher to assist pupils in filling the creative corner puzzle

ANSWERS TO EVALUATION PAPER 1

29. D  30. C

UNIT 2: PEOPLE AND POPULATION

Know more

1. Population is the number of people living in a certain place at a particular time.
2. a) National Census  
   b) Registration of births and deaths  
   c) Administration records  
   d) Police records  
3. a) Constant supply of food  
   b) Peace and stability  
   c) Early marriage  
   d) Improved health service  
   e) Attitude towards family planning  
   f) HIV/AIDS  
4. a) The main language groups in Eastern Africa are: Bantu speakers, Nilotic speakers, Cushitic speakers, Semitic speakers  
   b) The people of Northern Africa are: Berbers, Tuaregs and The Arabs  
   c) The people of Central Africa are: The Mande, The Kwa, Nilo-Saharan, Afro-Asiatic, Voltaic, West-Atlantic  
   d) The people of Central Africa are: Bantu groups, Pigmies  
   e) The people of Southern Africa are: the Khoisan, Bantu, Asians, coloureds and Afrikaners.  
5. a) Trade  
   b) Marriage  
   c) Games and sports  
   d) Sharing of food  
   e) War  
   f) Language and culture  
6. a) It helps to create good relations among the people  
   b) The people know one another  
   c) People understand why certain people carry out certain cultural practices  
   d) It encourages co-operation among the people reducing chances of such communities going to war against each other  
   e) It promotes interdependence among people and nations of the world i.e. rich nations offer support to the poor countries  
7. a) climate  
   b) relief  
   c) vegetation  
   d) pest and diseases  
8. a) warfare  
   b) drought  
   c) famine  
   d) diseases  
   e) health services  
9. a) shortage of social amenities  
   b) Inadequate land  
   c) Stress on natural resources  
   d) Stress on food available  
   e) Unemployment  
10. a) The mythical theory  
    b) Creation theory  
    c) Evolution theory  
11. Pre-historic sites, fossils  
12. B  

a. Human Origin  

i) Theories of human origin  

The Mythical theories  
1. It is untrue story  
2. Traditional theory  
3. Oral traditions, myths and legends  
4. Accept different kind of theories from the pupils. An example from the Kikuyu community is given. Kikuyu – God (Ngai) created a man Gikuyu and a woman (Mumbi). He gave them land at a place called Mukurwe wa Gathanga. They were blessed with nine daughters. They had no son. They prayed to God, to give them men to marry their nine daughters. God sent nine men who married the nine daughters. Population grew rapidly. They started to spread in search of fertile land for farming. This is where the Kikuyu tribe originated from.  

Creation theory  
1. Biblical theory  
2. Bible, Quran
3. Man, Adam
4. Eve, Hawa
5. Man (Adam) woman (Eve)

**Evolution theory**
1. Evolution is a process of slow and gradual change and development in living things over a long period of time.
2. Charles Darwin
3. Simple forms
4. i) Ape-like form to modern man  
   ii) Earliest man to the thinking man
5. a) Homo habilis  
   b) Homo erectus
6. i) Kenyapithecus  
   ii) Australopithecus  
   iii) Homo habilis  
   iv) Homo erectus  
   v) Homo Sapiens
7. Homo sapiens
8. Homo sapiens
9. Kenyapithecus
10. Homo sapiens
11. Aegytopithecus
12. Kenyapithecus/Ramapithecus
13. Australopithecus/Zinjathropus (Nutcracker man)
14. Man with ability
15. Olduvai Gorge
16. Homo erectus, upright man
17. Olduvai Gorge in Tanzania; Nariokotome on the western shores of Lake Turkana
18. i) He walked in an upright posture  
   ii) He was able to think, plan and make accurate forecasts
19. i) Aegytopithecus  
   ii) Dryopithecus Africanus  
   iii) Kenyapithecus/Ramapithecus  
   iv) Austropithecus or Zinjathropus  
   v) Homo habilis  
   vi) Homo erectus

viii) Homo sapiens
x) Homo Sapiens Sapiens

**ii) Stages of human evolution from the Stone Age period**
1. Stones
2. i) Early stone age  
   ii) Middle stone age  
   iii) Late stone Age (Neolithic)

**Homo habilis**
1. Early stone age
2. Hunting, gathering roots and wild berries
3. Hand axes, cleavers, thin pieces of stones
4. i) Walked in an upright manner  
   ii) Was able to communicate through speech  
   iii) The skull and teeth were similar to those of modern man
5. Caves
6. i) Signs  
   ii) Gestures
7. Homo erectus

**Homo erectus**
1. Upright man  
2. Early stone age
3. Caves
4. Combined words, Signs and Gesture
5. Stone, pebbles  
6. Animal skin
7. i) The body structure was similar to that of modern man  
   ii) Walked upright  
   iii) Brain capacity 800-1000 cc. The speech was more advanced  
   iv) Made hand axes  
   v) Had advanced speech than Homo habilis  
   vi) Made fire and roasted meat
8. Hunting and gathering
9. Digging up roots, skinning animals
10. i) Hand axes  
    ii) Cleavers  
    iii) Scrpapers
11. Fire
**Homo sapiens**

1. Intelligent
2. Middle Stone age
3. caves
4. i) Hunting  ii) Fishing  iii) Gathering roots  iv) painting  vi) making ornaments
5. a) Metals  
   b) harpoons, saw blades, arrow heads, sickles
6. i) They made baskets, pots and mats  
   ii) They recognised and appreciated art by printing pictures in caves
7. meat, roots, berries (wild fruits), fish, cereals
8. Homo erectus
9. Homo sapiens

**iii) Pre-historic sites in Eastern Africa and their location**

1. Archeological, evidence
2. Louis and Mary Leakey
3. E Hyrax  
   N Ilert  
   R Olorgesaille  
   Q Mogosi  
   H Kanjera  
   Y Engaruka
4. L Isimilia  
   T Olduvai Gorge  
   M River Omo basin  
   J Kalambo  
   G Gamble’s cave  
   P Kodoa Rock

**b. Migrations**

1. Migration is the movement of people from one region to another
2. Internal migration is movement within a country and external migration is international or movement outside the country

**i) Types of migration**

1. a) This is where people move from rural to urban areas or towns
   b) This is where people move from urban areas to rural areas
   c) This is where people move from one rural area to another rural area
   d) This is where people move from one town to another

<table>
<thead>
<tr>
<th>Reasons for migration</th>
<th>Effects of migration</th>
</tr>
</thead>
</table>
| a) Search for employment  
Attraction of urban life  
Shortage of land | Congestion, provision of ready market for goods and services, promotes national unity, rapid growth of urban centres  
Increase in social evils: increased crime rate, rapid growth of slums, inadequate social facilities due to high population  
Availability of cheap labour, erosion of peoples culture and traditional values |
| b) Retirement  
Job transfers  
Decentralisation | Promote development in rural areas, improve services in rural areas, increase population in rural areas leading to land fragmentation  
Introduction of new life style and skills, increase crime rate in rural areas, erosion of culture in rural areas  
Reduce rural-urban migration, helps decongest the towns |
|---|---|
| c) Population pressure  
Employment  
Government policy | Intermarriages, increase demand of social facilities, increase food production, possible tension between newcomers and local people  
Development in new areas, provides labour in plantations, mines and irrigation projects, leads to exploitation of resources  
Fighting over resources |
| d) Greener pastures  
Insecurity  
Job transfer | Increased development, expansion of trade, faster development of recipient towns, promote interaction of different people  
Transfer of vices, increase crime rate, mushrooming of slums due to lack of adequate housing  
Rapid population growth, inadequate social services unemployment |

3. a) Moving into a country  
b) People leaving their home country  
4. a) People who move into another country to live there  
b) Those who leave their country to go and settle in another country  
5. a) Employment  
b) Refugees  
c) Further studies  
d) Intermarriages  

e) The Green card lottery  
6. a) Political asylum  
b) Looking for better standards of living  
c) Employment  
d) Further studies  
e) Dual citizenship

<table>
<thead>
<tr>
<th>Effects of immigration into Kenya</th>
<th>Effects of emigration from Kenya</th>
</tr>
</thead>
</table>
| Intermarriage  
Foreigners promote international trade  
Strain on resources and social amenities  
Increase in population in settled areas. | Better education and skills  
Brain drain  
Reduction of culture  
Erosion of culture |
8. a) Availability of high market
   b) Development
   c) Availability of cheap labour
   d) Increase in social evils
   e) Overcrowding and congestion
9. a) High development in rural areas
   b) Population increase (explosive)
   c) Environmental destruction
   d) Joblessness
   e) Increased conflicts

**c. Population growth**

1. Population growth is the increase of number of people living in a place due to a number of factors.
2. a) This is where birth rate is higher than the mortality rate
   b) This means that there are few people who are born than those who are dying
3. Natural population growth occurs when a country has enough food and better health care
4. a) Number of people born in a place
   b) Number of people dying in a place. This can be done by subtracting number of people dying from those who were born
   c) Higher mortality rate than fertility rate lead to low population and vice versa.

**i) Slow population growth**

**Factors that lead to slow population growth**

a) Family planning- This offers parents an opportunity to have children when they want and the number they can cater for.

b) Poor health – This is when more people die than the ones born due to lack of proper health services.

c) Diseases – Diseases like malaria, T.B and HIV and AIDS claim higher number of people.

d) Wars and political instability – Many people die leading to slow population growth.

e) Hunger and famine – People die because of starvation and malnutrition.

f) Natural disaster – Floods, earthquakes and drought can wipe out the entire population.

**Problems that result from slow population growth**

a) Shortage of labour in agricultural areas, industries and other establishment.

b) School and other learning institutions could close due to lack of enough children.

c) Underutilised medical institutions leading to unemployment.

d) An underutilised resource since demand is low.

e) Invasion of community land by other people.

f) Poorly developed infrastructure.

**ii) Rapid population growth**

**Factors that lead to rapid population growth**

a) Improved food supply and nutrition – People with insufficient food to be assisted to get more food to improve their nutritional status, which in turn would improve their health.

b) Improved medical care – Everybody should be given better care to avoid early deaths.

c) Education – Educated people are aware of their diet, health, environment and other aspects that could affect their lives.

d) Improved security – This reduces loss of life and enables people to have peaceful environment.

e) Employment and improved working conditions – This will create a conducive working environment therefore improve livelihood.
Problems that result from rapid population growth

1. Pressure on agricultural land – The soil will become infertile due to overproduction.
2. Water-catchment areas – This region will be cleared for settlement - hence drying up of rivers.
3. Deforestation – This will lead to desertification.
4. Strain on social amenities – Housing, school and hospitals will be inadequate hence poor standard of living.
5. High rate of unemployment – Many people will be jobless, hence high rate of crime.

iii) Effects of HIV and AIDS on population growth

1. Through unprotected sex, blood transfusion with infected blood, through sharing skin cutting instruments, through cuts and open wounds.
2.  
   a) Abstaining from sex
   b) Being faithful (those who are married)
   c) Having only one sexual partner
   d) Use of condoms
3. VCT
4.

<table>
<thead>
<tr>
<th>True</th>
<th>False</th>
</tr>
</thead>
<tbody>
<tr>
<td>a)</td>
<td>✓</td>
</tr>
<tr>
<td>b)</td>
<td>✓</td>
</tr>
<tr>
<td>c)</td>
<td>✓</td>
</tr>
<tr>
<td>d)</td>
<td>✓</td>
</tr>
<tr>
<td>e)</td>
<td>✓</td>
</tr>
</tbody>
</table>

5. a) There is decrease in population growth due to high rate of infant mortality  
b) Adults who are able to produce die early due to HIV and AIDS  
c) Mortality rate is high in all ages leading to slow population growth  
d) Able bodied people who are economically able die early due to HIV and AIDS leading to starvation and malnutrition.

iv) Ways of managing population growth

1. Developed, undeveloped  
2.  

<table>
<thead>
<tr>
<th>Managing slow population growth</th>
<th>Managing rapid population growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Improved medical care and facilities</td>
<td>a) Introduction of family planning services</td>
</tr>
<tr>
<td>b) Reward those with many children</td>
<td>b) Developing rural areas</td>
</tr>
<tr>
<td>c) Increased food production</td>
<td>c) Increase in Agricultural production</td>
</tr>
<tr>
<td>d) Promotion of peace</td>
<td>d) Expansion of education facilities</td>
</tr>
<tr>
<td></td>
<td>e) Delaying marriage</td>
</tr>
<tr>
<td></td>
<td>f) Upgrading slums</td>
</tr>
<tr>
<td></td>
<td>g) Promoting better health care</td>
</tr>
</tbody>
</table>

v) Population of Kenya

1. a) This is the official counting of people  
b) Ten years (10)  
c) 2009  
d) 2019  
2.  
   a) Composition of population in terms of age and sex  
b) Age and sex  
c) Composition of population showing the number of males and females in each age group  
d) Composition of dependant population with those that they depend on  
e) The number of people per unit area of land
f) Rate at which people are born in a certain country.
g) Rate at which people die in a certain country.
h) The age at which majority of people reach before death.
i) Rate at which infants die in a certain country before they reach the age of five.

3. Forty two million
4. a) Central, Nyanza, Western, Rift Valley
   b) They receive high rainfall, they have fertile soils and plenty of other resources
5. Eastern and North Eastern regions
6. Population
7. Mortality rate
9. a) False  b) True  c) False
10. Hospitals, County Commissioner’s office, Attorney General’s office
11. HIV and AIDS
13. Eastlands (Nairobi East)
14. Post Election Violence

d). The population structure of Kenya
1. a) Four years and below 15.8%, youthful 44%, over 65 years 3.3%
   b) Dependency rate is high due to non working group
   c) Life expectancy is about 47 years
   d) Female are more than male
   e) Birth rate is higher than death rate.
      Fertility rate is high at 5 children per woman
   f) High rate of infant death due to poor health care (59 deaths out of 1000 lives)
   g) Population growth rate is high about 2.5%
   h) Death rate is high about 16% per 1000 live births

i) Comparison of the population structure of Kenya, Germany and India

<table>
<thead>
<tr>
<th></th>
<th>Kenya</th>
<th>Germany</th>
<th>India</th>
</tr>
</thead>
<tbody>
<tr>
<td>a)</td>
<td>40 million</td>
<td>About – 82 million</td>
<td>Over 1 billion</td>
</tr>
<tr>
<td>b)</td>
<td>65 per sq. km</td>
<td>234 per sq. km</td>
<td>356 per sq. km</td>
</tr>
<tr>
<td>c)</td>
<td>High 2.3%</td>
<td>Low 0.3%</td>
<td>High 2.9%</td>
</tr>
<tr>
<td>d)</td>
<td>13 per 1000</td>
<td>10 per 1000</td>
<td>17 per 1000</td>
</tr>
<tr>
<td>e)</td>
<td>55 years</td>
<td>77 years</td>
<td>64 years</td>
</tr>
<tr>
<td>f)</td>
<td>2.5%</td>
<td>0.2%</td>
<td>1.4%</td>
</tr>
<tr>
<td>g)</td>
<td>1:01 male/females</td>
<td>1:03 males/females</td>
<td>1:2 male/female</td>
</tr>
<tr>
<td>h)</td>
<td>High</td>
<td>Low</td>
<td>High</td>
</tr>
<tr>
<td>i)</td>
<td>Most Kenyans live in rural areas, population not evenly distributed</td>
<td>Well distributed most people live in urban centres</td>
<td>Most people live in rural areas</td>
</tr>
<tr>
<td>j)</td>
<td>Large with an average of five children</td>
<td>Families are small with an average of 2 children</td>
<td>Families are medium – sized with an average of four children</td>
</tr>
<tr>
<td>k)</td>
<td>Highlands, Coastal region, Lake region</td>
<td>Towns and industrial areas</td>
<td>Along river valleys e.g. Indus, Brahma Putra and, Ganges</td>
</tr>
</tbody>
</table>
2. a) B
   b) This is because during census the people are grouped into two categories: Male and female, Age and sex
   c) A d) A, B e) B, A
   f) Teacher to supervise the comparison

Creative Corner

1. Evolution
2. Fossils
3. Archaeology
4. Darwin
5. Stone age
6. Richard
7. Koobi Fora
8. Upright
9. Aegytopithecus
10. Immigrants
11. Unemployment
12. Pre-historic sites

Note: For creative corner subject teacher to assist the pupils in filling the puzzle.

ANSWERS TO EVALUATION PAPER 2

29. A 30. B

UNIT 3: SOCIAL RELATIONS AND CULTURAL ACTIVITIES

Know more
1. Schools, hospitals, churches
2. A set of believes ideas and ways of behaving especially which belonging to a particular society, race, religion etc
3. Recreation/entertainment/way of dressing

<table>
<thead>
<tr>
<th>Festival</th>
<th>Ceremonies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drama</td>
<td>Burial and death</td>
</tr>
<tr>
<td>Music</td>
<td>Marriage</td>
</tr>
<tr>
<td>Harvesting/</td>
<td>Initiation/Birth and naming</td>
</tr>
<tr>
<td>victory in war</td>
<td></td>
</tr>
<tr>
<td>Bull fighting</td>
<td></td>
</tr>
</tbody>
</table>

5. a) Formal b) Informal
6. a) Defence b) Religion
c) Medicine d) Administration
e) Apprenticeship
7. a) Medicine b) Defence
c) Religion
8. a) Iron smiths b) Healing (traditional doctors)

a. The family
1. A family is made up of people related by blood, marriage or adoption
2. Blood, marriage, adoption
3. a) Nuclear b) Extended
4. Father, mother, children
5. Single parent families
6. Divorce, death
7. Relatives, members of the nuclear family named after them

Marriage systems
1. Marriage refers to a permanent union between an adult male and female for the purpose of companionship, giving birth and raising children
2. a) Religious b) Customary c) Civil

Religious – People go to church mosque or temple and perform a wedding ceremony.

Customary – Some people prefer to marry according to African tradition and customs. This type of marriage allows polygamy and it doesn’t require a certificate.
ii) Rights and responsibilities of spouses in marriage

1. Rights are those values which should be respected while responsibilities are duties to be carried out for the success of the marriage.

<table>
<thead>
<tr>
<th>Rights of spouses</th>
<th>Responsibilities of spouses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Respected</td>
<td>Heading the family together with the husband</td>
</tr>
<tr>
<td>Make decision</td>
<td>Creating a good environment in the home.</td>
</tr>
<tr>
<td>Choose who to associate with</td>
<td>Provision of basic needs</td>
</tr>
<tr>
<td>Right to work</td>
<td>Respect of family members</td>
</tr>
<tr>
<td>Right to leave with the children</td>
<td>Helping the children to grow physically, mentally and spiritually</td>
</tr>
<tr>
<td>Right to have equal share of family resources and properties</td>
<td></td>
</tr>
</tbody>
</table>

3. Rights of parents

<table>
<thead>
<tr>
<th>Responsibility of parents</th>
</tr>
</thead>
<tbody>
<tr>
<td>To love and to be loved</td>
</tr>
<tr>
<td>To be loyal to each other</td>
</tr>
<tr>
<td>Each parent has a right to be respected by other member members of the family</td>
</tr>
<tr>
<td>It is the right of the parents to make decision on matters affecting the family</td>
</tr>
<tr>
<td>To love, care for and educate the children</td>
</tr>
<tr>
<td>To meet their children’s basic need – food, shelter, clothing and education</td>
</tr>
<tr>
<td>To provide security and protect their children from attack or injury</td>
</tr>
<tr>
<td>To give their children equally without favour</td>
</tr>
<tr>
<td>To give their children a sense of belonging</td>
</tr>
<tr>
<td>Create a good society by showing concern for others</td>
</tr>
</tbody>
</table>

iii) Succession and inheritance of family wealth

1. estate
2. succession
3. estate
4. A will is an outline of how one would like his or her property shared out after his or her death.
5. court
6. a) When you die without a will
   b) Having made a varied will before death

b. The school

1. A school is a place where people go to learn
2. Local community, The sponsors, The County Education Board (CEB), The County Education Officer (CEO), Parents Teacher’s Associations (PTA), The head teacher, Assistant teachers
3. These are managers of the school
4. a) The head teacher – secretary
   b) Representatives of PTA
c) Individuals appointed by the County Education Board
d) Members representing the sponsors
e) One member nominated by Kenya National Union of Teachers (KNUT)

5. Private schools
6. Public schools
7. a) Providing land for building and expansion  
   b) Donating materials and facilities  
   c) Local people can be invited as resource persons 
   d) Attending Annual General Meeting (AGM) and giving ideas on how to improve the standard of the school

8. a) Keep the school environment clean 
   b) Collect and send messages and letters 
   c) Type school records examination letters and other written materials 
   d) Maintain the school laboratories and prepare for the lessons

i) How schools are managed

1. Education
2. a) The ministry decides on subjects to be taught in schools. 
   b) It provides money to buy books and other materials used in teaching.
3. Directors
4. School committees  
5. Cabinet Secretary for Education  
   County Education Officers (CEO)
6. a) He is the secretary to the board  
   b) Allocate funds for different projects in schools 
   c) Ensuring all funds allocated to schools are spent well 
   d) Supervising the management of individual schools 
   e) Education Planning and Development

7. Ministry of Education  
   County Education Board (CEB)  
   School committee  
   Head teacher  
   Deputy Head teacher  
   Senior teacher  
   Assistant teacher  
   Prefects  
   Pupils

The County Education Boards (CEBs)

1. County Education Boards (CEBs)
2. a) County Commissioner (CC)  
   b) i) County Commissioner  
      ii) County Education Officer  
      iii) Three members nominated by the appropriate local authority.  
      iv) The clerk to the local council 
   c) i) Authorises the establishment of a new school 
      ii) Coordinates harambees and activity levy  
      iii) Allocating funds for different projects in school  
      iv) Ensuring all funds allocated to a school are spent well 
      v) Education planning and development
3. a) County Commissioner  
   b) County Education Officer

The school committee

1. Headmaster, Director
2. The head teacher, three members nominated by CEB, a religious member, eight people elected by parents of children attending the school
3. a) Parents representative  
   b) Head teacher
4. The School Committee plan for physical development, carry out development, ensure the school funds are not misappropriated, assist in matters of discipline and raising funds for the school

The parents-teachers association (PTA)

1. Head teacher, parents representatives, teachers representatives
2. It brings together teachers and parents working together for a common good of the school and its pupils
3. a) Raising funds to support school projects
   b) Helping to organize special days such as sports days
   c) Organising meetings for parents and teachers
   d) Discussing pupils progress
   e) Suggesting solution to emerging issues

The teachers

1. The Head teacher and Deputy Head teacher
2. i) Maintaining the school routine
    ii) In charge of the school in absence of the administrators i.e. Head teacher, Deputy Head teacher and Senior Head teacher
    iii) Maintain discipline
3. Assistant-teachers, prefects

iii) The role of the School Management Committee

1. Head teacher, PTA representative, individuals appointed by the CEB, members appointed by the school sponsors

2. Head teacher
3. a) He is the secretary to the school management board
    b) He writes minutes during school management committee meeting.
    c) He is the custodian of the minutes written
    d) He reads the previous minutes before the meeting starts
4. The Head teacher
5. a) Organising duties for staff members and preparing the school timetable
    b) Supervising class attendance by teachers
    c) Writing minutes during staff meetings
    d) He is the discipline master of the school
6. a) They teach children all subjects on the curriculum
    b) They organise activities like games, athletics, clubs, tours, etc
    c) They are in charge of day to day discipline of pupils
7. a) To keep the school environment clean
    b) Collect and send messages and letters
    c) They type school record, examinations letters and other written materials
    d) Maintaining school library
    e) Maintaining school laboratories
    f) They guard the school property
8. They provide the required school facilities

iv) The role of pupils in school management

1. a) They promote discipline among fellow pupils
b) They solve minor problems among pupils
c) They act as role models
d) They are the link between the pupils and the teachers
e) They lead pupils in school functions

2. a) Prefects should act as role models by behaving in an orderly and respectful manner
b) They should cooperate with the teachers, school administration and management to make sure that affairs of the school run smoothly
c) Prefects help teachers in maintaining discipline, cleanliness and in running some activities in school

3. a) Behaving in an orderly and respectful way
b) Supporting pupil with responsibility
c) Showing respect
d) Helping to keep and protect school facilities and resources

4. a) They contribute in the smooth running of the school
b) When they leave school, they can form old student association to support the school in its development projects
c) They learn to be good future leaders

Creative corner

Note: The teacher to assist the pupils in carrying out the exercise in creative corner.

ANSWERS TO EVALUATION PAPER 3

29. A  30. A

UNIT 4: RESOURCES AND ECONOMIC ACTIVITIES

Know more

1. a) Resources are things that one has and can use to increase one’s wealth
b) Economic activities are activities that help people to earn money e.g. trade, agriculture, tourism, mining, making things in factories and industries, fishing, lumbering

2. Renewable, non-renewable

3. Renewable resources

4. Soil, water, forests, animals, minerals

5. Trade, agriculture, mining, tourism, making things in factories or industries, Fishing, Lumbering

a. Agriculture

1. Agriculture is the growing of crops and keeping of animals for food consumption and for sale.
2. small scale or large scale

<table>
<thead>
<tr>
<th>Renewable resources</th>
<th>Non-renewable resources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water</td>
<td>Forest</td>
</tr>
<tr>
<td>wind</td>
<td>Minerals</td>
</tr>
<tr>
<td>Air</td>
<td>animals and birds</td>
</tr>
</tbody>
</table>

Creative corner

Note: The teacher to assist the pupils in carrying out the exercise in creative corner.
3. Subsistence farming
4. Commercial agriculture
5. Commercial agriculture is large scale farming

European settler farming in Kenya

i) Areas where European settler farming was practiced
1. Settlers
2. African native reserves
3. a) The highlands had fertile soils
   b) It had suitable climate for crops like coffee which were in high demand in Europe
c) It was accessible through the use of Kenya-Uganda railway. They used it to transporting their produce to the various markets in Kenya and abroad.
d) These areas were also secure to them
4. White highlands
5. The central highlands, Central Rift Valley, Western highlands, The Konza-Embakasi area between Nairobi and Machakos
6. Crown lands

<table>
<thead>
<tr>
<th>White highlands</th>
<th>African native reserves</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Use of heavy machinery</td>
<td>• Africans were exploited by providing labour for the white farmers at low pay</td>
</tr>
<tr>
<td>• Cultivation of cash crops</td>
<td>• Africans became squatters</td>
</tr>
<tr>
<td>• Extensive livestock farming</td>
<td>• Collapse of African Agriculture since their fertile land was taken by the white settlers</td>
</tr>
</tbody>
</table>

8. Muranga, Nyeri, Kiambu, Trans Nzoia, Uasin Gishu, Nakuru, Laikipia, Kericho
9. a) Use of heavy machinery
   b) Cultivation of different crops
   c) Use of pest control
   d) Modern methods of weed and pest control
   e) Extensive use of fertilisers
   f) Employment of large but cheap work force
   g) High capital investment
   h) Modern storage techniques
   i) Extensive livestock farming
10. Uasin Gishu, Laikipia, Nakuru, Trans Nzoia, Nyandarua, Molo, Narok, Nanyuki

11. A African reserves
    B Settler farming areas
    C Crown land

ii) Methods of farming used by the European settlers

Plantation farming
1. Plantations
2. Plantation farming, Mixed farming, Use of irrigation, Extensive livestock farming
3. Coffee, wheat, tea, maize, sisal, pyrethrum, wattles, pineapples, irish potatoes
4. Moi’s Bridge in Trans Nzoia, Machakos, Vipingo in Nyali near Mombasa, Ruiru and Juja
5. fertilisers and pesticides
6. Seed drills and ploughs were used during plantations. Harvesters and threshing machines were also used

**Mixed farming**
1. Mixed farming is the growing of crops and keeping of livestock on the same farm
2. Mixed farmers

**Livestock farming**
1. Livestock farming is keeping animals for food and for sale
2. Dairy and ranching farming
3. Fresian, Ayrshire, Jersey, Guernsey
4. Ranches
5. Paddocks
6. Beef cattle, dairy cattle, pigs, chicken, sheep, goats
7. Merino and corriedale sheep

**Irrigation farming**
1. Irrigation
2. a) Machines
   b) Fertilisers

**iii) Effects of European settler farming in Kenya**
1. **Positive effects**
   a) Infrastructure: Building the Kenya-Uganda railway and several good roads linking farms to towns
   b) Exotic animals; dairy cattle, Beef cattle, sheep, goats, pigs and poultry
   c) Commercial farming: Growing of cash crops and keeping of beef cattle for sale and for food
   d) Industries – Establishment of Kenya co-operative creameries K.C.C in 1925, the bacon factory in uplands Limuru to promote pig rearing
   e) Urbanisation – Towns such as Kitale, Eldoret started as market centres due to settler farming

2. To control the movement of Africans

**Settlement schemes in Kenya**
1. **Location of settlement schemes in Kenya**
   a) These are areas that have been set aside by the government to settle landless people
   b) Mwea Irrigation Settlement Schemes, Olkalou Salient Scheme, Island Farms and Muguga Jet Scheme.
   c) Oikalou, Salient and Kinangop plateau
   d) Mwea Irrigation Settlement Scheme, Olkalou Salient Scheme, Island Farms and Muguga Jet Schemes
   e) Ravin/Sabatia, Sotik, Ainabkoi, Lessos and Cherangany schemes
   f) Machakos, Aberdares, Taita hills, Nyiro Ndotos and Mathews Ranges
   g) Matunda

**Negative effects**
1. Low production reserves – This was because the areas occupied by natives were not fertile
2. Squatters – Most Africans were made squatters on their land which was alienated for European use
3. African provided cheap labour – African provided cheap labour to the white highland farmers by receiving low wages
4. Racism – This developed among the Africans, Europeans and Asians.
5. Land demarcation: This is subdivision of land brought about by the population growth in native reserves
8. Lake Kenyatta and Bura–Galole  
9. Ahero and Lambwe valley  
10. A – Sotik scheme  
    B – Lugari / Matunda / Turbo  
    C – Songoh, Koru, Muhoroni, Ft Ternan  
    D – Ol kalou Salient and Kinangop plateau  
    E – Nandi  
    F – Kaptagat  
    G – Cherangany  
    H – Timau  
    I – Naromoru and Island farms  
    J – Machakos

**ii) Reasons for establishment of settlement schemes**

1. To settle the landless, to reduce population pressure on land, to put better use of unproductive land
2. To promote farming, to give people land who were landless, to boost production of cash crops for export
3. Western highlands; Cherangani Hills, Mersuk Hills, Aberdare Ranges, Taita Hills, Nyiro Ndotos and Mathew Ranges
4. Mwea irrigation scheme
5. a) Reclaimed schemes  
    b) Reclamation
6. a) Putting unproductive land into productive land through either irrigation, clearing the bushes in tsetse flies infested areas and using pesticides, draining the swampy areas e.g. Yala swamp to make it productive  
    b) Mwea–Tebere, Bura, Kibirigwi, Lambwe valley, Yala swamp  
    Mwea–Tebere, Bura
7. Mwea–Tebere, Bura
8. a) The government bought the land that belonged to the settlers in the former white highlands  
    b) The government reclamation schemes e.g. Mwea and Bura–Galole
    c) Land buying companies were also formed
    d) Government land such as the Agricultural Development Corporation (A.D.C.) farms have also been allocated to the landless people by the government
    e) Excision of forest i.e. setting aside forests land by the government for people who are landless

**iii) Benefits of settlement schemes in Kenya**

1. a) The landless people get a place to settle  
    b) Good use of wasteland  
    c) The settlement schemes have brought general development of the areas where they were located e.g. schools, hospitals, water and electricity have been provided
    d) Employment has been created in agricultural sector for many jobless Kenyans for example in the Mwea irrigation scheme
2. Schools, hospitals, water and electricity
3. a) They bought land from the settlers, subdivide it and allocate the plots to its members  
    b) They also bought land that has been left idle by its owner and subdivide it among their members

**iv) Problems facing settlement schemes in Kenya**

1. a) Poor infrastructure e.g. roads are poorly maintained in Ol kalou  
    b) Increased growth of population has caused strain on the original facilities  
    c) Different ethnic people fail to
integrate fully leading to ethnic hatred and conflicts
d) Farmers lose their land when they fail to repay the loans given to them by the Public Settlement Trustee Fund
e) Equipment provided in the settlement schemes sometimes break down leading to collapse of some settlement schemes e.g. Bura-Galole scheme in Tana River district

2. Bura-Galole scheme

Irrigation farming
1. It is the growing of crops by supplying the land with water using specially constructed channels or pipes
2. National Irrigation Board (N.I.B.)
3.

<table>
<thead>
<tr>
<th>Irrigation Scheme</th>
<th>Source of water/river</th>
<th>County</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Mwea irrigation scheme</td>
<td>Thiba and Nyamindi rivers and tributaries of river Tana</td>
<td>Kirinyaga</td>
</tr>
<tr>
<td>b) Perkerra Irrigation scheme</td>
<td>River Perkerra</td>
<td>Baringo</td>
</tr>
<tr>
<td>c) Ahero irrigation scheme</td>
<td>River Nyando</td>
<td>Kisumu</td>
</tr>
<tr>
<td>d) Bura-Galole</td>
<td>River Tana</td>
<td>Tana River</td>
</tr>
<tr>
<td>e) Kibirigwi</td>
<td>Ngaratí</td>
<td>Kirinyaga</td>
</tr>
</tbody>
</table>

4. A Mwea-Tebere  B Perkerra  C Ahero
5. Kirinyaga
6. Onions
7. a) paw paw  b) Water melons  c) Chillies  d) tomatoes  e) cucumbers
8. Baringo, Baringo
9. Rice
10. Mwea irrigation scheme

i) Mwea Tebere Irrigation scheme
1. A Wamumu section  B Mwea section  C Tebere section  D Thiba section
2. X Thiba  Y Nyamindi  Z Rupingazi
3. Settle the landless
4. Black cotton soil
5. Thiba and Nyamindi
6. a) Canals or Basin irrigation  b) The teacher to ensure that the basin irrigation is well illustrated
   The above method of irrigation is called basin irrigation. Canals are used to direct water from the rivers into shallow basins. Each basis has two gates or sluices, which control how much water is given to the crops.
7. Cotton
8. a) tomatoes  b) French beans  c) maize  d) kale (sukuma wiki)
9. Basmati (pishori, sindano)
10. a) Tebere  b) Mwea  c) Thiba
**ii) Perkerra Irrigation scheme**

1. Baringo
2. River Perkerra
3. National Irrigation Board (N.I.B.)
4. a) paw paw   b) Water melon  
   c) Chilli    d) onions 
   e) maize    f) groundnuts 
5. a) Furrow irrigation  
   b) It involves construction of ridges and furrows. Furrows carry water from the main canal to the crops which grow on the ridges  
   c) i) ridges    ii) Furrows 
6. a) The scheme has helped to make good use of an area that was previously less productive  
   b) The products are sold to major urban centres like Nakuru, Eldoret and Kisumu. They are also sold to nearby tourist hotels 

**iii) Contribution of irrigation to the economy of Kenya**

1. a) Irrigation has helped to reclaim arid land and made it agriculturally productive  
   b) It has helped in food and cash crop production  
   c) Resettling the landless  
   d) Development of infrastructure  
   e) Provision of social institutions  
   f) Production of H.E.P or hydro-electric power  
   g) Flood control 
2. a) Controlling floods  
   b) Increased crop production without relying on the rain water 

**iv) Problems facing irrigation farming in Kenya**

1. a) Diseases - The stagnant water in the plots and canals act as a breeding ground for snails and mosquitoes.  
   b) Quelea birds – These are dangerous birds which feed on rice.  
   c) Mismanagement of the scheme- Farmers not provided with inputs, Canals not drained (siling)  
   d) Drought or inadequate rainfall affects the volume of water for irrigation  
   e) Competition of locally produced rice demoralizes the farmers.
2. a) Unreliable rainfall affects crop production  
   b) Perkerra Irrigation Scheme is a remote area far from the market  
   c) Horticultural products are perishable which means they need air transport which is very expensive 
3. a) Mismanagement  
   b) Water shortage  
   c) Pests and diseases  
   d) Delayed payments 
4. It acts as pool for breeding snails and mosquitoes which cause diseases  
5. a) Bilharzia  
   b) Malaria and elephantiasis 
6. Tsetse flies 
7. This is the flooding of canals by silt (soil) which is difficult to dredge out

**Horticultural farming**

i) **Meaning of horticulture and crops grown in horticultural farming**

1. Horticulture is the growing of fruits, vegetables and flowers and ornamental plants for sale. 
2. a) It is the other name for horticulture  
   b) Horticulture 
3. Floriculture 
4. a) The plots are intensively cultivated  
   b) Farms are generally small  
   c) Regular spraying of the crops
d) Use of high quality seed
e) Done in areas with fertile soils

5. Vegetables | Fruits | Flowers
---|---|---
a) Spinach | Bananas | Roses
b) Kales | Mangos | Orchards
c) Green peas | Oranges | Carnation
d) Chillies | Lemons | Gladion
e) Tomatoes | Tangerines | Dieffenbachia
f) Onions | Apples | Stlerilzie

6. Thika, Naivasha, Juja, Athi River, Limuru, Kericho, Kitale, Meru, Uasin Gishu, Nanyuki

**ii) Contribution of horticultural farming to the economy of Kenya**

1. a) Creation of employment
   b) Earning of Kenya’s foreign exchange
   c) Causes increase in number of cultivatable crops
   d) Provision of raw materials for industries
   e) Led to improvement of infrastructure
   f) Enables the people to use formerly unproductive land
2. Fruit processing, food canning industries

**iii) Problems facing horticultural farming in Kenya**

1. a) Unreliable rainfall affect production
   b) Production of horticultural crops is expensive
   c) Inputs are expensive
   d) Fluctuating of prices
   e) Lack of ready market
   f) Pest and diseases
   g) Quota system

2. Netherlands, Israel, Germany, South Africa
3. a) Restriction on exporting some horticultural products discourage farmers
   b) Fluctuation of world prices kills farmers morale

**iv) Comparison of horticultural farming in Kenya and the Netherlands**

1. **Similarities**
   a) Means of transport – air, road, rail
   b) Grows vegetables fruits and flowers
   c) Fertilisers are used to boost yields
2. **Differences**
   a) Dutch farmers rely solely on horticulture, in Kenya horticulture is relatively new. Tea is a bigger export and Tourism
   b) In Kenya farming is done on natural land, in The Netherlands farming is done on land reclaimed from the sea
   c) Has a few glass houses used i.e. Kenya, Netherland horticultural crops is mostly grown in glass houses
   d) In Kenya, a little mechanisation is done while Netherlands horticultural farming is highly mechanised

2. The Netherlands
3. a) False b) True c) True d) True e) False
4. a) Netherlands b) Netherlands c) Kenya d) Netherlands e) Kenya f) Netherlands g) Netherlands

**Fish farming**

1. It is the rearing of fish in ponds or tanks
2. Aquaculture
3. Fingerlings
4. a) Constant supply of water  
b) Food supply to the pond  
c) Land on which to construct the pond  
d) Services like cleaning the pond  

5. a)  

3. Kibos in Nyando, Bamburi in Mombasa, Sagana in Kirinyaga, Homa Bay, Lake Jipe in Taita Taveta, Kabaru in Nyeri, Aruba Dam in Taita Taveta/Lake  

4. County Fish farm  
a) Kirinyaga Sagana  
b) Nyeri Kabaru  
c) Taita Taveta Lake Jipe/Aruba Dam  
d) Kisumu Kibos  
e) Mombasa Bamburi  

5. Hatchery  

6. a) Nanyuki b) Naro Moru  
c) Kisumu d) Kakamega  

7. Water lilies and reeds  

8. Inland and marine water fish farms  

9. a) Fish farming  
b) i) Fish can multiply rapidly without food competition  
   ii) Fish are harvested at farmers' wish  

10. a) It provide valuable proteins  
b) It increases food for increasing population  
c) It increases the totals stock of food in the country  
d) It is a source of income to farmers and government  

ii) Comparison of fish farming in Kenya and Japan  
1. They have a strong fish culture  
2.  

<table>
<thead>
<tr>
<th>Fish reared and caught in Kenya</th>
<th>Fish reared and caught in Japan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fish kept are mainly the fresh water fish.</td>
<td>The fish kept mainly are the marine fish. Japanese keeps a variety of both Marine and fresh water fish in their farms.</td>
</tr>
</tbody>
</table>
Types of fish kept are mainly trout and tilapia

The type of fish kept is mainly carp and oyster.

3. Trawling
4. Japan
5. Fish, beans
6. Similarities
7. A Hokkaido
   B Honshu
   C Shikoku
   D Kyushu
   E Sea Okhotsk
8. a) True
    b) False
    c) True
    d) True

b. Mining
1. a) A mineral is an inorganic substance that naturally occurs beneath the surface or on the surface of the earth.
   b) Mining is the process of extracting minerals from the earth

2. Liquid, solid, gaseous, powder
3. Liquid, solid
4. Gold, fluorspar, limestone, diatomite, copper, diamond
5. Coal, petroleum, Gas
6. Open cast, adit, shaft
7. Dredging, underground, pit method
8. Soda-ash
9. A soda-ash   B marble
   C soda ash   D limestone
   E limestone
10. Soda ash, salt
11. a) Used in making soap and detergents.
     b) Used in chemical industries
     c) It is used in glass industries to manufacture glasses and bottles.

i) Distribution of minerals in Kenya

Flourspar
1. Flourite
2. Calcium fluoride
3. Kimwarer
4. Open cast mining
5. a) The mineral occurs slightly below the surface
     b) It can easily be scooped
6. Underground
7. Conveyer belts
8. Eldoret
9. a) It is used in strengthening iron and steel
     b) It is used to make cans for insecticides
     c) It is used to make sulphuric acid used in cars
     d) It is used in manufacture of cement
     e) It is used in the manufacture of toothpaste

Limestone
1. Athi river, Bamburi, Sultan-Hamud, Koru, Homa hills near Homa Bay, Kapenguria in West Pokot
2. Quarrying or open-cast
3. Explosives using dynamite
4. Marble
5. a) Manufacture of cement
   b) Manufacture of fertilisers
   c) Used in road construction
   d) Used for water treatment
6. Cement
7. a) It is cheaper to extract than building stones.
   b) It contains lime which is used to harden tar and other substances.
   c) It is readily available and it is found in many places.
8. Concrete
9. Athi river, Bamburi, Koru in Muhoroni

**Diatomite**
1. It is a chalk-like rock formed from small organism called diatoms that live in water
2. Koora, around Lake Elementaita, at Gicheru in Nyandarua
3. Lemunget near Ologesailie, Roysambu near Naivasha
4. At Eburu near Gilgil, Kariandusi
5. Open cast
6. Giant diesel – powered shovels
7. Underground method
8. Powder
9. Heat
10. a) It is used in the manufacture of writing chalk
    b) It is used in filtration plants to purify water
    c) It is fire resistant. It is therefore used in fireproofing and lining of furnaces in industries
    d) It is used in manufacture of white wash for painting
    e) It is used to make plaster that is used in hospitals

**Gemstones**
1. Precious stones
2. Rubies, Sapphires, Tsavorite
3. a) Garba Tula in Isiolo County
    b) Machakos
    c) Kitui
4. Voi, Mwatate
5. Kenya, Tanzania
6. Garba Tula in Isiolo County
   Lokirima, Machakos, Kitui, Taita
   Taveta
7. The scorpion mine
8. Lokirima
9. Open cast, deep cast
10. Ore
11. Ordinary rock
12. Making ornaments
13. Earings, necklaces, bangles

**Marble**
1. A hard smooth stone
2. Athi river, Kerio valley
3. Open-cast
4. Marble is produced by exposing limestone to great heat and pressure
5. Decorating buildings

**Salt**
1. Lake Magadi, shores of the Indian Ocean at Ngomeni, Fundisa near Malindi
2. Solution mining
3. Pond, evaporation ponds
4. Temperature, deposit of salt
5. a) Washing
    b) Cleaning
    c) Purification
    d) Iodised
6. a) Used as a food additive
    b) Given to animals in order to produce more milk
    c) Food preservation

**ii) Contribution of minerals to the economy**
1. Minerals earns Kenya’s foreign exchange
2. Employment
3. a) Schools and hospitals
   b) Macalder
4. Trading, churches, mosque and temples, recreation centres
5. Provision of electricity, provision of water, better infrastructure

iii) Effects of mining on the environment
1. Air pollution, water pollution, noise pollution
2. a) Air pollution as a result of poisonous gases and dust being released into the atmosphere during various mining activities.
   b) Polluted water which flows into rivers and ocean kills aquatic life. Polluted water is also a health hazard to human beings.
   b) The explosives and machinery used in the mine may be very noisy, making it unpleasant to live nearby.
3. In order to extract minerals from underground, large areas of beautiful vegetation has to be cleared. This creates environmental degradation.
4. a) Environmental degradation is caused by leaving huge depressions and heaps of rock after mining. The vegetation left behind is bare.
   b) Poisonous gases released into the air may cause changes in earth temperature contributing to global warming.
   c) Poisonous gases released into the air mix with rainwater to form acidic rain which is dangerous to plants and animals.
   b) Mining that involves blasting causes noise pollution and land tremors or shaking that cracks walls and foundation of houses.

C. Forestry
1. a) A forest is a large area of land covered by trees
   b) Forestry is the practice of planting and taking care of trees
2. a) Natural forests are those trees that grow naturally
   b) Planted forests are those trees that have been developed by man
3. Hardwood or soft wood
4.

<table>
<thead>
<tr>
<th>Hardwood</th>
<th>Softwood</th>
</tr>
</thead>
<tbody>
<tr>
<td>Olive (Elgon teak)</td>
<td>Cedar</td>
</tr>
<tr>
<td>Meru oak</td>
<td>Pine</td>
</tr>
<tr>
<td>Mvule</td>
<td>Podo</td>
</tr>
<tr>
<td>Camphor</td>
<td>Cypress</td>
</tr>
<tr>
<td>Rose wood and</td>
<td>Spruce</td>
</tr>
<tr>
<td>Mahogany</td>
<td></td>
</tr>
</tbody>
</table>

i) Types of forests in Kenya
1. Natural, man-made
2. i) Tropical rain forests
   ii) Mangrove forests
   iii) Highland forests

Natural forests
1. Arabuko Sokoke
2. Kakamega
3. Mangrove
4. Kikambala, Gedi, Kilifi, Lamu
5. Mt Kenya region, Mt Elgon region, Nyandarua ranges (Aberdare forests) Karura, Cherangany hills
6. Machakos (Chyulu hills), Mbooni and Kilala forests, Nyambene hills
7. Karura, Arboretum, Laregu
8. Gwasi Hills
9. Mahogany, rosewood

Planted forest
1. Afforestation
2. Cypress, pine, cedar
3. Turbo, Timboroa
Uses of forests
a) Fuels (wood, charcoal)
b) Construction (doors, windows, frames, poles etc)
c) Furniture making
d) Paper-making
e) Natural habitat of birds and other animals, food (fruit and nuts)
f) Medicine
g) Textile

ii) Problems facing forests
1. a) Forests are disappearing due to increase in population. This is because the higher population need to settle, farm and create infrastructure
b) Forest fires may be accidental or deliberate. When it started it clears a large forest area
c) Drought can kill trees. They also encourage forest fires. This will mean destruction of water catchment areas hence no rain
d) Demand for wood fuel and timber has led to mass destruction of trees
e) Poor government policy towards reafforestation has led to disappearance of forest in Kenya
f) When forest areas are degazetted, people rush for settlement and farming destroying all the forest. This leads to drought due to destruction of water catchment areas (wetlands)
g) When the forest reserves are degazetted, people move in for settlement and clear the forest, eg Mau forest

2. a) Protection of natural forest by the government
b) Educating people on importance of forests
c) This can be prevented by reafforestation and afforestation
d) Use of alternative source of fuel like solar energy, bio-gas and coffee husks
e) Tree seedlings to be given to public on tree planting day every year
f) The government to improve on forestry department and presidential commission on conservation and afforestation
g) The government should protect all the gazetted forest reserves

iii) Effects of deforestation
1. This is the process of clearing forests
2. a) Destruction of forests leading to desert like conditions prolonged drought due to forest destruction
b) Forested areas are water catchment areas. Clearing of forests lead to rainfall decreasing causing rivers to dry up
c) The rate of soil erosion increases due to forest destruction on hill tops and valleys
d) Cutting down of trees indiscriminately destroy the natural beauty of the land
e) Deforestation interferes with natural habitat for wildlife
f) Global warming due to much carbon dioxide which would have been absorbed by trees

3. Because of exposure to the sun, the soil gets baked. Soils become dry and cracked. Dust storms become common and carry away the loose soil. The land eventually becomes a desert with time.

iv) Forest conservation measures
1. Conservation is the protection, preservation, management or restoration of natural resources such as forests
2. a) Afforestation is planting of trees where there weren’t any before
b) Reafforestation is planting trees to replace lost forest
c) This is where farmers use the same place of land to grow crops, rear
animals and plant trees

3. a) Creation of tree nurseries  
b) Use of alternative sources of fuel  
c) KEFRI and ICRAF conduct research into better ways of managing forests  
d) Employment of forest rangers to patrol the forests  
e) Recycling of tree products. Waste paper can be re-used to make paper and other products

4. Forest rangers / guards

5. Solar energy, biogas, coffee husks

6. a) i) Kenya Forestry Research Institute (KEFRI)  
      ii) International Centre for Research in Agro-Forestry (ICRAF)  
      b) i) Conduct research into better ways of managing forests  
           ii) Carry-out research on diseases  
           iii) Carry-out research on pests affecting trees

**d. Wildlife and Tourism**

1. a) Wildlife describes untamed animals and vegetation as they are found naturally on land and in water  
b) Tourists are people who visits places for leisure. The places could be either within or outside their countries  
c) Tourism is travelling away from home for leisure  
d) A person who visits particular areas within his country for leisure  
e) People who travel to other countries for leisure  
f) Large areas of a country set aside by the government for wildlife are called game parks  
g) Areas set aside to protect wildlife and allow local people to live and keep or even graze their animals in it  
h) Marine parks are national parks found along the coast

i) Eco-tourism means tourism that is in harmony with the natural environment

**i) Major tourist attractions in Kenya**

1. The places that tourists visit  
2. Wildlife  
3. Sandy beaches  
4. a) Natural scenery: Kenya has a spectacular scenery which include mountains, the Great Rift Valley and its lakes, water falls, forests and arid land.  
b) Climate: Kenya has a variety of climate from humid, warmth of the coast to cooler upland areas.  
c) Sports: Tourists enjoy taking part in the Safari Rally, swimming, sailing, scuba diving, horse riding and golf  
d) Culture: Kenya has a rich varied culture  
e) Historical Sites: Kenya is fascinating from the pre-historic sites of early man to monuments  
f) Monument: These include Fort Jesus, Ancient Arab-swahili towns, Vasco da Gama pillar and various museums in the country.

5. a) Mombasa  
b) Kilifi  
c) Kilifi  
d) Turkana  
e) Kajiado  
f) Nakuru

6. A Sibiloi  
   B South Turkana  
   C Marsabit  
   D Marsabit National Park  
   E Losai  
   F Samburu National Reserve  
   G Lake Nakuru National Park  
   H Aberdare National Park  
   I Meru National Park  
   J Bisaadi National Reserve  
   K Rahole National Park  
   L North Kitui National Park  
   M Malka Maari Naional Reserve  
   N Arawale  
   O Masai Mara  
   P Nairobi National Park
Q Tsavo National park  
R Tana River Primate National Reserve  
S Dodori National Reserve  
T Boni National Reserve  
U Malindi Marine National Park  
V Shimba Hills National Park  
W Kisite/Mpunguti Marine National Park  
X Mombasa Marine National Park  
Y Kiunga Marine National Reserve  
Z Amboseli National Park

**ii) Major tourist attractions in Switzerland**

1. Mountains, Lakes (glaciated), Health Spars, Varied climate, Hanging valleys and Water falls, Swiss National Parks, Hike and bike facilities  
2. Peaks, smooth slopes and many valleys  
3. Winter sports  
4. Aletsch glacier  
5. Fishing, swimming, sailing  
6. a) Mineral water springs which people consider to cure ailments  
   b) St. Moritx  
7. Summer winter  
8. a) Mountain climbing  
   b) Sight-seeing  
   c) Sport fishing  
   d) Swimming and sailing

**iii) Similarities in tourist attractions in Kenya and Switzerland**

a) Both are marketed by tourism boards funded and run by the government  
b) Both encourage local tourism  
c) Both are pivoted by Fauna and Flora  
d) Both enjoy hospitality from their citizens  
e) Both are boosted by religious neutrality (Christians, Muslims and Jews)  
f) Both suffer environmental destruction threatening the ecosystem  
g) Both have beautiful geographical scenario  
h) Both enjoy good geographical setting

**iv) Differences between tourist attractions in Kenya and Switzerland**

1. a) Kenyan wildlife attraction is superior to the Swiss wildlife which is occasioned by the differences in climate. Most of Swiss wildlife is not found in its natural habitat rather it is domesticated  
b) Political stability in Switzerland is supported by the non-alignment policy it encourages tourism growth in Switzerland unlike the Kenyan situation which is riddled with numerous ethnic clashes propagated by conflicts  
c) Swiss marketing strategy is more developed compared to Kenyan strategies which are limited due to financial constrains  
d) Infrastructure differences with the Swiss being more developed than their Kenyan counterparts though to some extent the lack of infrastructure in itself acts as a tourist attraction  
e) Insufficient skilled labour in the Kenyan set up with the KWS being mandated as the only recognized institution in charge of educating professionals in the tourism industry. In Switzerland there are numerous accredited institutions  
f) Human – wildlife conflict due to high population growth is prevalent in Kenya whereby wildlife is integrated with human lines
g) Differences in climate

2. a) Kenya  b) Switzerland
    c) Kenya  d) Kenya
    e) Switzerland  f) Kenya  
    g) Switzerland

e. Industries

1. An industry is a place where raw materials are turned into finished products for use
2. Industrialisation is the art of coming up with many industries

i) Types of industries

1. Primary industry is a larger section in developing countries e.g. animal husbandry, coffee processing and cotton processing. Secondary industries include the economic sectors that creates a finished or usable products e.g. manufacturing industries. They mainly rely on primary products.

<table>
<thead>
<tr>
<th>Manufacturing Industry</th>
<th>Processing Industry</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Glass making</td>
<td>a) Dairy industry</td>
</tr>
<tr>
<td>b) Textile making</td>
<td>b) Meat processing</td>
</tr>
<tr>
<td>c) Cement manufacture</td>
<td>c) Coffee milling</td>
</tr>
<tr>
<td>d) Pulp and Paper</td>
<td>d) Cotton ginning</td>
</tr>
<tr>
<td>e) Fertiliser</td>
<td>e) Sugar factories</td>
</tr>
<tr>
<td>f) Petroleum industry</td>
<td>f) Maize and flour milling</td>
</tr>
<tr>
<td>g) Tobacco industry</td>
<td>g) Soft drink processing</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Assembling industry</th>
<th>Service Industry</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Motor vehicle assembly</td>
<td>a) Education</td>
</tr>
<tr>
<td>b) Electronic and electronic equipment assembly</td>
<td>b) Banking</td>
</tr>
<tr>
<td>c) Bicycle assembly</td>
<td>c) Insurance</td>
</tr>
<tr>
<td></td>
<td>d) Printing and publishing</td>
</tr>
<tr>
<td></td>
<td>e) Transport and communication</td>
</tr>
<tr>
<td></td>
<td>f) Repair and maintenance</td>
</tr>
<tr>
<td></td>
<td>g) Tourism</td>
</tr>
</tbody>
</table>

2. a) i) Manufacturing  ii) Processing  iii) Assembling  iv) Service
    b) i) Manufacturing industries are involved in mixing of several materials to come up with the final product.
    ii) Processing industries specialises in the production of agricultural products which are eaten by people i.e. food products.
    iii) Assembly industries use parts that are made in different industries and collected together to make an item.
    iv) Service industries are industries that offer support services and financial help to other types of industries.

3. Service Industry
4. Processing Industry
5.
ii) **Factors influencing the location of industries**

1. a) i) Availability and nearness to raw materials
   ii) Availability of market
   iii) Availability of a good transport network
   iv) Cost and availability of capital
   v) Availability of adequate water supply
   vi) Availability of energy

b) i) Raw materials should be available and near. This is to reduce cost of transport and thus reduce production cost.
   ii) This is to maximize on profit. Such industries should be located near the buyers. Examples are bread, beer and textile.
   iii) An industry is located where transport is available. This is because the cost of collecting raw materials and distribution of finished goods is low.

iv) Water is important as a solvent for cooling and for cleaning.

v) Power is used in running industries.

2. a) Bread making
  b) Coffee factories
  c) Coffee and paper making factories

iii) **Jua Kali industries**

1. Jua kali is a Kiswahili word meaning ‘hot sun’. Jua kali industries are also called cottage industries or informal sector

2. a) Make use of locally available resources
    b) Produce goods for local consumption
    c) Requires less capital

d) Act as a source of income to the artisans

e) Create jobs by opening opportunities to people for self-employment

f) It encourages recycling of raw materials

3. Sandals from old tyres, jembes, pangas, hoes, tissue papers, metal boxes, spoons, sufurias

iv) **Reasons for establishment of Jua Kali industries**

a) Affordable goods

b) To create employment

c) To make Kenya self reliant

d) To make use of locally available raw material

e) To curb rural –urban migration

v) **Benefits of Jua Kali industries**

1. a) Jua Kali has created jobs to skilled and unskilled workers. This has improved livelihood of many Kenyans through self employment

b) Many people are now able to work in Jua Kali industries thus improving their standards of living and have a source of income

c) Local industries produce cheap and affordable goods which many Kenyans can afford to buy. This saves Kenyans a lot of money which could have been used to buy goods from other countries.

d) Scrap metal and waste materials is recycled to be re-used in making cheap products. This reduces garbage therefore conserving the environment.

e) Jua kali activities have assisted in the development of skills since people train as they work

f) Jua Kali Industries help to reduce
rural-urban migration because they can be established anywhere

vi) Problems facing Jua Kali Industries

a) Lack of permanent structures or areas where they can operate without being exposed to bad weather conditions
b) Lack of capital to start or expand their businesses
c) Stiff competition from goods made in other industries and imports
d) Production of similar goods hence low demand due to flooding
e) Over-production of Jua Kali items
f) Lack of sufficient skilled labour

vii) Contribution of industries to the economy of Kenya

1. a) i) Availability of raw materials
   ii) Availability of market
   iii) Availability of water and power
   iv) Good infrastructure
   v) Availability of labour
   vi) Cost and availability of land for expansion
   b) i) Industries have led to creation of employment for both skilled workers
   ii) Improved livelihood
   iii) Manufactured goods are exported to earn Kenya's foreign exchange
   iv) It lead to utilization of local resources
   v) Areas where industries are located are usually served with good infrastructure
   vi) Industries pay government in form of taxes

2. a) i) Create jobs by opening opportunities to people for self-employment
   ii) Produce goods for local consumption
   iii) To reduce rural urban migration
   iv) To make use of locally available materials
   b) Employment: Reduced urban migration, utilisation of local resources, earning the country foreign exchange, source of livelihood and improved living standards

viii) Problems facing industries

<table>
<thead>
<tr>
<th>Problems</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack of enough capital</td>
<td>Industries needs funds to enable them expand and run their operations.</td>
</tr>
<tr>
<td>Stiff competition</td>
<td>If other companies (industries) are producing similar products, it is hard to make money because competition is too fierce.</td>
</tr>
<tr>
<td>Preference of imported goods</td>
<td>If consumers can buy similar products at cheaper prices from overseas, they will kill Kenya's textile industry e.g. The mitumba trade.</td>
</tr>
<tr>
<td>Poor Infrastructure</td>
<td>Good transport and communication are vital for industries. Poor roads and telephone networks make industrialists to make no profit.</td>
</tr>
</tbody>
</table>
### Fluctuation of prices

<table>
<thead>
<tr>
<th>Fluctuation of prices</th>
<th>The prices of some industrial goods like tea and coffee keep on fluctuating in the world market. This discourages farmers.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Economic recession</td>
<td>If there are economic problems investors pull-out from investing</td>
</tr>
</tbody>
</table>

#### ix) Effects of industries on the environment

1. Land, air and water pollution
2. Land pollution, air pollution, water pollution, noise pollution, soil pollution
3. If industrial pollutants are not cleaned, people, plants and animals may become sick and die
4. Waste from industries may be dumped on the land. This creates heaps of garbage thus polluting the environment
5. Displacement
6. Desertification due to deforestation

#### f. Urbanisation

1. This is the process through which small centres grow into urban centres / urbanisation means the growth and expansion of towns
2. Towns or trading centres
3. Nairobi, Mombasa, Kisumu, Nakuru, Kakamega, Eldoret, Thika

#### i) Location of main towns in Kenya

| A Mombasa | B Malindi |
| C Lamu    | D Voi     |
| E Garissa | F Nyeri   |
| G Thika   | H Nairobi |
| I Kisii   | J Kisumu  |
| K Kakamega| L Eldoret |
| M Maralal | N Lodwar  |
| O Marsabit| P Lokichogio |

#### ii) Functions of main towns in Kenya

##### Nairobi

1. Athi plains
2. Railway camp built in 1899
3. Machakos, 1907
4. a) Administration – Nairobi is the capital city of Kenya and the headquarter of the government. It is also the county headquarters for Nairobi County
b) International centre – It is the headquarter of international organization like (UNEP), (UN-HABITAT) and (ICIPE)
c) Commercial centre – It is the centre for business and trade in Kenya
d) Transport and communication centre – Nairobi has three airports, Wilson, Jomo Kenyatta and Eastleigh air base. It has a road and railway terminal. It is the centre for Radio and television network in the country
e) Industrial centre – It is the main industrial town in Kenya having many small and large processing and manufacturing industries
f) Tourist centre – There are many tourist attractions sites in the city which include Nairobi National Park and Animal Orphanage
g) An education centre - Nairobi is home to various education centres namely Nairobi University, Kenyatta University and Kenya Institute of curriculum Development (KICD)
h) Residential centre - Over 3.5 million people live in Nairobi, from Kibera slums to expensive areas like Westlands.

##### Mombasa

1. Shores, coast
2. Arab traders in the 11th century
3. Calling port for slave traders from the Middle East
4. Coastal
5. Air and Water
6. a) There is a natural harbour at
Mombasa which is used by small dhows and local fishing boats. Kilindini harbour which is modern handles imports and exports.
b) It connects Kenya to the world through the Indian Ocean. Tourists are attracted to the clean beaches found at the coast. Fort-Jesus is another tourist attraction to Mombasa.
c) Industrial centre – Mombasa Island hosts service and light manufacturing industries such as bottle manufacture, furniture, soap and aluminium goods. Bamburi cement factory, Kipevu Oil Refinery, marine engineering are located on the mainland.
d) It is the county headquarters of Mombasa county. It is the Kenya’s navy headquarters. It is the home of the most senior Muslim cleric in Kenya –Chief Kadhi.
e) Mombasa has several schools, higher institutions like Universities, Colleges and Muslim madrasas.
f) Mombasa has a population of about a million people living in Nyali, Likoni and Changamwe. It has many housing estates.
g) Mombasa has many commercial centres and distribution of produced and imported goods.
h) Mombasa is linked by the sea, air, railway, and fast road network. They connect people to and from the county. Major media houses have offices in Mombasa and some major dailies are distributed from Mombasa to the rest of the coastal region.

Kisumu
1. Lake port
2. Port Florence, Lake victoria
3. a) Lake port
   b) Fishing
   c) Industrial centre
   d) Transport and communication
   e) Residential area
   f) Education centre
   g) Tourist centre
   h) Kisumu
4. Textile making, brewing, soft drink bottling, extraction of vegetable oil, soap making, ship repair and fish processing industries.

Nakuru
1. As a marketing centre
2. Rift Valley  3. Nakuru
4. a) A market centre
   b) Transport and communication centre
   c) An industrial centre
   d) An administrative centre
   e) A residential area
   f) An education centre
   g) A tourist centre
5. Flour milling, Processing of dairy products and pyrethrum, Tanning and making of leather goods, Manufacture of woolen products
6. Lake Nakuru National Park, Menengai Crater
7. Flamingos, pelicans

Thika
1. 40 km
2. A market but now it is an industrial centre
3. Sisal, coffee, pineapples, tea
4. a) Fruit and vegetable canning industries
   b) Manufacture of metal boxes
   c) Leather tanning
   d) Paper making
   e) Maize milling
   f) Motor vehicle assembly
5. a) Abundant water supply from Chania river and labour force from Muranga and Kiambu make an ideal location for industries in the town. All types of industries are found in Thika including manufacturing, processing, service and assembly industries.
b) Thika is located in an area with two tourist resort i.e. Chania falls and fourteen falls  
c) Thika town is the headquarters of Kiambu County  
d) Education centre: There are many training institutes and schools in and around Thika. Examples are Mary Hill High School, Jomo Kenyatta University of Agriculture and Technology and St. Kizito Vocational Training Institute  
e) Thika has a rich agricultural environment with moderate temperatures and reliable rainfall. Cash crops and food crops are brought to Thika for sale.  
f) Thika has an excellent road and rail connection to Nairobi and other towns across Kenya  
g) Thika town has a population of over 100,000. Mostly who work in industries and the surrounding farms  

**Malindi**  
1. Tourist centre  
2. a) Historical and cultural centre  
   b) Industrial centre  
   c) Fishing centre  
   d) Residential area  
   e) Transport and communication  
   f) Port  
   g) Administrative  
   h) Market centre  
3. a) Swahili Culture: 12 mosques, furniture, carvings and doors.  
   b) 15th century Gedi ruins which include many houses, mansions, mosques, tombs and cemeteries  
   c) Vasco-da Gama pillar  

### iii) Problems facing urban centres in Kenya  
1. a) Pressure on social amenities – schools, hospitals  
   b) Lack of utilities – e.g. water, electricity and sewerage  
   c) Spread of HIV and AIDS  
   d) Lack of housing  
   e) Traffic congestion  
   f) Pollution  
   g) Unemployment  
2. Air pollution, water pollution, noise pollution  
3. Water  
4. i) Unemployment  
   ii) Corruption  
   iii) Insecurity  
   iv) Traffic jam (congestion)  
   v) Pollution  
   vi) Pressure on Social amenities  

### iv) Efforts in solving urban problems in Kenya  
1. a) Improving rural areas  
   b) Encouraging self employment  
   c) Slum upgrading  
   d) Provision of clean piped water  
   e) Rehabilitation of street children  
   f) Improving security  
   g) Privatising service provision  
   h) Improving road infrastructure  
2. Decentralisation of industries  
3. a) Construction of by passes to ease traffic congestion  
   b) Construction of multiple – carriage to accommodate more vehicles  

### g. Transport and Communication  
1. a) Transport refers to the movement of people and goods from one place to another.
b) Communication is the exchange of information, ideas, messages or opinions among people

2. Road transport
3. Radio

**Transport**

i) **Forms of transport**

**Road transport**

1. a) Murram or dry-weather roads
   b) Tarmac roads or all-weather roads
   c) Dry weather road
2. The Great North Road, The Trans-African Highway
3. a) Easy and cheap to construct and maintain
   b) Faster and can reach many destinations
   c) Flexible and can reach most parts of the country
   d) Vehicles do not work on strict timetable
4. a) Prone to traffic jams especially in towns
   b) Many incidences of accidents
   c) Expensive to build in hilly and valley areas
   d) Limited number of tones of goods which can be carried by road
5. **Note:** Teacher to ensure that pupils draw a map of Kenya showing the major roads

**Railway transport**

1. They are used to store goods when transported by rail
2. Imperior British East African Company (IBEACo) – Britain
3. To open up Kenya highlands and get a through way to Uganda
4. a) 1900 - Nairobi  b) 1901 - Kisumu
5. Railway stations in Kenya
   a) Mombasa, Konza to Magadi
   b) Nairobi, Nanyuki through Muranga and Nyeri to Nanyuki
   c) Gilgil, Nyahururu
   d) Nakuru, Bungoma through Eldoret
   e) Rongai, Solai

   **Rail Terminus in Kenya**
   a) Taveta  b) Magadi
   c) Nanyuki  d) Busia
   e) Kitale  f) Nyahururu
g) Solai
6. a) It is the cheapest means of transport over long distances
   b) Experience few accidents
   c) Not affected by traffic congestion
   d) Railways are cheap to maintain
7. a) Expensive to build e.g. on hilly areas
   b) Slow to reach its destination
   c) Trains are expensive to buy and maintain
   d) Relies heavily on road transport
8. **Note:** Teacher to guide the pupils on how to draw a map of Kenya locating railway terminal and stations

**Water Transport**

1. Heavy and bulky
2. a) Ocean transport waterways
   b) Lake transport waterways
   c) River transport waterways
3. a) They do not contain enough water throughout the year and some are seasonal
   b) Some of the rivers contain cataracts, rapids and water falls that hinder navigation
   c) Some of the rivers are short making it uneconomical to use them for water transport
   d) Some of the rivers are narrow and shallow
e) Floating vegetation (riverine) on the surface and dangerous animals like crocodiles and hippos
4. Kisumu, Musoma, Mwanza Bukoba
5. a) It is the cheapest for transporting bulky goods over long distance
   b) Protection of goods due to closed containers
   c) Waterways are cheap to maintain
   d) The are few cases of traffic congestion
   e) It is the best when transporting delicate good

**Air transport**
1. a) Light but of high value or perishable goods
   b) Perishable goods, fragile goods
2. a) Jomo Kenyatta International Airport – Nairobi
    b) Moi International Airport- Mombasa
    c) Eldoret International Airport – Uasin-Gishu (Eldoret)
    d) Kisumu international airport- Kisumu
3. Wilson airport
4. Malindi, Eastleigh, Wajir, Marsabit, Lokichogio, Lodwar, Embu, Namanga, Tsavo Simba
5. a) It is the fastest means of travel
   b) It is the best means of transporting perishable and light cargo
   c) It does not suffer traffic congestion
   d) It can reach remote areas
   e) There are few plane crashes
6. a) Airports are expensive to build
   b) Aircrafts are expensive to buy and maintain
   c) Most expensive means of transport
   d) Few survivors in-case of accidents

**Pipeline**
1. Oil, water and gas
2. a) They are expensive to build
   b) Accident are rare, but a lot of damage and loss when fire occurs
   c) Transports only one commodity

**Cable transport**
1. Wire transport
2. Electricity and electronic messages
3. Can be installed above or below the surface
4. a) Expensive to install
   b) If wires are exposed, it can lead to deaths and serious damage to property

**ii) Problems facing the different forms of transport**

a) Road
   i) Traffic jams and congestion
   ii) Accidents which may lead to deaths
   iii) Road construction and maintenance is expensive
   iv) Impossible during the rainy season
   v) Insecurity due to carjackers
b) Railway
   i) Not flexible
   ii) Door to door service is not possible
   iii) Construction of the line is very expensive
   iv) Trains are generally slow
c) Air
   i) Expensive due to volumes of passengers and cargo
   ii) Competition from other airlines
   iii) Lack of enough capital to put modern airports
   iv) Mismanagement which leads to collapsing due to inefficiency
   v) Insecurity
d) Pipeline
   i) Inadequate money to construct and maintain
   ii) Leakage from pipes leading to
pouring out all its contents

iii) Fire due to oil leakages leading to death and damage of property

iv) Siphoning of products by thieves

d) Water

i) Lack of capital to control and establish shipping lines

ii) Some ports are unable to handle modern ships

iii) Some rivers are unnavigable

iv) Some rivers are seasonal

v) Capsising of boats

vi) Competition from fast means of transport

e) Cable

i) Theft of cables

ii) Live cables can cause fire

iii) Cables are mainly found in urban centres

iv) Inadequate capital

iii) Catering for people with special needs in transport

1. Physically impaired, mentally challenged

2. a) Provision of wheelchairs to ease movement of people with walking problems

b) Lowering the footpaths and the provision of ramps to permit easy passage of wheel car between carriage and footpath

c) Provision of special parking bays, entrances for physically disabled

d) Government encouragement to citizens to practice affirmative action in day to day life in favour of those with special needs e.g. giving seats to the physically challenged in public service vehicles

iv) Major road signs

1. Road safety is the taking care when using roads

2. A Give way

B Road closed

C Entry forbidden to all motor vehicles and Motor cycles

D No Entry – Entry forbidden for all vehicles

3. a) Red – Stop

b) Red and amber – Stop but get ready to move

c) Green – Go if the way is clear

d) Green and amber – Get ready to stop

v) First Aid procedure

1. First aid is the assistance given to injured person before medical care is available

2. a) To save life

b) To prevent further injury

c) To promote recovery

3. a) Should be able to stay calm at all times. Avoid talking unnecessarily

b) Should be able to assess the nature of the accident

c) Always wear gloves when handling a victim

d) Cover all the cuts and wounds

e) Wash hands before and after giving first aid

f) Reassure the victims that everything will be fine

4. a) It is a box which contain all the necessary first aid equipments.

b) i) Crepe bandages

ii) Palm rubs

iii) Thermal blankets

iv) Syringe

v) Scissors

vi) Arms sling
vii) Spirit/ antiseptic
viii) Supportive instruments

5. a) Unconsciousness
b) Shock
c) Wounds and bleeding
d) Nose bleeds
e) Fainting
f) Burns and scalds
g) Bruising

6. **Unconsciousness**
   a) Lift the chin and gently tilt the head back to open the airway
   b) Loosen tight clothes around the neck, chest and waist
   c) Place the arm nearer to you out to the side with the elbow bent and the palm upwards
   d) Let the head lie in one of the victim's hand
   e) Let the victim lie in a recovery position

**Shock**
   a) Lay the person down, and raise the legs gently to allow free flow of blood to the brain
   b) Try to keep the legs as still as possible
   c) Loosen tight clothing especially around the neck, chest and waist
   d) Cover the person with a blanket or any warm material
   e) Call for medical help

**Wounds and bleeding**
   a) The wound should bleed for a while to clean itself
   b) Apply pressure using a clean material
   c) Clean the wound with clean water and make it dry
   d) Cover the cut with sterile dressing
   e) Take the victim to the hospital

**Nose bleeds**
   a) Sit the person down with the head bent forward
   b) The victim should breathe through the mouth and pinch the nose
   c) The victim should not blow the nose and sniff
   d) Clean the area with warm water after bleeding has stopped
   e) The victim should rest before being taken to hospital

**Bruise**
   a) Reduce the blood supply by tying a cloth above the bruised area
   b) Lay the victim down and raise the injured part to a comfortable position
   c) Apply a cold squeeze
   d) Let the victim rest for a while
   e) Seek medical help

**Burns and scalds**
   a) Gently remove rings and watches
   b) Cover the area with a sterile dressing
   c) Send the person to hospital if he is not in danger
   d) Call for medical help if the victim is in danger

vi) **Forms and problems facing communication**

1. Messengers, blowing horns, beating drums, smoke signals, wailing
2. Radio, television, newspapers and magazines. Mobile phones, telex, facsimile (fax) electronic mail (e-mail)
3. Forms of communication problem
   a) Illiteracy - Not many people can read and write
   b) High cost of installation and sustain
   c) Expensive to install
   d) Expensive to buy especially by common man
e) Complex to use and maintain
f) Poor means of transport
g) Destruction of telephone lines
h) Insecurity

vii) Measures taken to cater for people with special need in communication
1. Blind, deaf
2. a) Provision of braille materials
    b) Set up special schools
    c) Sign language
    d) Visual aids – hearing impaired

h. Trade
1. Trade is selling of goods and services
2. a) Conducive environment
    b) Capital
    c) Production and market
    d) Provision of good infrastructure
    e) Organising shows and exhibition
3. a) Exports are goods that are sold to other countries
    b) The goods that Kenya buys from other countries are called exports
    c) This is the money a country gets after selling its goods to foreign countries

i) Exports from Kenya
1. a) i) Animal feeds
      ii) Canned pineapples
      iii) Coffee
      iv) Hides and skins
    b) ii) Leather
        iii) Petroleum products
        iv) Textiles
        iv) Jua Kali products
    c) i) Soda ash
        ii) Diatomite
        iii) Flouspar
        iv) Limestone
2. Cement, Soda ash, Coffee, Tea
3. France, Germany, Iran, Japan, UK, USA.
4. Tourism, Banking, Insurance, Printing and publishing

ii) Imports to Kenya
a) Crude oil from Middle East
b) Machinery – Germany
c) Medical drugs – United Kingdom
d) Chemicals – Japan
e) Vehicles – China, Japan
f) Electronic goods – China
g) Raw materials e.g. metal and plastic – USA
h) Grade cattle – Denmark
i) Machines such as factory machines – Britain
j) Spices – Zanzibar

iii) Benefits of trade to Kenya’s economy
a) Source of foreign exchange – Kenya gets a lot of money when its goods are sold in foreign countries
b) Creation of jobs – Many people are employed directly in trade related areas
c) A source of revenue – Government collects various taxes from trade related areas
d) Growth of industries – Industries develop due to contribution of trade
e) Development of infrastructure – Flourishing trade in a country contributes directly to the establishment of good roads, railway, air and water transport
f) Promotion of regional and international co-operation
g) Provision of market – Both local and foreign goods are sold through trade

iv) The role of government in promoting trade
1. a) Improvement of infrastructure
    b) Establishment of Kenya Bureau of Standards
    c) Provision of financial assistance
d) Protection of unfair competition
e) Organising shows and exhibitions
f) Producing and marketing goods
g) Joining trade blocks
h) Encouraging political stability

2. a) Industrial and Commercial Development Co-operation
b) Investment Promotion Council
c) Industrial Development Bank
d) Kenya Industrial Estates
e) World Trade Organisations
f) Kenya National Trading Corporation
g) The Kenya External Trade Authority
i) Kenya Institute of Business Training

3. a) Give loans to business people
b) Bodies established to promote trade
c) Give loans to large and small scale trades who want to start or expand their industries
d) Give loans to business people
e) This deals with promoting trade internationally
f) Helps Kenyans to set up trading business
g) This is a public corporation which provides information on foreign markets to interested parties
h) This gives adequate training to businessmen

vi) Business opportunities in Kenya
1. a) Farming
   b) Manufacturing
   c) Wholesale trade
   d) Retail trade
   e) Services
2. Services
3. a) Transport and communication
   b) Banking and Insurance
   c) Tourism
4. a) Cash and food crop farming
   b) Poultry farming
   c) Fish farming
   d) Livestock farming – Dairy, beef, sheep, goats
5. A large self service grocery store selling groceries, dairy products and household goods
6. Person who buys goods in large quantities and sell them to retailers
7. Hawking

Creative corner
The teacher should ensure that pupils get answers to the questions from the crossword puzzle.

ANSWERS TO EVALUATION PAPER 4

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>29.</td>
<td>B</td>
<td>30. C</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
UNIT 5: POLITICAL DEVELOPMENT AND SYSTEMS

Know more
1. a) Kingdoms  b) Chiefdoms  c) Council of Elders
2. Indirect
3. a) Formal education, health centres and hospitals  b) Introduced new crops and better farming methods

<table>
<thead>
<tr>
<th>Collaborators</th>
<th>Resistors</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Luhya - Nabongo Mumia</td>
<td>a) Baganda - Kabaka Mwanga II</td>
</tr>
<tr>
<td>b) Agikuyu - Chief Waiyaki</td>
<td>b) Nandi - Koitale Samoei</td>
</tr>
<tr>
<td>c) Maasai - Oloibon</td>
<td>c) Agiriama-Mekatilili wa Menza</td>
</tr>
<tr>
<td>d) Buganda - Kabaka Mutesa I</td>
<td>d) Mandinka - Samori Toure</td>
</tr>
<tr>
<td>e) Lozi - Lewanika</td>
<td>e) Nyamwezi - Nyungu ya Mawe</td>
</tr>
<tr>
<td>f) Kikuyu - Karuri Gakure</td>
<td></td>
</tr>
</tbody>
</table>

5. a) Loss of land by Africans to the Europeans
b) Interferences with African culture, tradition and political systems
c) Loss of independence by Africans and their rulers
d) Forced labour and payment of taxes

6. a) The Europeans wanted raw materials for their industries and markets for their finished products
b) The British wanted to control River Nile and its source
c) The European countries wanted to acquire territories in Africa as a sign of prestige
d) The European wanted territories where they could settle their surplus population
e) The European governments wanted to protect missionaries and traders who were already working in Africa

7. a) Similarities between government of Kenya and Uganda

<table>
<thead>
<tr>
<th>Kenya</th>
<th>Uganda</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) The president appoints the cabinet secretaries and other senior officials</td>
<td>a) The president appoints ministers and other senior officials</td>
</tr>
<tr>
<td>b) The president serves a five year term</td>
<td>b) The president is elected for a five year term</td>
</tr>
<tr>
<td>c) The president is the commander-in-chief of the armed forces</td>
<td>c) The president is the commander-in-chief of the armed forces</td>
</tr>
</tbody>
</table>

b) Differences between government of Kenya and Uganda

<table>
<thead>
<tr>
<th>Kenya</th>
<th>Uganda</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) The president, the MPs, Senators and the Governors are elected on the same day</td>
<td>The president and MPs are elected on separate days</td>
</tr>
<tr>
<td>b) No constitutional requirement to elect representatives on special groups</td>
<td>Representative of special groups must be elected</td>
</tr>
<tr>
<td>c) There are twelve seats reserved for nominated MPs</td>
<td>No provision for nominated MPs</td>
</tr>
</tbody>
</table>
8. a) Conducting civil education
   b) The commission or
      Constitution of Kenya review
      commission (CKRC) to collect
      views from the civil society
   c) The commission calls for a
      constitutional conference
   d) The conference comes up
      with a draft constitution after
      consensus is arrived at
   e) The draft is presented to the
      Attorney General who then
      presents it to parliament
9. a) This is the rewriting of an
      already existing constitution
   b) Constitution of Kenya Review
      Commission (CKRC)
   c) 2000
   d) i) Preparatory phase
      ii) Development phase
      iii) Production phase
      iv) Adoption phase
      v) Operation phase
10. a) This is getting the people
      to vote for or against issues
      which were not agreed upon
    b) 2005
11. a) Regional body EAC
    i) East African community
    ii) Tanzania
    iii) Arusha
    Functions: To provide a wider market
                for good and services thus promoting
                trade
    Achievements:
    i) A large market have been created
    ii) Improved livelihood
    iii) Co-operation has been
         strengthened
    b) Regional body IGAD
       i) Inter-Government Authority on
          Development
       ii) Djibouti
       iii) Djibouti
       Functions: Promote peace; To promote
                  food security; To promote the
                  environment
       Achievements: It has reduced
desertification; It has reduced problems
of refugees and conflict; It has created
employment
   c) Regional body COMESA
      i) Common Market of Eastern and
         Central Africa
      ii) Zambia
      iii) Lusaka
      Functions: To improve agricultural
                production; To promote peace and
                security; To create common market
      Achievements: Increased agriculture and
                    food security; It has tried to promote
                    peace and security; It has created a wide
                    market
      Failures: Lack of a common currency:
                Unable to improve in transport and
                communication: Withdrawal by some of
                the member states
   a. Activities of early political
    associations in Kenya upto
    1939
    1. a) 1919
    b) 1920
    2. The Kikuyu Association
   i) Political associations in Kenya
   East African Association (EAA)
    1. a) 1921
    b) It wanted to attract members all-
      over Africa
    2. Harry Thuku
    3. East African chronicle
4. a) Better wages for Africa
   b) An end to compulsory labour for women
   c) Lower taxes and abolition of the hut-tax which was only paid by Africans
   d) For African land to be returned
   e) There should be a common voter’s roll
   f) An end to Kipande system
5. a) Africans became more aware of their rights
   b) The colonial government felt that its rule was under threat for the first time
   c) The arrest of Harry Thuku made colonial government more unpopular
6. a) 14th March 1922
   b) Kismayu in Somalia
7. 1924

**Young Kikuyu Association (YKA)**
1. 1921
2. Harry Thuku
3. a) Reduction of African wages by one third
   b) Poll tax to be reduced
   c) African land had to be returned
   d) Abolition of Kipande system
   e) Advocated for better working conditions

**Kikuyu Central Association (KCA)**
1. 1924
2. a) Joseph Kan’gethe
   b) Job Muchuchu
3. 1928
4. a) Muiguithania
   b) the reconcilor
5. Mzee Jomo Kenyatta
6. a) To press for the release of Harry Thuku
   b) To end the Kipande system
   c) To protect the African culture from change by the missionaries
   d) To get back land taken from the Agikuyu
   e) Education to be provided in native language
   f) Revision of 1915 crown land ordinance
   g) Paramount chiefs who were educated and elected by majority of Kenyan people
7. a) It establish independent schools and churches
   b) It advocated the return of land taken from Africans
   c) It tried to unite Africans through Muiguithania
   d) Made sure the grievances of the Africans were represented to colonial government
   e) Spread political awareness to other parts of the country

**Kavirondo Tax Payers Welfare Association (KTWA)**
1. July 1923
2. a) Africans to be issued with title deeds
   b) End of forced labour by settlers
   c) 1928 Law that meant African imprisonment failure to take part in communal work
   d) Reduction of hut tax and poll tax
   e) Exemption of women from paying taxes
   f) Abolition of the Kipande system
   g) Kenya to continue being a protectorate and no a colony
   h) Better wages for African labourers
3. a) Jonathan Okwiri  
    b) Owuor Gumba  
    c) Simon Nyende  
4. Young Kavirondo Association (KCA)  
5. Some members wanted to present their grievances using memorandums while others wanted to hold political rallies  
6. Welfare association in 1923  
7. a) Organising rallies to unite Africans  
    b) Supporting Welfare matters – digging pit latrines, killing rats and eradicating tsetse flies and Malaria  
    c) Writing a memoranda to express African grievances  

**ii) Reasons for the formation of early political associations in Kenya**  
1. Colonialism  
2. To address various Agikuyu grievances  
3. a) Demanded the release of Harry Thuku  
    b) Freed to grow coffee and cotton  
    c) The return of Kikuyu land taken by European  
4. KTWA complains were similar to those of KCA  
5. a) Provide them with a forum in which to discuss their grievances and demands  
    b) The AEMO demanded that voters be registered on a common roll not according to their race  
    c) The AEMO called for an end to the state of emergency and the opening up of Kenya’s white highlands to all races  

**iii) The role played by early political associations in the struggle for independence**  
1. a) They educated Africans on the injustices committed to the colonial government through rallies  
    b) They presented African grievances to the outside world  
    c) They made their fellow Kenyans aware of the political situation in the country  
    d) They defended African cultures against condemnation by the Europeans  

2. Better working conditions and better wages  

**b. The Legislative council (LegCo)**  
1. 1907  
2. Chruhabai Jekabhai Amin – 1926  
3. a) This is a document in which the Duke of Devonshire (Colonial secretary) issued his findings to the settlers in 1923. It was one of the most important documents in the constitution and political development in Kenya  
    b) Lord Delamere  
    c) i) The highlands were reserved for European settlement only  
        ii) Indians were allowed to elect five members to the LegCo but not on a common roll  
        iii) There was no racial segregation in residential areas and no restriction on immigration  
        iv) A missionary was to be nominated to the LegCo to represent African interests  
        v) There was no possibility of the European having a controlling influence in government  
        vi) The colonial officer was to exercise close control of the colony and the interests of Africans were to be of major importance
d) i) The white paper marked a partial settlement of Indian - European issues  
ii) It made it clear that Kenya is an African territory and interests of the African native must be paramount.  
iii) The Indians too were dissatisfied and they refused to hold election for legislative council seats

4. a) Eliud Mathu  b) 1944  
5. a) B.A Ohanga  b) 1946

i) African members in the LegCo before 1960

1. a) Eliud Mathu  b) B.A Ohanga  
c) Walter Odede  
2. 1954

3. a) Kenya African Union (KAU)  
b) It was mainly to assist Eliud Mathu understand African problems and interests

4. a) Apolo Banaiah Ohanga  
b) Minister for Community Development

5. Members elected
   i) Daniel Arap Moi  
   ii) Bernard Mate  
   iii) Tom Mboya  
   iv) James Muimi  
   v) Ronald Ngala  
   vi) Lawrence Oguda  
   viii) Oginga Odinga  
   viii) Masinde Muliro

ii) The role of the LegCo in the struggle for independence

1. It facilitated meaningful involvement of Africans in the administration after the state of emergency  
2. Dr. J. W Arthur  
3. a) African members of the LegCo found it easier to force the colonialist listen to the African point of view  
b) The introduction of election for African representatives to the LegCo was a major step towards independence  
c) African elected members organisation (AEMO) provided a forum in which to discuss their grievances and demands  
d) African members of LegCo made crucial contributions to the three Lancaster House conference which drew up Kenya’s timetable and constitution for independence  
e) It was through the LegCo that the ban on political parties was lifted

4. a) i) It recommended the introduction of council of ministers  
ii) It recommended multi-racial council of ministers  
iii) The unofficial members of the council of ministers should be 3 European, 2 Asians and one nominated to represent Africans  
b) It made proposals that would see more African representation in parliament after creation of 6 more constituencies elections were held and this increased the number of African elected in the LegCo from 8 – 14

5. a) i) British government – declared that Kenya was an African country  
   ii) Africans for the first time would have a majority (33 open seats) in the LegCo and 4 ministers in the council of ministers  
   iii) KANU agreed to KADU’s regional argument  
   (i) The central government – was to oversee the external affairs, defence, international trade e.t.c  
   (ii) The date of independence was announce to be December 12, 1963  
   (iii) Kenya became a Republic
through the first amendment to its constitution in 1964.

b) i) 1960 ii) 1962 iii) 1963

6. 1958

7. In order to provide AEMO with a forum in which to discuss their grievances and demands

8. The Lennox – Boyd Constitution

9. 1960

10. i. KANU ii. KADU

**c. Struggle for independence**

i) Effects of the 2nd World War on the struggle for independence in Kenya

1. a) 1914 – 1918
2. 1939 - 1945
3. Germany, Italy, Japan, Britain, France, USA
4. a) The ex-soldiers used the skills learnt during the war to strengthen the nationalist movement
b) Africans were no longer afraid of Europeans after seeing their weaknesses
c) Britain and her allies were fighting the Germans because their leader Hitler wanted to rule other countries. We were ready to fight the British who ruled Africans against their wishes
d) UNO fought for independence and made African to form such organisations as Pan-African movement which pushed for self rule

5. United Nations Organisations (UNO)

ii) Political organisations in Kenya between 1945 and 1963

**Kenya African study (KASU)**

1. 1944

2. a) Recruitment of members throughout the country
b) Opening KASU branches
c) Making Africans aware of their rights
d) Writing ideas in their paper ‘Sauti ya Mwafrika’

3. Harry Thuku
4. a) Francis Khamisi
   b) Albert Owino
5. Sauti ya Mwafrika, Baraza

6. a) It educated people about public affairs
b) Civil servants were allowed to join KASU
c) It led to formation of another association (KAU)

**Kenya African Union (KAU)**

1. 1946
2. James Gichuru, Muchohi Gikonyo, Ambrose Ofafa
3. a) Regaining land allocated to Europeans
b) End of British rule
c) Better and free education
d) Higher wages for Africans
e) Improvement of working condition and housing for Africans

4. a) Opening up branch offices in various parts of the country
b) Established a newspaper known as ‘Sauti ya Mwafrika’ to express their demand for independence
c) Organised meetings with governor where they discussed problems affecting Kenyan affairs
d) Demanded for change peacefully

5. a) October 20, 1952
b) Jomo Kenyatta, Paul Ngei, Achieng Oneko, Kung’u Karumba, Bildad Kagia, Fred Kubai
6. a) 1952
   b) It was a threat to colonialists

**The Mau Mau movement**

1. Mzungu Aende Ulaya Mwafrika Apate Uhuru
2. 1952
3. a) White settlers had taken African land
   b) African lived in poverty and reserves
   c) Harsh and oppressive colonial rule
   d) High taxes and low wages
   e) Failure to compensate African ex-soldiers
   f) Eviction of squatters from Olenguruone
4. Dedan Kimathi
5. a) Waruhio Itote (General China)
    b) Stanley Mathenge
    c) Field Marshal Muthoni
6. October, 1956; Kamiti
7. a) Oathing united the fighters and increased their commitment to the struggle
    b) Mau Mau had good leaders like Kimathi who inspired and guided their soldiers
    c) Local people played an important role by providing soldiers with food ammunition and information when they were hiding in the forest
8. a) The British had superior weapons
    b) Displaced Africans could not farm and suffered economic hardship, hunger and diseases
9. 1956
10. a) High cost of suppression
    b) High cost of human life
    c) Dashed settlers’ hopes
    d) Hastened or accelerated constitutional changes

**Kenya African National Union (KANU)**

1. March 20, 1960
2. a) Oginga Odinga
    b) Tom Mboya
    c) Arthur Ochwada
3. a) Immediate release of Kapenguria six
    b) Independence
    c) To form a strong central government
4. Ronald Ngala; Daniel Toroitich Arap Moi
5. To press for Kenyatta’s release
6. May 1963
7. a) United Kenyans
    b) Participated in drafting the first constitution
    c) Succeeded in negotiating for the release of political prisoners
    d) Led the country to independence in 1963

**Kenya African Democratic Union (KADU)**

1. June 26, 1960
2. a) Ronald Ngala
    b) Daniel Arap Moi
    c) John Keen
    d) Justus Ole Tipis
3. a) Kenya wanted to avoid Kikuyu and Luo dominance in independent Kenya by pressing for a more federal kind of constitution
    b) It acted as an opposition party
    c) It wanted and participated in negotiating for independence
    d) Wanted federation or majimbo as a constitution for an independent Kenya
    e) Advocated for release of Kenyatta
4. a) 19; 11 
b) Mr Ronald Ngala
5. a) To sort out the differences between KANU and KADU  
b) To work out the final steps for independence in Kenya
6. Federal system (Majimbo) 
7. 73; 31 8. Opposition 
9. 1964 10. 1964 
11. a) KADU brought together political association representing minority groups  
b) They demanded a federal (Majimbo) constitution which they felt would better represent their needs  
c) KADU joined together with KANU to form a coalition government

iii) Founder members of political organisations in Kenya between 1945 and 1963

**KASU**
1. Tom Mbotela; James Gichuru; J.D Otiende; H. Nangurai; F. Nganga; S.O Josiah; J. Jeremiah 
2. James Gichuru

**KAU**
1. a) W.W.W Awori  b) Paul Ngei  
c) Harry Ole Nangurai
2. Extremists (Radicals); Moderates (Loyalists)
3. a) Jomo Kenyatta; Ramogi Oneko; Paul Ngei  
b) Kikuyu  
c) i) Eliud mathu  
 ii) B. A. Ohanga  
 iii) Tom Mbotela  
 iv) F. W. Odede  
 v) Francis khamisi  
 vi) james Gichuru  
 vii) J. D. Otiende  
 viii) Tom Mboya

4. a) i) Moderates wanted Mau Mau to denounce its activities  
 ii) Moderates advocated for gradual constitutional approach to independence within the party  
 b) i) Militants wanted rapid change and immediate independence  
 ii) The unwillingness or slowness of the colonial government to act made radicals to use violence  
 iii) Increased representation in the legislative council

**Mau Mau movement**
1. KAU members; Members 
2. a) General Kago, General Muthoni, General Mbarai wa Maniu; General Mwariama, General China 
   b) KAU

**KANU**
1. a) James Gichuru  b) Ronald Ngala 
 c) Daniel Arap Moi
2. Ronald Ngala; Daniel Moi; Masinde Muliro 
3. Mzee Jomo Kenyatta 
4. James Gichuru 
5. 1961

**KADU**
1. Masinde Muliro; Daniel Arap Moi 
2. Ronald Ngala 
3. Minister for labour, social security and adult education

iv) The role of political organisations in the struggle for independence in Kenya
a) They demanded increased representation of Africans in LegCo 
 b) They demanded to change the constitution
c) Laws which favour Africans to be enacted

d) They demanded self rule

e) They called for release of detained Kenyans e.g. Kenyatta

f) They participated in the Lancaster House conference in London

d. Political developments in Kenya since 1963

Major political events since independence

a) 1969 b) 1985
c) Nyiva Mwendwa d) 1991
e) 1991 f) 2001
g) 2002 h) 2002

i) December 29, 1992

Kenyatta era (1963 – 1978)

1. 1966; Jaramogi Oginga Odinga; Tom Odongo; Bildad Kagia; Achieng Oneko
2. 1964
3. 1964
4. a) 1965 b) 1969 c) 1975
d) 1978 e) 1968
5. 1978
6. a) 1965 by a document known as sessional paper No. 10
b) i) Political equality and democracy
   ii) Equal opportunities for all
   iii) Fair distribution for resources
7. a) Working together in unity
   b) i) Schools, health centres, cattle dips and roads have been set up
   ii) Lives have been saved through harambee
   iii) Collection to meet medical expenses
   v) Students from needy families have gone for higher education
   vi) Income generating groups started

Moi era (1978 – 2002)

1. 1978
2. a) Mwakenya was a pamphlet which contained 1980 grievances
   b) It was spread in 1980
3. August 1st 1982
4. 1988
5. a) Kamukunji
   b) Charles Rubia; Kenneth Njindo Matiba; Martin Shikuku; Jaramogi Oginga Odinga
   c) July 7th 1990
   d) Many people died; Many people were arrested; The main leaders were detained
   e) 1990
6. a) 1978
   b) What president Moi had in mind was that we would follow the same political, social and economic policies
   c) Peace; Love; Unity

Kibaki era 2003 - to march 2013

1. 2002
2. a) November 21st 2005
   b) 2005 c) 2007/2008
d) 2008 e) 2008
f) 2003 g) 2008
h) 2008

ii) Major constitutional amendments affecting political parties in Kenya since 1963

1. A constitution of a country is a set of rules and principles that govern a country
2. 1964 (12th December 1964)
3. 1964
4. 1964; Provinces
5. The constitution of Kenya
6. a) This is making changes to the existing constitution.
   b) A proposal known as a bill written or drafted by law officers in Attorney General’s office. In order for a constitutional amendment bill to be passed, it has to be accepted by members of parliament. It is debated, points added or subtracted. It must be voted for by at least two thirds of the MPs. The accepted constitutional amendment bill is then sent to the president for his/her approval. This is called presidential assent. The bill then becomes the constitutional (amendment) act. After the presidential assent the New Constitutional (Amendment) Act is officially published in the Kenya Gazette as an act of parliament.
7. a) 1991   b) 1966   c) 2001
   d) 1966
8. a) All parties should get equal coverage from the state owned radio and television stations
9. (a) Kenya was made a republic
    (b) Requires MP’s who have missed eight consecutive sittings in parliament or imprisoned for more than six months to lose their seats.
    c) Reduced the age of voting from 21 years to 18 years.
    d) Kiswahili was made one of the official language of the national assembly.
    e) Introduced section 2A that changed Kenya from a de Facto to de Jure making Kenya a one party state by law.
    f) Repealed Section 2A of the constitution hence ending the de jure one party rule in Kenya.
   g) National Accord and Reconciliation Act 2008
   h). Promulgating of the New Constitution in Kenya 27th August 2010
10. a) Inter-Party Parliamentary Group
    b) i) All parties should get equally coverage from the state owned media
        ii) The president to go for two five year terms
        iii) The president was allowed to appoint members of parliament to the cabinet regardless of their political parties
        iv) Formation of constitution of Kenya Review Commission (CKRC)

**Multi-party democracy**
1. Republican constitution
2. Mzee Jomo Kenyatta
3. KANU; KADU; APU
4. Jaramogi Oginga Odinga
5. (KADU) Kenya Peoples Union
6. Tom Odongo; Bildad Kagia; Achieng Oneko
7. a) A system of one House of parliament
    b) Governor General; Prime minister
8. One party state

**Single Party Democracy**
1. (KANU) Kenya African National Union
2. Jaramogi Oginga Odinga
3. (KADU) Kenya African Democratic Union, African People’s Party (APP)
4. Kenya African peoples Union
5. Kiswahili
6. Kihika Kimani; Njorge Mungai; Njenga Karume; Jackson Angaine; Paul Ngei
7. 1978
8. KANU
9. One party
10. An attempted coup to overthrow the Government
11. Civil servants
12. Nyiva Mwendwa
13. Grace Ogot; Julia Ojiambo
14. Milongo
15. Kenneth Matiba; Martin Shikuku; Raila Odinga
16. a) The country adopted multi-party democracy  
   b) Section 2A of Kenya’s constitution  
   c) i) Ford (Forum for the Restoration of Democracy)  
        ii) DP (Democratic Party)  
        iii) KSC (Kenya Social Congress)
17. 1992; Daniel Arap Moi
18. Mwai Kibaki
19. 1994
20. Ufungamano Initiative

Coalition government in Kenya

History of the coalition government in Kenya

1. a) Raila Odinga  
   b) Joseph Kamotho  
   c) Joseph Kamotho  
   d) Uhuru Kenyatta  
   e) Rainbow Alliance 
2. a) NAK (National Alliance of Kenya)  
   b) i) National Rainbow coalition  
        ii) National Alliance of Kenya  
        iii) Liberal Democratic Party  
   c) Mwai Kibaki; Micheal Kijana Wamalwa; Raila Odinga; Charity Ngilu; Kalonzo Musyoka  
   d) KANU 
3. Mwai Kibaki; Micheal Kijana Wamalwa
4. a) In August 2003  
   b) Moody Awori
5. a) The voted against the constitutional change.  
   b) i) Banana  
        ii) Orange
6. a) Orange Democratic Movement (ODM)  
   b) Party of National Unity  
   c) Mwai Kibaki
7. a) Party of National Unity  
   b) 1. Mutula Kilonzo  
        2. Samuel Phogisio
8. ODM – Orange – Raila Odinga
ODM – K – Kalonzo Musyoka
9. Charity Kaluki Ngilu
10. Raila Odinga; Najib Balala; Charity Ngilu; Joseph Nyaga; William Ruto; Musalia Mudavadi
11. PNU (Party of National Unity)  
    ODM (Orange Democratic Movement)  
    ODM-K (Orange Democratic Movement – Kenya)
12. PNU (Party of National Unity)
13. Kalonzo Musyoka
14. a) PNU (Party of National Unity);  
    ODM (Orange Democratic Movement)  
    b) Kofi Annan
### c) Members of Eminent African Personalities panel

<table>
<thead>
<tr>
<th>Name</th>
<th>Political party</th>
</tr>
</thead>
<tbody>
<tr>
<td>President – John Kufuor of Ghana</td>
<td>Martha Karua PNU (Party of National Unity)</td>
</tr>
<tr>
<td>Graca Machel (wife of Nelson Mandela)</td>
<td>Musalia Mudavadi ODM (Orange Democratic Movement)</td>
</tr>
<tr>
<td>Joaquim Chisano (Former President – Mozambique)</td>
<td>Mutula Kilonzo ODM-K</td>
</tr>
<tr>
<td>Benjamin Mkapa – Former President Tanzania</td>
<td>William Ruto ODM</td>
</tr>
<tr>
<td>Desmond Tutu (South Africa)</td>
<td>James Orengo ODM</td>
</tr>
<tr>
<td></td>
<td>Moses Wetangula PNU</td>
</tr>
<tr>
<td></td>
<td>Dr Sally Kosgey ODM</td>
</tr>
<tr>
<td></td>
<td>Sam Ongeri PNU</td>
</tr>
</tbody>
</table>

---

15. 2008
16. Kofi Annan; Benjamin Mkapa
17. i) PNU  ii) ODM  iii) ODM-K
18. Raila Odinga
19. Uhuru Kenyatta of PNU; Musalia Mudavadi of ODM
20. It stopped the post election violence and formed Waki Commission to investigate the causes of the violence and recommend ways of preventing such violence
21. a) 2008  
   b) president, political parties
22. a) From 33 to 42

### b) Ministry of information and communication.
   ii) Ministry of Nairobi Metropolitan Development
   iii) The ministry of Industrialisation
   iv) Ministry of Defence

#### Main constitutional amendments in the coalition government
1. Post of Prime Minister; Post of Deputy Prime Ministers
2. a) Formation of coalition government
   b) Creation of prime Minister’s and Deputy Prime Minister’s posts

### e. Attainment of independence

<table>
<thead>
<tr>
<th>Year</th>
<th>Changes in the government</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) 1952</td>
<td>Governor, Sir Evelyn Baring Signed the emergency proclamation which was code-named ‘operation ‘Jock Scott’</td>
</tr>
<tr>
<td>b) 1954</td>
<td>The lyttleton constitution which was to be Multi-racial and the first Kenyan was nominated as a minister</td>
</tr>
<tr>
<td>c) 1957</td>
<td>In March 1957, the first direct election for African members of LegCo was held</td>
</tr>
</tbody>
</table>
i) Events leading to attainment of independence (1960 – 1963)

1. Early political associations and organisations were formed to liberate Kenya from colonialists
2. 1960

*The first Lancaster House Conference*
1. January 1960; London
2. To prepare Kenya’s Independence under African majority rule
3. a) British government to realise that Kenya is an African country
   b) Kenyans to have majority representation in legislature
   c) Introduction of a common roll
4. KANU; KADU
5. Captain Briggs
6. Ronald Ngala; Tom Mboya; Oginga Odinga
7. National Assembly
8. a) Musa Amalemba
    b) Ronald Ngala
    c) James Muimi
    d) Julius Gikonyo Kiano
9. a) A common electoral roll but not all adults will win
    b) African majority on the council of ministers.
    c) 12 specially elected members.
    d) Bill of right to guarantee individual rights.

*The Second Lancaster House Conference*
1. February 1962

2. Colonial secretary, Reginald Maulding
3. Mzee Jomo Kenyatta; Ronald Ngala
4. Jomo Kenyatta; Ronald Ngala; Tom Mboya; Oginga Odinga
5. Jomo Kenyatta
6. i) Kenya should have a coalition government
   ii) KANU and KADU leaders were included
   iii) Majimbo (regions) were introduced

*The Third Lancaster House conference*
1. September 25th to October 19th 1963
2. i) The date of independence was announced to be December 12, 1963
   ii) Kenya was moved from a self-governing colony to an independent state
3. a) May 1963  b) 1961  c) 1992

*Attainment of independence*
1. May 1963
2. June 1963; Jomo Kenyatta
3. Moving from a self-governing colony to an independent state in the commonwealth of Nations
4. National Assembly
5. 12th December 1963

*ii) Kenya becoming a republic*
1. 12th December 1964; Jomo Kenyatta
2. 12th December
3. Kenya becoming a sovereign country
4. Federal (Majimbo) Constitution
5. Republic constitution
f. Contributions of prominent Kenyans

i) Prominent Kenyan leaders

**Mzee Jomo Kenyatta**
1. Kamau wa Ngengi
2. Nairobi Town Municipal Council
3. 1924
4. Muiguithania (Reconciler)
5. February 1929
6. Facing mount Kenya
7. 1947
8. a) 1952   b) Kapenguria
   c) 14\textsuperscript{th} August 1961
9. 28\textsuperscript{th} October 1961, James Gichuru
10. Kariuki Njiri; Muranga
11. a) 1963   b) 12\textsuperscript{th} December 1964
   c) 22\textsuperscript{nd} August 1978
12. a) He promoted National Unity.
   b) An African Champion of African Freedom
   c) A diplomat
   d) Promoted National Development
   e) He introduced the spirit of Harambee.
   f) He introduced free-education.

**Jaramogi Oginga Odinga**
1. October 1911; Siaya
2. March 1957 (Central Nyanza)
3. a) KANU
   b) First Vice President
4. KPU (Kenya People’s Union)
5. a) 1992   c) 20 January 1994
6. a) He actively participated in the struggle for Kenya’s independence
   b) He refused to form an independent government without Kenyatta
   c) He never gave up his struggle

d) He demanded for multi-party democracy
e) A recognised leader of the Luo community and an active opposition politician

**Daniel Toroitich Arap Moi**
1. 1924 (Sacho in Baringo)
2. a) 1955   b) 1957   c) 1959
d) 1964   e) January 1967
f) 1978
3. 2002
4. a) Through *Harambee*, he made contributions towards building more schools and hospitals
   b) He increased the number of public universities
   c) He introduced 8-4-4 system of education
d) He introduced Nyayo wards
e) Encouraged soil conservation measures
f) Introduced District Focus for Rural Development
g) Constructed Moi International Sports Centre
h) He constructed Eldoret International Airport
i) He was the chairman of OAU (AU)
j) Accepted repealing of section 2A

**Wangari Maathai**
1. 1940
2. Central
3. Veterinary Anatomy
4. Rights
5. Environment
6. Forests
7. a) Green Belt movement   b) 1977
8. a) Restoration of indigenous forests
   b) Plant trees in their community
Provided work for tens of thousands of women and has been replicated in dozens of other African countries

9. Daniel Arap Moi (retired president)
10. a) Professor Wangari Maathai 
b) She was rated as the best environmentalist and human rights crusader 
c) 2004

g. International co-operation

The United Nations (UN)

1. The main aim of UN is to prevent war and promote peace
2. League of Nationals
3. 1945
4. League of Nations
5. New York
6. a) 1919 
b) Prevent war and promote peace 
c) League of Nations collapsed after the outbreak of the second World War in 1939
7. It has prevented an outbreak of any other world war to date

i) Reasons for the formation of the UN

1. a) Maintain peace and security in the world 
b) Maintain good relationship between member states 
c) Promote economic, social and political development 
d) Provide a forum for reconciliation in case of indifferences among members 

b) i) The General is like parliament of UN. This is where general business is discussed ii) This is the most powerful organ whose main duty is to maintain peace and security iii) This carries out tasks given by the General Assembly. It is in charge of day-to-day administration iv) World Court is the main judicial organisation of the UN v) This is to ensure that countries are managed in the best interest of their people and of the international peace and security vi) This is the co-ordinating body of UN Agencies to promote respect for human rights

ii) Functions of UN agencies

1. It is concerned with food supply and agricultural development in less developed countries
2. To co-ordinate education research and promote the spirit of co-operation with regard to education, science and culture
3. International Bank for Reconstruction and Development
4. The World Bank
5. It was originally set up to help with reconstruction of Europe after the Second World War
6. a) Girls education b) Immunisation c) Child protection d) HIV/AIDS and AIDS orphans e) Early childhood
<table>
<thead>
<tr>
<th>UN Agency</th>
<th>Year of formation</th>
<th>Headquarter</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>UNICEF</td>
<td>December 11, 1946</td>
<td>New York, USA</td>
<td>- Provide long-term humanitarian and development assistance to children and mothers.</td>
</tr>
<tr>
<td>UNHCR</td>
<td>1951</td>
<td>Geneva, Netherlands</td>
<td>It recognises basic needs.</td>
</tr>
<tr>
<td>UNESCO</td>
<td>1946</td>
<td>Paris, France</td>
<td>To promote International peace through education, science and culture.</td>
</tr>
<tr>
<td>UNEP</td>
<td>1972</td>
<td>Nairobi, Kenya</td>
<td>To promote management of environment.</td>
</tr>
<tr>
<td>WFP</td>
<td>1945</td>
<td>Rome, Italy</td>
<td>Distribute food for refugees and displaced people in emergencies.</td>
</tr>
<tr>
<td>World Bank</td>
<td>1945</td>
<td>Washington, USA</td>
<td>Was established to offer financial assistance to member countries by giving them grants, aids and loans.</td>
</tr>
</tbody>
</table>

**The Commonwealth**

1. Countries which were under British sphere of influence
2. Britain wanted to maintain close ties with its former colonies
3. British Crown Queen / King
4. a) British monarch Queen Elizabeth II  
   b) 1949  
5. Britain; Canada; Australia; New Zealand
6. a) Commonwealth Secretariat  
   b) Commonwealth foundation
c) Commonwealth of learning
7. a) Botswana, Cameroon, Zambia
   Uganda, Tanzania, Swaziland
   South Africa, Sierra Leone, Nigeria
   Namibia, Mozambique. Malawi
   Lesotho, Kenya, Ghana, Gambia
b) Mozambique
8. a) Commonwealth Heads of Government Meetings
b) Kampala, Uganda

i) Reasons for the formation of the Commonwealth
1. The Commonwealth was formed to encourage strong ties among the member state in trade, sports, education, cultural and industrial development
2. a) To promote co-operation among member states.
   b) To encourage peace among member states.
   c) Provision of financial assistance.
   d) Promotion of good governance in member countries.
3. Head of state
4. Head of the Commonwealth
5. Zimbambwe
6. Mozambique
7. Two
8. British Queen, Head of Commonwealth

ii) Functions of the Commonwealth
1. a) To promote development
   b) To provide scholarship
   c) To promote world peace and international understanding
   d) To promote unity and progress of member state
   e) To provide better understanding among member state
2. Violence, Democracy, Constitution
3. Commonwealth games
4. Scholarship
5. Lusaka, Zambia
6. Commonwealth fund for Technical co-operation (CFTC)
7. i) Tracking the money for gender equality.
   ii) The need to build women’s capacity to access market development
   iii) Critical role for micro-finance and innovative financing for women empowerment
   iv) Financing HIV and AIDs intervention
   v) Need to develop and enhance capacity for implementation of projects
8. Commonwealth foundation
9. These are HIV young people who work with other young people to educate them about HIV and AIDS and to provide them with support and counselling

Creative corner
The teacher to ensure that pupils are able to rearrange the letters in brackets to come up with the correct answers

ANSWERS TO EVALUATION PAPER 5
29. A  30. C
UNIT 6: CITIZENSHIP

Know more
1. a) A citizen is a person who belongs to a certain country
   b) Citizenship is the way the people of a country behave or do things
2. a) i) By birth
   iii) By registration
   b) i) By Birth: A child who is born in Kenya and whose both parents are Kenyans, becomes a citizen of Kenya. The parents of the child register the birth with the government and get a certificate. When the child becomes 18 years old, the child uses the Birth Certificate to get a National Identity card (I.D), which all adult Kenyans must have.
   ii) By registration: A woman from another country can become a Kenya citizen if she gets married to a Kenyan man for seven years. The marriage naturalises her to become a Kenyan. This happens if the two get married and live in Kenya.
   iii) By Registration: A foreigner who has stayed in Kenya for more than 7 years and has not broken any laws of Kenya, can apply to the government to become a Kenyan citizen. The government then registers the person as a Kenyan citizen.
3. a) i) Loyalty
   ii) Patriotism
   iii) Obedience
   iv) Honesty
   v) Fairness
   b) Loyalty is the love a citizen shows to his/her country. We show our love for our country when we sing our National Anthem by standing at attention. We do the same when our flag is being raised. A good citizen should not talk wrong things about our country or work for another country against Kenya. Good citizens should always work for their country and support their government to provide services to its people. Good citizens know that no country is better than their own.
   Patriotism: A good citizen should always be ready to defend his or her country. Such a person is called a patriot. A patriot is ready at all times to take arms and fight for his/her country. A patriot is proud to be called a Kenyan. Such a person attends all National celebrations like Madaraka day, cheers our national teams when they play against another country and feels happy when a Kenyan wins gold medal in world games. A patriotic Kenyan always supports fellow Kenyans who need help. Good citizens help those who are affected by floods or drought and contribute money in *harambees*.
4. a) i) Right to life
   ii) Right to education
   iii) Right to medical care
   iv) Right to own property
   v) Right to information
   b) i) Freedom of assembly
   ii) Freedom of worship
   iii) Freedom of movement
   iv) Freedom of association
   v) Freedom of speech
   **Freedom of Assembly** - We are free to attend any public meeting, meet our friends to discuss our own things but we should not break the law.
Freedom of worship - The people of Kenya are free to join any religion that they want. We can go to any church or mosque to pray without asking for permission.

Freedom of movement - Every Kenyan citizen has a right to move and to settle in any part of the country.

Freedom of Association - This allows a citizen to interact with member(s) or the community without fear.

Freedom of speech – Kenyans have a right to say or write what they like as long as it is not inciting the public.

c) Responsibilities of a good citizen
   i) Reporting of foreigners among us: Foreigners are allowed by the government to visit our country, if one of us hides a foreigner in his/her home, it is our duty to report to the authorities. At times foreigner might be dangerous to our country.

   ii) Reporting of law breakers: We should always report to our teacher anyone who does wrong things in class or in school. Good citizens should report to the police whoever breaks the law like stealing, fighting other people e.t.c.

   iii) Taking care of the environment: We need to take care of our surrounding by protecting plants, animals and water. Good citizens should make their surrounding clean all the time.

   iv) Respecting other people’s property: People work hard to buy the things they need, no one should take away another persons or government property. This is stealing other people’s property. Stealing is bad and also it is against the teaching of God and the laws of Kenya.

5. a) i) Joining political parties

ii) Attending political meetings and rallies

iii) Volunteering to be voted as a people’s representative in the government

iv) Participating in voting during elections

b) Citizens participate in civic life by contributing towards the social welfare of the people. Through their participation citizens are able to bring about changes that lead to social, political and economic development

6. It is the condition of belonging to two countries at the same time.

a. Dual Citizenship

1. a) By birth

b) By registration

2. a) By birth: A child who is born in Kenya and whose parents are both Kenyans, becomes a citizen of Kenya

b) i) By registration: A woman from another country can become a Kenyan citizen if she gets married to a Kenyan man for seven years

ii) A foreigner who stays in Kenya for more than 7 years and has not broken any Kenyan law can apply to become a Kenyan Citizen. The government then registers the person as a Kenyan citizen

If a child is not a citizen but is adopted by a Kenyan Citizen, can be registered as a citizen upon application.
3. By Birth
4. Through registration
5. It is a situation where a person is a citizen of two countries at the same time
6. Yes
7. No
8. a) True  b) False
9. i) × (ii) √ (iii) √ (iv) ×

b). How one may lose Kenyan Citizenship
1. A Kenya citizen is a person who is recognised by the law as belonging to Kenya by Birth, through registration or through naturalisation
2. a) If they are found to have used false information to acquire the citizenship
   b) If their actions and speeches display disloyalty to the government and the country
   c) If they commit criminal activities and are sentenced to five years imprisonment during the first five years after acquiring the citizenship
   d) If they support enemies of the country during war
   e) When a person chooses to become a citizen of another country
3. If discovered that a person who become a Kenyan citizen by birth has parents who are not Kenyan citizens
   If discovered that a person who becomes a citizen by birth as a child was more than 8 years old when found

Creative corner
Subject teacher should ensure that he/she makes an album using pictures from magazines and newspapers and pupils to make their own following the descriptions given.

ANSWERS TO EVALUATION PAPER 6
29. D  30. D

UNIT 7: DEMOCRACY AND HUMAN RIGHTS

Know more
1. Democracy is a system which the people choose the government they want and the way to operate
2. Direct, Representative, Delegative, Constitutional, Indirect
3. a) President is elected directly by the people for a fixed period
b) A person exercises his or her power through a representative
c) Elected officials discuss issues on behalf of their people
d) Elected officials are allowed to nominate or pick additional representatives

4. Kenya is a true democratic country because:
   a) There is freedom of movement
   b) People are free to elect representatives of their own choice
   c) There is freedom of expression
   d) There is no violation of human rights
   e) There is equal distribution of resources

5. Representative democracy, Delegative democracy

6. Dictatorship
7. a) Dictator b) Democrat
8. Dictatorial
9. a) Right to life – Every person is entitled to his or her life
   b) Right to Liberty – One should not be arrested without a reason
   c) Protection from slavery and forced labour – Every person should be protected from forced labour
   d) Protection from torture – Every person should be protected from inhuman acts
   e) Protection of private property. The government cannot take by force what belongs to its citizens.

10. This is a document where the policies of a party are contained.

**a. The role of political parties in a democracy**

<table>
<thead>
<tr>
<th>Political Party abbreviation</th>
<th>In full</th>
<th>Year of formation</th>
</tr>
</thead>
<tbody>
<tr>
<td>KANU</td>
<td>Kenya African National Union</td>
<td>1960</td>
</tr>
<tr>
<td>DP</td>
<td>Democratic Party</td>
<td>1992</td>
</tr>
<tr>
<td>LDP</td>
<td>Liberal Democratic Party</td>
<td>2000</td>
</tr>
<tr>
<td>NARC-KENYA</td>
<td>National Rainbow Coalition</td>
<td>2001</td>
</tr>
<tr>
<td>ODM</td>
<td>Orange Democratic Movement</td>
<td>2006</td>
</tr>
<tr>
<td>ODM-K</td>
<td>Orange Democratic Movement Kenya</td>
<td>2007</td>
</tr>
<tr>
<td>PNU</td>
<td>Party of National Unity</td>
<td>2007</td>
</tr>
<tr>
<td>FORD-People</td>
<td>Forum for the Restoration of Democracy People</td>
<td>1992</td>
</tr>
<tr>
<td>FORD KENYA</td>
<td>Forum for the Restoration of Democracy</td>
<td>1992</td>
</tr>
<tr>
<td>FORD ASILI</td>
<td>Forum for the Restoration of Democracy</td>
<td>1992</td>
</tr>
<tr>
<td>NARC</td>
<td>National rainbow coalition</td>
<td>2002</td>
</tr>
<tr>
<td>SAFINA</td>
<td>SAFINA Party</td>
<td>1997</td>
</tr>
</tbody>
</table>
2. Opposition party and public accounts committee (PAC)

3. a) Formation of a government
   b) Acting as an alternative government
   c) Provide an arena through which one is elected or nominated
   d) Acts as a channel of passing message
   e) They act as watchdogs

b. Benefits of Democracy

   a) Enables citizens to elect good leaders
   b) Enables people to monitor the government
   c) Protection of human rights
   d) People feel involved in the government
   e) Encourages transparency and accountability
   f) Encourages justice and equality
   g) Ensures equal distribution of national cake
   h) Citizens are kept informed about issues that affect them

c. The Bill of Rights

   1. A Bill of Rights is a section in the constitution that explains the basic rights and freedom that should be enjoyed by a citizen of a country
   2. Chapter IV
   3. a) Right to life
       b) Right to liberty
       c) Freedom from torture and inhuman treatment
   4. a) Rights and freedom
       b) Torture suspects; Wrongful arrests; Denial of freedom of speech; Discrimination; Punishment – without permission e.g. mob justice

      5. Right to life
      6. Freedom from unfair arrest
      7. a) Freedom of association
           b) Freedom of movement
           c) Freedom of worship
           d) Freedom of knowledge
           e) Freedom of expression
           f) The right to life
           g) The right to fair trial
           h) Right to liberty
           i) Right to nationality
           j) Right to marry

d. Importance of the Bill of Rights

   1. Peace, Co-operation
   2. a) Bill of rights promote justice and equality among members of the society
       b) It creates harmony among people
       c) Human rights creates good environment for personal, community and national development to take place
       d) They create unity among people because they are universal hence not based on gender, ethnicity, race or religion
   3. a) Torture of suspects
       b) Wrongful arrest
       c) Denial of freedom of speech
       d) Discrimination
       e) Punishment without court permission e.g. mob justice
   4. Freedom of association

Creative Corner

The teacher or the instructor to ensure that learners are able to match the items in A with corresponding items in B correctly
ANSWERS TO EVALUATION PAPER 7

29. B  30. C

UNIT 8: LAW, PEACE AND CONFLICT RESOLUTION

Know more

1. a) Laws are rules that explain how people should live with one another  
b) Conflict is the absence of peace. It is a sharp disagreement or opposition to an issue often out of self-interest or differing ideas  
c) Peace is the absence of conflict. It is promoted by a number of factors; The practice of the rule of law, just and fair treatment of people, presence of dialogue between the leaders and the people, respect of people’s rights by the government etc.

2. Conflict resolution is creating a state of peace, bringing about a sense of relaxation in strained relationship that causes hostilities. It results to a halt to war.

3. Laws are important in a society because people love and respect each other and act and develop the society

4. a) i) Riots, demonstrations and killings of several people  
ii) People were displaced from their homes up to today we are having IDPs (Internally Displaced Peoples) in camps

b) The method of conflict resolution used was reconciliation meetings that included mainly Kenyan and international leaders

5. a) Reconciliation meetings  
b) Government to prevent such violence from occurring again  
c) Political events such as what happened in Kenya are bound to occur in any nation  
d) The government formed a commission headed by Justice Phillip Waki to find out more about the violence.  
e) Coming together of the countries major parties

a) Reconciliation meetings that included main Kenyan and international leaders.

b) Government determined to prevent such violence from occurring again by forming a commission to find out more about the violence and recommend ways of preventing it.

c) Political events such as what we have had in Kenya are bound to occur in any nation. What matters is how the government is able to cope and deal with the situations

d) The government formed a commission led by Justice Phillip Waki to find out more about the violence and recommend ways of preventing such violence from occurring again

e) Coming together the country’s major parties P.N.U (Party of National Unity) led by Mwai
Kibaki O.D.M (Orange Democratic Movement) led by Raila Odinga. This was after several reconciliation meetings

6. a) We are able to support each other in times of need
b) It minimises tribalism and tribal conflicts
c) People understand and appreciated each other
d) It helps development the country
e) Promotes political stability

7. a) i) Use of one national language
   ii) Education
   iii) The constitution
   iv) Social and economical interaction
   v) Equal distribution of resources
b) i) Tribalism  ii) Nepotism
   iii) Greed
   iv) Political selfishness
   v) Regionalism

8. Mediator – A person who intervene in a dispute between two parties in order to reach an agreement
Negotiator – Someone who negotiate (confers) with others in order to reach a settlement
Arbitrator – Someone who negotiate (confers) with others in order to reach a settlement

a. Symbols of National Unity

1. a) i) The National Anthem
ii) The National flag
iii) The court of arms
iv) The Public Seal
b) i) The National Anthem expresses the aspiration, hope and wishes of all Kenyans. It is a prayer for our country.
ii) The National Flag is a symbol of our independence

iii) This is a national badge or emblem. It represents Kenya and its citizens. It is used as symbol of authority and as the official seal.
iv) It approves government documents officially. It is a stamp like-mark.

2. Four
3. Red - Blood shed
   Black – Black people
   Green – Our land
   White – Peace
4. Black
5. Prayer
6. (i) Live in peace, love and unity
   (ii) Practice Justice
   (iii) Sharing
   (iv) Be united
   (v) Protect our heritage
   (vi) Enjoy our freedom
   (vii) Build a strong nation
7. Friday
8. a) Kenya National Anthem in English

1
O God of all creation
Bless this our land and nation
Justice be our shield and defender
May we dwell in unity
Peace and liberty
Plenty be found within our borders

2
Let one and all arise
With hearts both strong and true
Service be our earnest endeavour
And our homeland of Kenya
Heritage of splendour
Firm may we stand to defend
1. a) The constitution of Kenya
b) Use of the National language
c) Education
d) National philosophies
e) Equal distribution of natural resources
f) Equality before the law
g) Engaging in National games and sports
h) Trade
i) Intermarriage
j) Religious bodies

2. a) The constitution of Kenya: When both the government and its citizens respect the constitution that is in use
b) Use of the national language promotes communication and better understanding between people
c) Education system promotes national unity
d) National philosophies rule or set of values of a country, an individual or school follows. Philosophy guides the citizens attitude and conduct.
e) Equal distribution of national resources -The government follows a policy of fair and equitable distribution of social amenities.
f) Equality before the law – All people in the country are treated as equal before law.
g) Engaging in National games and sports promote national unity.
h) Trade – Traders and business people interact with their customers and move from one place to another to sell and buy their products.
i) Intermarriage between people of different ethnic groups and races.
j) Religious bodies – Different religions have people from different parts of the country status and communities.

**c. Importance of National Unity**

1. a) Yes
   b) i) It promotes peace
   ii) It promotes social and economic activities
   iii) It leads to promotion of security
   iv) It improves individual development
   v) It enhances respect towards others

**d. Factors that undermine national unity**

1. a) Tribalism       b) Nepotism
   c) Racism
   d) Religious differences
   e) Uneven distribution of resources

2. **Tribalism**: Some individuals who favour members of their communities or ethnic groups.

**Nepotism**: The practice of favouring one’s relatives when allocating jobs and public resources.

**Racism**: Practice of causing disunity in the country.

**Religious differences** may undermine national unity by discriminating others who do not share their religion.

**Uneven distribution of resources** when one region is favoured in terms of allocation of resources and others are left out.

**Corruption** this brings disunity as those involved want to enrich themselves at the expense of others.

---

**Creative corner**

The teacher to assist the pupils in answering questions in this section

**ANSWERS TO EVALUATION PAPER 8**

29. B 30. A

---

**UNIT 9: THE GOVERNMENT OF KENYA**

**Know more**

1. Government and the people
2. Parliament
3. President
4. a) Bomas of Kenya  
b) Yash Pal Ghai  
5. a) D  
b) A  
c) Oversee the election of the deputy speaker of the national assembly and swear in elected members  
d) He maintains order and discipline. The speaker has the authority to suspend for several seatings any member from the house, who breaks parliamentary rules  
6. Elected, nominated or ex officio  
7. The speaker  

a. Formation of the national government  
1. President  
2. a) He must be the presidential candidate with the highest number of votes-51% + 1 votes in half of the counties  
b) He must get 25% of the presidential votes in each County  
c) He must be declared the winner by the chairman of the commission  
d) The outgoing president hands over the new president who later forms the government  
e) Must be a nominated member of a political party  
3. Chief Justice  
4. (i) Cabinet secretaries  
(ii) Principal secretaries  
(iii) Secretary to the cabinet  
(iv) Senior Government officials  
(v) Chief of the Kenya Defence Forces  
(vi) the Attorney General  
(vii) The Director- General of the National Intelligence Services  
5. 2008  
6. a) The Chief Registrar  
b) The Chief Registrar  
c) Chief Justice  
7. 14, 22  

8. Jubilee  
9. a) The president is sworn in by the Chief Registrar  
b) The MPs elect the speaker of the National Assembly  
c) The speaker oversees the election of the deputy speaker of the National Assembly  
d) The Members of Parliament are sworn in by the Clerk of the National Assembly  
e) The president appoints the cabinet/Permanent Secretaries/Head of civil service/Chief General staff and other dignitaries e.g. Attorney General and Military commanders  
f) The cabinet is sworn in by Chief Registrar  
10. The legislature, the Executive, The Judiciary  

Composition and Functions of the Legislature  
1. (i) 290 members representing constituencies  
(ii) 47 elected women representatives  
(iii) 12 members nominated by political parties  
(iv) the speaker as an ex-officio member  
It consists of a total of 350 Members  
2. Parliament/National assembly  
3. 290 and 12  
4. Speaker  
5. (i) 47 elected members representing counties  
(ii) 16 women members nominated by political parties  
(iii) Two elected youth representatives (male/female)  
(iv) Two elected representatives of people with special needs (male/female)  
(v) The speaker as ex-officio member
6. a) **Speaker**

i) To decide what business will be discussed in parliament and in what order

ii) To prepare and distribute the order paper, which lays out the order of Parliamentary business for each session

iii) To receive bills to be tabled (or introduced) and motions to be discussed

iv) To guide debate in the house

v) To decide who gets a chance to speak in parliament

vi) To make sure discussions are relevant

vii) To tell the ministers when they are going to be asked questions so that they can prepare appropriate answers

viii) To make sure members obey the rules of the house and to discipline those who break them

ix) To make sure there is a friendly atmosphere in the house and prevent personal attacks on one another

x) To watch members attendance and declare their seats vacant if they fail to attend eight consecutive sessions without permission

xi) To enforce the standing orders of the house, which are the rules for parliamentary procedures

b) **The clerk to the National Assembly**

i) He is in charge of recording all discussions that take place in parliament

ii) He takes care of the Hansard (records of all parliamentary discussions)

iii) The clerk is the chief adviser to the speaker, the house and government on matters relating to parliament

iv) He or she attends all parliamentary sessions and reads out bills presented to parliament for debate

v) The clerk prepares the agenda for discussion in the house, prepares security for the Member of Parliament

vi) He is the permanent head of the national assembly

vii) He is the accounting officer of the National assembly thus controls expenditure

viii) He swears in the Speaker and the members of parliament

c) **Sergeant at arms**

i) He keeps law and order in parliament

ii) He carries out the orders of the Speaker

iii) He is in charge of security in parliament

iv) He escorts a Member of Parliament out when he breaks parliamentary rules or is expelled from the house by the Speaker

v) He ensures that Members of Parliament do not walk into the house with harmful objects

vi) He is in charge and organises ceremonies carried out in parliament

7. National Assembly, Senate

8. **First reading**

i) The bill is not discussed at this stage

ii) The bill is merely introduced at this stage

iii) The members have to approve it as a good suggestion worth discussion later
iv) A drafted bill prepared by legal officers is tabled in parliament

**Second reading**

i) The bill is discussed in details in parliament

ii) A decision is made whether the bill should become law or be withdrawn

iii) Amendments are proposed or suggested

iv) The bill can be rejected or its discussion postponed for six months to afford the ministry it affects time to re-think and re-draft it

v) When passed it is moved to the committee stage

**Committee Stage**

i) Every part of the bill is discussed in detail, clause by clause by either a committee of the whole house (meaning the entire parliament turning itself into a committee)

ii) During these discussions the speaker leaves the chair so that there is room for free discussions

iii) The bill then returns to the house for the report and third reading

**Report and third reading**

i) The bill is now presented to the house as a report of the house committee

ii) The mover of the bill once again takes the floor and addresses the house

iii) The members give their views on the bill supporting or disapproving it

iv) Under the chairmanship of the Speaker, the members vote for or against the Bill

v) The Bill is accepted or rejected by the house through simple majority of the members present in the house

vi) If accepted by the House, it is then presented to the president by the clerk of the National Assembly for the Presidential assent

vii) If the bill is assented by the President, the clerk arrange for publication of the resulting act in the Kenya Gazette

**Presidential Assent**

i) This is the final stage for the bill

ii) If the president accepts to contents of the bill, he signs it

iii) It becomes a law or an act of parliament

iv) The clerk publishes the bill as an Act in the Kenya Gazette

v) The draft Act assented by the president is returned to the clerk who arranges to have its assent announced by the Speaker in parliament

vi) The president may reject the bill and send it back to parliament to start the process once again

**The National Assembly**

9. (a) i) To debate and make laws to govern the country

ii) To amend or change existing laws and the constitution when necessary

iii) To present the views of the people

iv) It provides a link between the people and the government

v) To debate matters of national importance
vi) To act as a watch dog on activities of the government and make sure the executive and the Judiciary do not abuse their powers

vii) To make sure that the rule of law is respected

viii) To fire the president and government by passing a vote of no confidence. This is done by two-thirds majority of MPs voting in favour of a motion of no confidence

ix) To fire an individual member of parliament through a vote of no confidence. That MP must then resign. This happened to Vice President Josephat Karanja in 1988

x) To monitor government spending through the public accounts committee

xi) To create or close parastatals or other government institutions through Acts of parliament, for example Kenya Ports Authority, Telkom Kenya

taxi) To elect the speaker and deputy speaker

xii) Approves the National budget

xiii) Approves the appointment of certain government officials

xiv) Form selected committee to investigate matters of the National importance

xv) Approves the appointment of certain government officials

The Senate

b) i) To protect the interest of the people in the counties

ii) To protect the interest of the county government

iii) To debate and approve parliamentary bills concerning the counties

iv) To determine the allocation of national revenue among counties

v) To determine and consider any decision to remove the President or Deputy president from office

ii) The composition and functions of the Executive

1. President, Deputy president, Cabinet, Public Servants

2. It implements government policies.

3. i) The head of state and head of government

ii) Chairs cabinet meetings

iii) The commander in chief of the Kenya Defence Forces (KDF)

iv) He is the only one who has the power to declare war against another state

v) He appoints cabinet secretaries and relieve them off their responsibilities if they do not perform their duties as required

vi) He appoints all senior government officials.

vii) Forgive convicted criminals (pragmatic of mercy)

viii) He leads Kenyans in celebrating national days

ix) He gives consent to bills passed in parliament before they become laws

ix) He signs international treaties and agreements on behalf of Kenya

x) Declare state of emergency

xi) Appoints ambassadors and high commissioners

4. President, Deputy President, Cabinet Secretaries, Attorney General

5. Secretary to the cabinet, responsible for arranging the business and in keeping of the minutes of the cabinet
6. i) To promote the country’s economic and social development by formulating development oriented policies
   
   ii) To help and advise the president in the governing of Kenya. This is because the president as an individual cannot run the country
   iii) To help in the formulation of government policies that governs the protection of the Kenyan nationals in foreign countries
   iv) To control administration by the civil servants. The cabinet secretaries who are members of the cabinet are in charge of their respective ministries and ensure that the civil servants working under them follow the laid down rules and regulations
   v) Answer the questions related to their respective departments in parliament

7. i) Principal assistant of the president and shall deputise for the president in the execution of the president functions
   ii) Perform the functions conferred by this constitution and any other functions assigned by the president.
   iii) When the president is absent or is temporarily incapacitated and during any other period that the president decides the deputy President shall act as the president
   iv) The deputy president shall not hold any other state or public office

8. a) A civil servant is a civilian who works for the government
   b) Head of public service
   c) Principal secretary

   d) i) Carrying out policies and programmes of the government
   ii) Interpreting the government policies to the people.
   iii) Maintaining government records
   iv) Offer services to the people on behalf of the government

9. a) Principal secretaries in charge of various state departments.
   b) Chairman of Public Service Commission
   c) To appoint personnel or people to work in the civil service

   iii) Composition and functions of the Judiciary

1. Chief registrar of the judiciary, Chief Justice, Deputy Chief Justice, Judges and Magistrates
   
   2. Supreme Court –> Court of Appeal
   High Court –> Magistrate Court –> Kadhis courts –> Court Martial –> Local tribunal

   3. Chief Justice
   
   4. a) President
   b) President in consultation with the judicial service commission
   c) Judicial service commission
   
   5. i) Hearing and determining cases
   ii) Interpreting the law
   iii) Ensuring that there is justice and fairness/no oppression
   iv) Brings peace between the accused and the accuser’s
   v) To protect the fundamental rights and freedom of an individual

   6. Supreme Court, Court of Appeal, High Court.
   
   7. a) It is a body which appoints magistrates at all levels
   b) Chief Justice
   
   8. a) Military offences under the Defence Forces
b) Civil cases such as divorce and inheritance of property involving the Islamic law.

b) County government

1. Governor
2. 47
3. Governor, deputy governor, members of county assembly, county executive committee
4. Governor
5. Collecting revenue, providing health services, collecting garbage, providing sewerage services, providing water, building and maintaining roads

c) Sources of government revenue

1. The government needs money to finance social services, development projects and pay its employees
   i) National government
   1. Taxes, loans and grants, exports, licences, profits made by Government organisations, sale of government property, custom duty, charges for services provided in government institutions
   2. Income tax (direct tax), VAT, (indirect tax) companies and individuals operating businesses in the country pay money to the government based on the profits made and also those in the tourism business pay taxes to the government
   3. KRA
   ii) County government
   1. 47
   2. Rates charged on property, charges on services provided by the county government, loans and grants, fines charged when by-laws are broken, levies charged to people, 15% revenue provided by the central government, sale of county government’s property

3. Commission on Revenue Allocation (CRA)

d. Forms of government expenditure

1. It is an outline of all the governments projects and services that require finds and how much each requires
2. Ministry of Finance
   i) National Government
   1. At least two months before end of each financial year
   2. In a planned manner
   3. Buying supplies needed in government offices, repairing government facilities, paying salaries to its employees, financing public education institutions, financing public health centres, finance the building and maintenance of roads, funds given to counties, funds given for constituency development as (CDF), repaying of public debts, financial support given in cases of emergencies and unforseen needs

   ii) County Government
   1. County fiscal strategy paper
   2. Payment of bills, Financing the building and maintenance of roads, health centres and markets, salaries paid to county workers, buying of supplies needed for development, financial support given in cases of emergencies

e) National security organs

1. National security is the protection against internal and external threats to Kenya’s territory
2. National security organs protects;
   i) the Kenyan people
   ii) their rights and freedom
iii) their property
iv) ensures there is peace, security and prosperity
v) protects Kenya’s territorial integrity and independence
3. The president
4. The Kenya defence forces, the national intelligence service, the national police service
5. Internal security and external security

i) External security

The Kenya Defence Forces
1. The defence and protection of the sovereignty and territorial integrity of the republic
2. They assist and cooperate with other authorities in situations of emergency or disasters, they report to the National Assembly whenever deployed, they maybe deployed to restore peace in any part of Kenya affected by unrest or instability
3. The Kenya Army, the Kenya Air Force, the Kenya Navy

ii) Internal security

National Intelligence Service
1. Security intelligence and counter intelligence to enhance national security
2. Director general of the national intelligence service
3. General Philip Kameru

National police service
1. The Kenya police service, the Administration police service

2. Throughout Kenya
3. Inspector General
4. Joseph Boinnet
5. To prevent crime by carrying out patrols, to prevent cattle rustling, maintain records related to crime, assist in emergency services in case of fires and floods, during national celebrations they mount a guard of honour, carries out motor vehicle inspection, protect the lives and peoples property, to maintain law and order in the country
6. Strives for the highest standards of professionalism and discipline among its members, prevents corruption and promotes practices of transparency and accountability, complies with constitutional standards of human rights and fundamental freedoms, trains staff to the highest possible standards of competence and integrity so as to respect human rights and fundamental freedoms and dignity, fosters and promotes relationships with the broader society

Creative corner

The instructor to make sure that pupils are able to pick out matching letters from the chart in order to come up with the correct answer for each question

ANSWERS TO EVALUATION PAPER 9

29. B  30. B
### KCPE MODEL EXAMINATION PAPERS

#### KCPE PAPER 1

33. B 34. D 35. D 36. A  
41. B 42. C 43. D 44. D  
49. A 50. C 51. C 52. A  
57. C 58. C 59. A 60. D

#### KCPE PAPER 2

33. D 34. C 35. C 36. A  
41. C 42. D 43. C 44. D  
45. A 46. D 47. B 48. D

#### KCPE PAPER 3

41. B 42. C 43. B 44. A  
53. A 54. B 55 B 56. A  
57. D 58. C 59. A 60. D

#### KCPE PAPER 4

KCPE PAPER 5

33. B  34. A  35. D  36. A
41. B  42. A  43. D  44. B
49. D  50. A  51. D  52. A

KCPE PAPER 6


KCPE PAPER 7

41. A  42. B  43. B  44. C

KCPE PAPER 8

<p>| | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>57. B</td>
<td>58. A</td>
<td>59. B</td>
<td>60. D</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**KCPE PAPER 10**

<p>| | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>37. A</td>
<td>38. A</td>
<td>39. A</td>
<td>40. B</td>
<td>41. C</td>
<td>42. A</td>
</tr>
</tbody>
</table>
UNIT 1: GOD’S HELP AND SELF HELP

a) The body is the temple of God
1. The body is the temple of God because we are created in His image (1 Corinthians 6:15-20). This means that we share in God’s moral values. All the gifts and fruit of the Holy Spirit are seen through us and from us because He lives in us.
6. He should go to church because God commands us to.
   He should also go to church because church is where Christians meet to worship together, pray together and encourage one another
7. Not indulging in immorality, not telling lies, having good friends, not engaging in drug abuse.
9. Keep our bodies pure, i.e. without sins.
10. We should practice the Christian values in all our life.

b) Various drugs and how they are abused
1. Any non-food substance that alters the body’s functions negatively.
2. It causes cancer of the lungs, bad smell browning of teeth.
3. B
4. Seeking advice and speaking out their problems to a responsible person such as a teacher or parent so they can be helped
5. Alcohol, tobacco, miraa, bhang
9. Poor health, hallucinations, laziness, brain damage, heart, liver and lung diseases
10. Bhang

c) Sexual misuse
5. A 6. C 7. A
8. It is having sex by force or violence with a person, against that person’s will.
11. They mislead and spoil young people. They take advantage of the young people sexually, mostly in exchange for money and other gifts such as clothes, shoes and jewellery. They should be avoided at all cost.

d) Effects of sexual misuse
1. Effects of sexual misuse include HIV and AIDS, early or unwanted pregnancy, forced or early marriage, abortion
2. Death, impotency or infertility, insanity
3. Gonorrhoea, Syphilis, Hepatitis B, Genital herpes
4. B
5. It can lead to school drop outs, unwanted pregnancy, unplanned pregnancy and sexually transmitted diseases
9. Severe weakness of the immune system, loss of weight due to other infections like TB
10. i) Voluntary Counselling and Testing
   ii) When people go for counselling,
they are assisted in knowing their HIV status, therefore are able to take care of themselves and take proper medication if they are infected.

e) Misuse of natural resources
1. Assets or services used to generate wealth
2. Water, land, forests, soil, animals
3. Natural resources occur naturally while man-made resources are created by man
4. Cutting down trees, mining, pollution of rivers
5. It destroys our natural forests hence our river sources, it contributes to desertification
6. C
7. Vincent
8. The late Professor Wangari Maathai
9. Creates breeding places for mosquitoes, can cause accidents when one falls into the open pits, it destroys the environmental beauty, children can drown in such wastelands, especially when they are flooded

f) View of traditional African society on use and misuse of God’s creation
1. Source of herbal medicine and firewood, used for fencing, used for construction of houses
2. B
3. The vegetation in and around shrines was never cut down because shrines were considered holy or sacred.
4. C
5. Cutting trees to create land for cultivation, hunting of wild animals
6. The endangered animals have increased in number after the ban on poaching
7. Planting trees, watering seedlings
8. They were heavily punished, they were not allowed to take part in community activities such as hunting

h) How to respond to misuse of God’s creation
1. D
2. Christians regard God’s creation as holy and should not be destroyed. God created each of His creation with a purpose.

G) Christian teaching on use and misuse of God’s creation
1. We should take care of the environment because God commanded to so; God commanded human beings to control the earth and to take care of all creation
2. A command from God, to be able to maintain favourable climate for food production, the environment represents God’s nature and presence, the environment provides us with food and water
3. Establishing animal orphanages, treating sick animals, reducing human animal conflicts
4. Protection of forests ensures protection of sources of water, trees provide shade during hot weather, help to purify air
5. Global warming is the gradual increase in the temperature of the world. It is believed to be caused by the increase of certain gases such as carbon dioxide in the atmosphere environment.
6. Christians should plant more trees to reverse the desertification effect and absorb the carbon from air to reduce the effect global warming, stop illegal logging and reduce pollution from industries.
UNIT 2: CHRISTIANITY AND TRADITIONAL AFRICAN HERITAGE

a) African stories of creation
4. a) Nandi - Asis/Cheptalel
   b) Kisii - Engoro
   c) Nyamwezi of Tanzania - Shida Matunda
   d) Tugen - Tororut
   e) Rabai - Mulungu
5. The Bukusu God is called Were created the world in stages. He first made heaven, supported with pillars. He created assistants Mukhobe and Muremwa. He then made the moon and the sun, followed by clouds, the Eastern and the Western stars. Other stars followed. He then created a big red cock to be the thunder, warning people about rain. He created rain and put it in the clouds. Two rainbows followed by air, earth, mountains, valleys, Mwambu (first man) and Sela (first woman) were also created.
6. 2
7. The Nandi people believe that their first person came from a mysterious knee then the knee got swollen and finally burst out. Out of it came a man and a woman as the first parents of the Nandi community. Accept any other creation story from any other Kenyan community.

b) Relationship between the unborn, the living, the living dead and ancestors
1. D 2. B
3. The life of the unborn child in the traditional African communities was sacred because it came from God. The living dead got reborn through the living. Children were believed to bring about continuity of a clan after their parents died. This is why children were highly valued.
4. The living highly respected the ancestors because the ancestors were mediators between them and God. They instructed them on how to live.
5. B 6. D
7. True
8. Living, living dead

b) Relationship between the unborn, the living, the living dead and ancestors
1. D 2. B
3. The life of the unborn child in the traditional African communities was sacred because it came from God. The living dead got reborn through the living. Children were believed to bring about continuity of a clan after their parents died. This is why children were highly valued.
4. The living highly respected the ancestors because the ancestors were mediators between them and God. They instructed them on how to live.
5. B 6. D
7. True
8. Living, living dead

b) Relationship between the unborn, the living, the living dead and ancestors
1. D 2. B
3. The life of the unborn child in the traditional African communities was sacred because it came from God. The living dead got reborn through the living. Children were believed to bring about continuity of a clan after their parents died. This is why children were highly valued.
4. The living highly respected the ancestors because the ancestors were mediators between them and God. They instructed them on how to live.
5. B 6. D
7. True
8. Living, living dead

b) Relationship between the unborn, the living, the living dead and ancestors
1. D 2. B
3. The life of the unborn child in the traditional African communities was sacred because it came from God. The living dead got reborn through the living. Children were believed to bring about continuity of a clan after their parents died. This is why children were highly valued.
4. The living highly respected the ancestors because the ancestors were mediators between them and God. They instructed them on how to live.
5. B 6. D
7. True
8. Living, living dead

b) Relationship between the unborn, the living, the living dead and ancestors
1. D 2. B
3. The life of the unborn child in the traditional African communities was sacred because it came from God. The living dead got reborn through the living. Children were believed to bring about continuity of a clan after their parents died. This is why children were highly valued.
4. The living highly respected the ancestors because the ancestors were mediators between them and God. They instructed them on how to live.
5. B 6. D
7. True
8. Living, living dead
e) **Concepts of God in traditional African society and Christianity**

1. B  
2. B  
3. C  
4. C  
5. Omniscient  
6. D  
7. A  
8. A  
9. D

f) **Response to God in traditional African society**

1. B  
2. D  
3. The people were able to know the future and relate to God in an acceptable way. People heard from God through the diviners. They mediated for the people.  
4. Offering animal sacrifices to God, worshipping God through rituals and rites, through prayers and songs.  
5. An elder is blessing the warriors before they took part in an activity such as war. This ensured that the planned activity was successful. This also ensured that the warriors were courageous.

g) **Ways of reconciling with God in traditional African society**

1. Reconciliation means becoming friends again with someone one has had a quarrel with  
2. committing murder, destroying facilities where offering of sacrifices was done, doing immoral acts like having sex between relatives, offering no sacrifices to God  
3. God would punish a community through drought, famine, earthquakes or floods and disease outbreaks  
4. D  
5. Expect answers like; Animals, farm harvests, prayers. The answers will depend on the community that the pupils comes from  
6. C  
7. D

h) **Similarities between Christianity and traditional African beliefs and customs**

1. D  
2. Christians believe in the existence of heaven and hell for the souls while the traditional Africans believe in the spiritual world of the living dead and ancestors.  
3. A  
4. God created the universe and people, God is powerful, existence of life after death, life is sacred  
5. A  
6. True  
7. A  
8. True  
9. life

i) **Differences between Christianity and traditional African beliefs and customs**

1. B  
2. A  
3. B  
4. B  
5. A  
6. Jesus Christ  
7. False  
8. True

UNIT 3: THE VICTORY OF JESUS CHRIST OVER PAIN AND SUFFERING

a) **Causes of suffering**

1. An experience of emotional, physical or mental pain, sorrow or discomfort  
2. B  
3. Natural calamities like earthquakes, accidents on our roads, sickness like HIV and AIDS, robbery or theft, loss of job, drug abuse.
4. i) Emotional suffering
   ii) Ask him to repent and ask God to forgive him through prayers


b) Pain and suffering
1. Suffering is the feeling of sadness due to discomfort or sorrow whereas pain is unpleant sensation in the body
2. Mental suffering involves the mind, physical suffering involves the body, emotional suffering involves the feelings
3. C  4. B
4. Emotional suffering is difficult to heal because it involves one’s heart’s feelings. This takes time because it may involve sessions of counselling. One might take time to change their opinions over the problems they are going through.
5. Emotional suffering. This will cause anger and humiliation in her.
6. (a) Mental suffering
   (b) This may be caused by diseases such as syphilis, drug abuse or intense stress.

7. Jesus Christ triumphs over pain and suffering
1. D
2. - He was arrested, tortured and crucified on the cross for the forgiveness of our sins
   - He was also rejected in his own town
   - He was betrayed by Judas Iscariot
3. He died, resurrected from the dead and ascended into heaven.
4. Jesus Christ suffered in order to bring us salvation from our sins upon repenting. Through Him we are able to experience eternal life
5. A  6. C

d) Purpose of suffering
1. D
2. When one trusts in Jesus Christ, one triumphs over pain and suffering, in the process their faith in God is strengthened.
3. D
4. Insulted, followers, resting
5. D  6. B
7. True
8. True

e) Martyrdom
1. A martyr is a person who suffers or is killed because of his or her faith in God or religious beliefs.

f) Christian suffering today
1. B
2. i) At school, Christian students may be mocked, beaten or harassed by others
   ii) At workplace, Christians may be underpaid, overworked or treated unfairly, for example, denied a promotion
3. Suffering
4. A
5. Stephen
6. True

UNIT 4: LIVING THE CHRISTIAN FAITH

a) Prayer
1. It is a personal conversation or communication with God
2. i) Adoration is the praise and worship to God
   ii) Confession is the acknowledgment that we are sinners and hence need for repentance
ii) **Thanksgiving** is the gratitude we express to God for all the good things He has done for us.

iv) **Supplications** are the requests we make to our God. Personal requests are called petitions while public requests for many people are termed as intercessions.

3. i) The Pharisee
   ii) God did not hear this prayer because the Pharisee was arrogant and not humble before God.

7. D 8. A
9. Disobedience to God, pride, dishonesty
10. B
11. A public prayer is a prayer made in a group. It involves more than one person.
12. A private prayer is a prayer said by an individual when he or she is alone.
13. C
14. A
15. Yes

b) **Differences between prayer and magic**
4. They were used for fame, power, wealth, getting of children or good health. Sometimes they were used to make destructions or disasters to happen.
8. buy

c) **Relationship between prayer and fasting**
1. It is the act of denying yourself food and drink for a spiritual reason. Fasting helps us to focus our minds on God through prayer.
2. To show dependency on God, to intensify the impact of a prayer to God or to earn God’s favour.
3. D 4. C
5. Fasting helps us to pray without the desire for food, drinks or friends and it also strengthens our prayers. One cannot fast without praying. Both demand for humility and both help to improve our relationship with God.
6. A 7. sad 8. C

d) **Self-denial in service to others**
1. Self-denial is the act of forgetting oneself for the sake of serving God and other people.
2. B
3. The act of denying oneself in order to help others gives one a better chance to serve others. It helps one to concentrate on the needs of others.
4. D 5. B
6. Jesus readily suffered mockery, persecutions and death because of our sins.

e) **Faith in daily action**
1. Faith is a strong belief and trust in God, being sure of what we hope for and certain of what we cannot see.
2. C
3. (a) By seeking God’s will, being role-models, sacrificing their needs for others and helping the needy.
   (b) This is important so as to portray a good example of Jesus’ teachings to others.
4. Living sacrifice
5. Faith
6. D 7. D
8. dead
f) Meaning of a living faith

1. A living faith means acting and behaving according to the values of the word of God. A dead faith comprises of sinful ways of life and dependency on worldly ways.

2. D

3. We should show practical concern for the needy by providing them with basic needs such as food and clothing. The rich should share their wealth with the poor.

4. False


UNIT 5: SOCIAL PROBLEMS AND CHRISTIAN VALUES

a) Christian values

1. A

2. Christian values are the Godly morals in us while the secular values are the worldly desires that people adopt for pleasure.


15. D 16. A

b) Social problems

1. Tribalism is favouring and offering privileges to people from one’s tribe while nepotism is favouring one’s relatives.


5. Corruption has taken root at all levels in Kenya, both with the rich and the poor. It has caused great mismanagement and misuse of public resources.

6. i) Better management of resources
   ii) Upholding justice to all
   iii) Not serving people based on tribal backgrounds
   iv) Exercising high degree of integrity

7. B

8. natural

9. C

10. human resources

11. D

c) Upholding Christian values in our lives

1. Christian values promote peaceful coexistence, love and good relationships among people. They also promote generosity, kindness and humility among people and enable us to follow Christ’s example.

2. C

3. the truth

4. B 5. D 6. A

7. True

8. C 9. A

UNIT 6: JESUS FREES AND COMMANDS

a) Meaning of Christian freedom

1. Secular freedom refers to the devotion to worldly desires while Christian freedom means the total commitment to Jesus Christ through exercising all the values He taught like charity and service to others. It also means having our sins forgiven.

2. C

3. Always to do what the will of God is

4. D

5. This is because Christians should not allow evil actions or bodily desires to
hinder them from the freedom that Jesus gave them; freedom from sin.

6. C
7. Free
8. Love

b) Jesus Christ shows His obedience to God
1. Jesus Christ remained loyal and obedient to God even to His death. When He was being arrested, He asked that God’s will be done. He did not resist the arrest
2. B 3. C 4. A
5. Kiss

c) Jesus Christ’s reaction towards freedom
1. D
2. A free person is the one who knows the truth about Jesus because of exercising His teachings and doing the will of God
3. Free 4. Slave
5. A 6. C

d) Jesus Christ’s respect for authority
1. He told the Pharisees that they should pay the Emperor what belongs to him (taxes) and to God what belongs to God
2. D 3. A
4. taxes 5. B
6. True 7. False
8. True

e) Personal freedom
1. C
2. i) We should not use our freedom to mislead but allow others to learn from our good character
   ii) We should not cover up any evil in the society but help others learn from it
   iii) We can use our personal freedom to visit the sick, to visit prisoners, to help orphans and widows.
3. Using our freedom to enslaving others, engaging in the evils of the society such as sexual immorality and drug abuse.
4. They will live a long time here on earth
5. evil 6. B
7. obedient 8. D

f) Loyalty to the state
1. Endangering your country for example, assisting your country’s enemies or attempt to overthrow one’s government.
2. A
3. Betraying one’s country
4. permission 5. C
6. True 7. A

UNIT 7: THE FAMILY AND MARRIAGE

a) Types of families
1. A group of people related either by blood, marriage or adoption
2. A nuclear family comprises of a husband, wife and children whereas an extended family is made up of father, mother, children, grandparents, grandchildren, uncles, aunts and all their relatives
3. It is easier to feed and manage, it is easier to educate and provide for
b) Factors to consider when choosing a marriage partner

1. B 2. D

3. It is important because HIV and AIDS has no cure yet. It is still a killer disease and partners can make informed decisions after the testing. It also helps to control the spread of HIV and AIDS.

4. the Garden of Eden

5. Adam, Eve

6. 18 years 7. B 8. C

c) Marriage


5. i) Belonging to a different religion

ii) Incompatible cultural background

iii) Difference in interests to a greater percentage

iv) Wide age gap

v) Joblessness

vi) Lack of God in marriage

6. When we want to marry, we should pray to God for guidance because love and faith in God makes up a marriage.

7. A monogamous marriage is easier to manage and provide for since it involves fewer people. The polygamous one is difficult to manage because it involves many people with different ideas.

8. Food, clothing and shelter. Other needs are love, hope for a better living, security and acceptance.

9. This is to make the planning of their needs easier. It is easier to provide for a manageable family which is relatively small.

d) Qualities of a good parent

1. Advising children in all matters, providing food, clothing and shelter

2. A good parent is concerned about the spiritual welfare of the children, a good parent provides security and protection to his or her children, good parents provide love and attention to their children.


e) Qualities of a good child

1. Helping in family duties and chores, providing emotional security

2. Being a role model, being God fearing, being respectful to elders, obedient, honest

3. gift 4. disciplined

5. obey 6. D

f) Traditional African view on love and marriage

1. C

2. The dowry was like a seal for the marriage since it made the wife develop a sense of belonging, it was a sign of appreciation to the girls parents, a girl also felt loved after her dowry was paid.

3. A

4. Polygamy is when a man marries more than one wife.

5. C 6. taboo

7. Procreation 8. True

9. false 10. True

g) Christian teaching on love and marriage

1. companionship

2. submit


UNIT 8: RESPONDING TO CHRIST’S CALL

a) Meaning of discipleship
1. Following Jesus Christ and obeying His teachings
2. C
3. Foregoing worldly pleasures in order to be able to serve God and others
4. A
5. i) Falling into social problems due to too much wealth or peer pressure
   ii) Rejection
   iii) Mockery
   iv) Persecutions
6. drive out all the demons
7. A follower of Jesus Christ
8. A
9. martyr

b) Teaching of Jesus Christ on discipleship
1. love, pray 2. B
2. plough, back, use, kingdom
3. gardener 5. B 6. fruit
4. C 8. C

c) The place of wealth in Christian discipleship
1. C
2. lying, rich, poor, need
3. A
4. wealth is having great amounts of money and property
5. False

d) Misuse of wealth in Christian discipleship today
1. peace 2. pay
3. A 4. True

5. B
e) Role of evangelists and witnesses
1. An evangelist preaches the gospel and counsels people whereas a witness is a Christian who serves and participates in church activities as well as confess great work of God.
2. B
3. A gospel preacher who preaches and counsels people through television
4. D
5. power

UNIT 9: MEANING OF LEISURE

a) Meaning of leisure
1. The free time we have for ourselves away from our regular work or routine
2. Active leisure is leisure that entails a person being physically involved.
3. Passive leisure is leisure that does not require a person to take part in any physical activity
4. C
5. Passive leisure is when we have very minimal physical activities whereas active leisure is when the whole body is involved in physical activities
Passive leisure may lead to idleness and encourage laziness if overused. Active leisure helps to develop and use God-given talents.
6. C 7. Passive leisure

ANS BK 8 combined.indd 238 4/27/15 9:09 AM
b) Leisure today and in traditional African communities

1. Singing during marriage ceremonies, dancing during initiation ceremonies, beer parties for the elders, hunting, basket weaving, wrestling
2. Leisure was used as an opportunity to make work enjoyable and teach certain moral values and taboos to the youth

c) Uses of leisure

1. Recreation, supplementing income, meeting friends, developing skills like football, preaching God’s word
2. A
3. i) It helps one to grow in their reasoning
   ii) It helps one to strengthen their faith in God, especially when they take part in spreading the Gospel
   iii) Interacting with others helps one improve their interpersonal skills
   iv) It helps in improving cultural awareness
4. evil, Saul, harp 5. C
6. True 7. A

d) Christian activities during leisure

1. Taking part in youth camps, singing in the church choir, cleaning the church, visiting the needy, spreading the Gospel
2. D
3. People encourage each other when they visit each other and share ideas, people appreciate each other and feel honoured to have friends who care, leisure brings joy
4. B
5. Holy

e) Misuse of leisure

1. Engaging in sexual immorality, abusing drugs, gossiping, stealing, gambling
2. Indulging in sexual activities will cause unwanted pregnancies, stealing may result to one being imprisoned, taking drugs may cause sickness or insanity, it may lead to waste of money, for example, if one engages in gambling

f) Leisure and unemployment

1. Leisure is the free time away from regular work whereas unemployment is the situation of having all the free time because one is idle and has no job to do
2. D
3. He taught that those who do not work should not eat; He condemned laziness and commended hard work
4. True
5. B
6. B

Answers to Model Paper 1

1. C 2. B 3. D
25. D 26. C 27. A

Answers to Model Paper 2

1. C 2. A 3. A
Answers to Model Paper 3
1. A 2. B 3. D

Answers to Model Paper 4
25. D 26. A 27. A

Answers to Model Paper 5

Answers to Model Paper 6

Answers to Model Paper 7
1. D 2. B 3. D

Answers to Model Paper 8
4. A 5. A 6. A
28. A  29. D  30. A

Answers to Model Paper 9

Answers to Model Paper 10
4. B  5. B  6. A

Answers to Model Paper 11

Answers to Model Paper 12

Answers to Model Paper 13

Answers to Model Paper 14
1. A  2. B  3. C
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. D</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. D</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. D</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. B</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. C</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. B</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. D</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. A</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13. B</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14. B</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15. B</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>