This book provides answers for:
Breakthrough Workbook English 6
Breakthrough Workbook Maths 6
Breakthrough Workbook Kiswahili 6
Breakthrough Workbook Science 6
Breakthrough Workbook Social Studies 6
Breakthrough Workbook CRE 6
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Subject</th>
<th>Pages</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td>1 - 31</td>
</tr>
<tr>
<td>Maths</td>
<td>32 - 69</td>
</tr>
<tr>
<td>Kiswahili</td>
<td>70 - 88</td>
</tr>
<tr>
<td>Science</td>
<td>89 - 108</td>
</tr>
<tr>
<td>Social Studies</td>
<td>109 - 167</td>
</tr>
<tr>
<td>CRE</td>
<td>168 - 178</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 6
- Maths Class 6
- Kiswahili Class 6
- Science Class 6
- Social Studies Class 6
- CRE Class 6
Unit 1: Health and hygiene

A. Reading

B. Let’s recall the passage
1. C an ambulance
2. B pneumonia
3. A he had lost his appetite and therefore could not eat
4. Three diseases: pneumonia, tuberculosis, polio, flu, HIV and AIDS
5. Vaccination guards children against diseases
6. B all is well that ends well

C. Vocabulary

Word Puzzle
1. A vehicle equipped to carry the sick – ambulance
2. An infectious disease that affect the lungs – pneumonia
3. A treatment to protect one against a disease – vaccination
4. A serious disease that causes death – aids
5. An illness that goes on for long is said to be – persistent
6. The outcome of a tested specimen – test results
7. A disease that makes it difficult for one to breath – pneumonia
8. A small living thing that spreads diseases – germs
9. The desire to eat – appetite
10. A person who does not eat may lose – weight
11. It enters the body and makes one sick – virus
12. Something to be tested – specimen
13. Signs of an illness – symptoms
14. The short form of Human Immuno Deficiency Virus – HIV

D Language patterns

I. Use of too + adjective + for + nominal
1. The food was too hot for the patient to eat.
2. The queue was too long for us to continue waiting.
3. The doctor was too shocked to talk to us.
4. The syrup was too bitter for the patient to take.
5. Maina is too sick to walk.
6. Peter is too healthy to be admitted at the hospital.
7. The fire was too much for the firemen to put out.
8. The girl is too young to travel to the countryside by herself.
9. The bag is too heavy for him to carry by himself.
10. The sun is too hot for the players to run today.

II. Use of conditional sentences involving impossible conditions with affirmatives
1. If she had taken the medicine, she would have got well.
2. If the patient had waited, the nurse would have talked to him/her.
3. If the man had been seriously injured, the doctor would have been called.
4. If he had taken the advice seriously, he would have survived.
5. If the mother had acted immediately, the boy would have survived.
6. If the patient had been given enough
time, he would have taken his lunch.
7. If Amina had taken her job seriously, she would not have lost it.
8. If the books had been collected, the teacher would have marked them.
9. If the bus had been overloaded, it would have been involved in a road accident.
10. If we had money, we would have fuelled the car.

**III. Sentences involving impossible conditions with negatives**

**Writing sentences from the table**
1. If he had not worked hard, he would not have passed.
2. If Juliet had not been given first aid, she would not have survived.
3. If Mary had not asked for words of advice, Romeo would not have married her.
4. If Mrs Amani had not gone to church, the pupils would not have passed the exam.
5. If Tom had not gone to see a doctor, he would not have survived.
6. If they had not listened to their parents, they would not have won.
7. If I had not committed myself, they would not have won.
8. If he had not worked hard, they would not have passed.
9. If she had not asked for words of advice, she would not have survived.
10. If they had not gone to church, they would not have won.

Accept other sensible and correct sentences

**IV. Use of adjective + noun: noun groups**
1. Last week, Ole teta bought a two-week old sheep.
2. I read about a three-eyed monster.
3. The couple wants to take a two-month trip.
4. My grandmother likes to sit on a four-legged chair.
5. He is taking a two-year French course.
6. She married a fifty-year old man.
7. The boy fell into a two-metre deep ditch.
8. The couple was given a double-cabin vehicle.
9. Have you eaten a six-course meal?
10. Where is the three-legged stool?

**E. Grammar**

**I. Use of commas in lists with phrases in apposition**
1. Kerubo, the best girl in our class, will come to our home tomorrow.
2. Macmillan dictionaries, the best reference books, are available in all bookshops.
3. Mrs Juma, the lazy matron, has been suspended from work.
4. Mr Oluoch, our family doctor, is becoming better these days.
5. Toyota, the best car in the market, is selling like hotcake.
6. AIDS, the most deadly disease, has become a slow killing monster.
7. Patricia and Helen, the student nurses, are very kind to patients.
8. She ate chips, chicken, fish and fruits.
9. When we went to the coast, we visited Fort Jesus, Gedi Ruins, Haller Park and Diani Beach.
10. Have you seen Peter, John or Dave?
II. Adjectives as complements of ‘be’ ‘become’ and ‘get’.

1. intelligent 6. wealthy
2. proud 7. sick
3. well 8. wise
4. healthy 9. singer
5. successful 10. bright

F. Let’s write: Dialogue
Teachers to accept any relevant answers from the pupils. The answers will vary from one pupil to the other. Accept any sensible answer.

Quick fire
(a) Three ways of contracting HIV virus
   (i) Blood transfusions of infected blood.
   (ii) Deep kissing an infected person.
   (iii) Having sexual intercourse with an infected person.
   (iv) Sharing items like nail cutters, razor blades, toothbrushes with an infected person.
(b) Ways of preventing the infection
   (i) Avoid sex before marriage.
   (ii) If married, be faithful to one’s partner.
   (iii) Avoid deep kissing.
   (iv) Blood should be carefully examined before transfusions are done.
   (v) Avoid sharing personal items like nail cutters, toothbrushes.
       (Accept any other relevant answers)

Unit 2: Shopping

A. Reading

B. Let’s recall the passage

1. B have a leisure walk in town
2. A friends

C. Vocabulary

1. Left luggage – a section in a supermarket where customers’ luggage is temporarily stored.
2. Window shopping – looking at displayed items.
5. Shop lifting – picking items from a shop without paying for them.
6. Tills - a drawer at the counter, where money is kept.
7. Carrier bag – a bag for carrying shopping usually given at the counter.
8. Short change – to give less change to a customer.
9. Shop attendant – one who takes care of customers’ needs at the shop.

Sentence construction
Accept any sensible and relevant sentences given by the learners.

D. Language patterns

I. Use of too many + nominal + to + verb
Accept any 10 correct sentences
Possible sentences
1. The carrier bags were too many for him to handle.
2. The story book was too long for Amina to read.
3. The dress was too costly for the customers to pay for.
4. The security guards were too fast for the thieves to escape.
5. The water was too little for the shop attendants to drink.
6. The dress was too small for Amina to wear.
7. The items bought were too heavy for Mkulima to carry.
8. The customers were too noisy for the baby to sleep.
9. The rain was too heavy for Mkulima to plant.
10. The food was too cold for Ngui and Mari to pay for.

II. Compound nouns + possessive (apostrophes) (’)
1. The car’s seat belts are spoilt.
2. The shop attendants’ salaries were delayed.
3. The shop manager’s friends were hijacked.
4. The price tags’ writings were not clear.
5. The shoplifters’ identity cards were found at the counter.
6. The green grocer’s shelves were not in good condition.
7. Have the classrooms’ doors been repainted?
8. The policemen’s uniforms are new.
9. The newspapers’ sales have gone down.
10. The blackboards’ colour is black.

III. Use of compound noun + noun groups
A. Form compound nouns

<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>B</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>shop</td>
<td>bag</td>
</tr>
<tr>
<td>2</td>
<td>carrier</td>
<td>board</td>
</tr>
<tr>
<td>3</td>
<td>price</td>
<td>attendant</td>
</tr>
<tr>
<td>4</td>
<td>shop</td>
<td>list</td>
</tr>
<tr>
<td>5</td>
<td>evening</td>
<td>grocery</td>
</tr>
<tr>
<td>6</td>
<td>green</td>
<td>lifting</td>
</tr>
<tr>
<td>7</td>
<td>chalk</td>
<td>shade</td>
</tr>
<tr>
<td>8</td>
<td>lamp</td>
<td>room</td>
</tr>
<tr>
<td>9</td>
<td>bed</td>
<td>light</td>
</tr>
<tr>
<td>10</td>
<td>day</td>
<td>dress</td>
</tr>
</tbody>
</table>

B. Fill the blank spaces
five, twenty, one hundred, two hundred

E. Grammar
I. Plurals of nouns ending in -y
1. boys 6. deliveries
2. dairy 7. puppies
3. monkeys 8. lorries
4. valleys 9. diaries
5. trolleys 10. berries

II. Adjectives coming before nouns
A. Underlining adjectives in the sentences
1. new, mobile 6. white, good
2. green, old 7. many
3. shopping 8. old
4. handsome 9. small, red
5. yellow, torn 10. three

B. Filling in the correct adjectives
1. ripe, unripe, big, small
2. Maths, English, new
3. brown, aching, refilled
4. good, beautiful, ugly
5. outdoor, indoor
6. brown, black, favourite
7. best
8. dark, grey
9. beautiful, descent, new
10. scrumptious, delicious, tasty

NB accept any other suitable adjective

III. Use apostrophe to show possession
1. dog’s
2. shop’s
3. attendants’
4. cashier’s
5. customer’s
6. supermarket’s
7. shop’s
8. ladies’
9. baby’s
10. customer’s

F. Let’s write

a) (i) Go through the advertisement with the learners and let them give other similar advertisements from the current communication media like radios, newspapers and televisions.
(ii) Let them come up with their own advertisements on any food type well described and illustrated.

b) Pictorial composition
Let the learners study the picture given. They can also briefly discuss in groups before the actual writing of the composition and advertisement which should be done individually.

II. Sentences construction

D. Language patterns
I. Use of indirect objects as subjects of the passive with give/send/show/offer/promise

Matching sentences

Possible Sentences
1. The guests were shown several rooms where they would stay.
2. The pupils were promised a trip to Mombasa if they passed in the exams.

B. Let’s recall the passage
1. because they did not know what to expect of the day as it was the first wedding in the family.
2. D – none of the above
3. the ushers welcomed the guests into the church

C. Vocabulary – Matching words with their meanings
1. Master of ceremonies – one who is in charge of introducing speakers and performances in a formal event.
3. Couple – husband and wife.
5. Procession – a line of people moving in a slow and formal way.
7. Vase – a container for putting in flowers.
8. Wedding gown – a special dress worn by a bride during a wedding.
9. Name tag – labels bearing people’s names.

Unit 3: Celebration

A. Reading

B. Let’s recall the passage
1. because they did not know what to expect of the day as it was the first wedding in the family.
2. D – none of the above
3. the ushers welcomed the guests into the church

4. B – the wedding was colourful
5. A – be easily identified in case one needed help
6. congregation
7. C – The wedding ceremony
3. The couple was given some flowers by the manager.
4. The bridegroom was offered a car and a house as presents.
5. The cooks were promised promotions if they worked well.
6. The driver was given a car and a house as presents.
7. The church was given new members by the diocese.
8. Mulwa was sent ten kilos of sugar by his sister.
9. The salesman was promised a good deal by his customers.
10. The bridegroom was offered some presents by his relatives.

II. Use of suppose/be/afraid/know + clause
Accept any suitable answers given by the learners.

Possible answers
1. has broken down
2. is still on
3. will arrive late
4. not that easy to bake
5. will be taken up by the teacher of maths
6. that I have to see a doctor
7. public means
8. will be delayed
9. the cold breeze in the evening
10. will be rewarded for her good performance
Accept any other sensible option

III. Use of past continuous passive
1. The cake was being decorated by the girls.
2. The invitation cards were being written by Fatuma.
3. Clothes were being washed by Atieno and Juma.
4. The guests were being barked at by the dog.
5. The goods were being loaded into the truck by the workman.
6. When we walked into the compound, the car was being stolen by the thief.
7. The mobile phone was being repaired by Tamaa.
8. The best man was being driven to the wedding by Njogu.
9. The floor was being swept by her.
10. The donkey cart was being driven by Amina.

E. Grammar

I. Double consonants in past tense and in present participle
1. knitted, knitting
2. tripped, tripping
3. pinned, pinning
4. patted, patting
5. stepped, stepping
6. slipped, slipping
7. ripped, ripping
8. slammed, slamming
9. shopped, shopping
10. travelled, travelling
11. skipped, skipping
12. trimmed, trimming
13. hugged, hugging
14. wrapped, wrapping

II. Filling blanks with the correct forms of the given verbs
1. stopped 6. running
2. slap 7. trimming
3. clapped 8. tapping
4. sitting 9. wrapped
5. cutting 10. stepped
III. Proper Nouns

Identifying the proper nouns

St Josephine church, Lucy, Kirerieni supermarket, Ruwenzori Mountain, Kinyonge Tea Factory, Jedidah, Nkurai Market.

F. Let’s write

I. Let the teacher go through the invitation letter with the pupils. The pupils can then fill in the blanks with the most suitable words. Answers will vary from one student to the other.

II. Designing a poster

The teacher may design a small poster on the chalkboard not necessarily based on the given one. Later, the learners can draw a poster on the invitation letter in (I) above.

Unit 4: Drugs

A. Reading

B. Let’s recall the passage

1. C drug addicts cannot do with out drugs
2. a drug is a substance used to treat a disease or a medicinal problem or an illegal substance that when taken affects someone physically or mentally
3. Examples of drugs: tobacco, alcohol, bhang and glue
4. B drugs have bad effects especially on the youth
5. A allowed
6. a drug addict is a person who cannot do without drugs.
7. the act of illegally being involved in buying and selling of drugs
8. A, B - restless and stubborn respectively

C. Vocabulary

drug, medicinal, herbal, harmful, overdose, under dose, addicts, effects, restless, stubborn, glue, bhang, tobacco, alcohol

D. Language patterns

I. Use of hear/see/want/have/get/would/like + noun + past participle

Possible sentences

1. Smoking in public should be illegal in our country.
2. The government wants drug abuse controlled.
3. Most people see smoking prestigious.
4. The youth would like drug trafficking stopped.
5. People caught selling cigarettes to children should be fined.
6. The world would like child abuse stopped.
7. The children would like drug abuse controlled.
8. Smoking in public should be fined.
9. The youth would like regular advice from doctors.
10. The world would like drug addicts treated.

II. Use of relative clause ‘who’

1. She is the lady who sells herbal medicine.
2. He is the boy who was terribly affected by drugs.
3. The boy who died last week was a drug addict.
4. This is the boy who has a mental disorder.
5. She is the new matron who is very strict.
6. The girl who is carrying a cup is my friend.
7. Asha is the girl who was pulling the donkey cart.
8. Here is the boy who won the best prize.
9. This lady whom I met is very honest.
10. The pupils whom or who you saw are my classmates.

III. Use of ‘wonder how’
In this exercise, accept any suitable answer from the learners as long as the sentence make sense since the answers will vary.

IV. Use of understand/see + where/what/why/how
1. why 6. how
2. how 7. why
3. how 8. how
4. where 9. what
5. why 10. where

E. Grammar
I. Use of full stops in abbreviations
1. K.B.S. 6. Eg. or E.g.
2. A.I.D.S. 7. KM.
5. K.B.C. 10. N.W.

II. Use of Commas in apposition
1. Kiore, Mr Karaka’s firstborn, is now a renowned teacher.
2. Mr Marengo, my class teacher, is fond of playing football.
3. My sister, Sally, lives in Kericho.
4. Our headman, my dad’s best friend, owns one of the fully stocked shops in the village.
5. Makongeni, our village market, is the hideout for drug addicts.
6. Lions, just like the cheetahs, belong to the cat family.
7. Omari, the best pupil in Mathematics, has become the top candidate in the country.
8. Nairobi, the capital city of Kenya, is bigger than Kampala.
9. A doctor, one who treats the sick, does a very tiring job.
10. Hector, the pilot flies abroad every week.

F. Let’s write
I. Writing a friendly letter
Let the teacher go through each picture and let the learners express what they think is happening in each. Remind them on the format of a friendly letter and let them write one based on the pictures given. Give them ideas as they come up with theirs orally before they write in their books.

II. Summary (Points writing)
In pairs, let the learners discuss drugs on a wider perspective. Let them discuss the good as well as the bad things about drugs. The teacher to allow several groups to make presentations of the same before the class to create a chance for participation by all. Make it lively as the learners learn of the dangers involved in drugs and drug addiction.
Unit 5: Giving directions

A. Reading

B. Let’s recall the passage
4. because she had not been to Makena’s home before
5. A-to meet unexpectedly
6. North, South, East and West
7. she was supposed to use the map given to her by her friend
8. Makena felt happy, jolly, excited, overwhelmed with joy/melted with joy
9. next to

C. Vocabulary

I. Matching words with their meanings
1. Cardinal – the chief points of a compass
2. Not far away – near
3. Beside – next to
4. Map – a drawing showing directions to a place
5. Junction – a place of joining e.g. where Railway lines meet
6. Route – a way taken from one place to another
7. Sign post – a sign to make a place known
8. Lane – a narrow country road

II. Sentence construction
Let the learners study the sentences given and come up with their own using the given vocabulary items. Accept any correct sentence.

III. Road Signs
1. turn right
2. turn left
3. drive straight ahead
4. roundabout
5. cross roads
6. T - junction

D. Language patterns

I. Use of clauses joined with ‘although’
1. (a) Leah decided to climb the mountain although she did not have a map.
   (b) Although she did not have a map, Leah decided to climb the mountain.
2. (a) I managed to trace where they live although it was my first time to visit them.
   (b) Although it was my first time to visit them, I managed to trace where they live.
3. (a) I was able to visit my cousin in Mombasa although she had only given me a map as a guide.
   (b) Although she had only given me a map as a guide, I was able to visit my cousin in Mombasa.
4. (a) My brother had given him directions although he took the wrong route.
   (b) Although my brother had given him directions, he took the wrong route.
5. (a) He was told to wait at the junction although he waited at the crossroads.
   (b) Although he waited at the crossroads, he was told to wait at the junction.
6. (a) Although Peter is young, he is intelligent.
7. (a) We arrived late although we left early.
   (b) Although we arrived late, we left early.
8. (a) Guru won the 100-metre race although he had a leg injury.
   (b) Although he had a leg injury, Guru won the 100-metre race.
9. (a) We will visit the Game Park although we don’t have enough money.
   (b) Although we don’t have enough money, we will visit the Game Park.
10. (a) Terry managed to carry the dustbin although it was heavy.
    (b) Although the dustbin was heavy, Terry managed to carry it.

II. Use of further/shorter/longer/nearer + than
(a) True or False
   2. False  5. True  8. False

(b) Sentences writing using the table
Possible sentences
1. Changi is nearer to Mwiru than Matomo.
2. Kore is farther away from Mwiru than Changi.
3. Katolo is nearer to Mwiru than Bebea.
4. Matomo is farther away from Mwiru than Kore.
5. Bebea is farther away from Mwiru than Katolo.

III. (a) Contrastive use of ‘hope/be/afraid/think/suppose in affirmative and negative
1. affirmative 9. affirmative
2. affirmative 10. negative
3. affirmative 11. negative
4. negative 12. negative
5. negative 13. affirmative
6. negative 14. affirmative
7. negative 15. affirmative
8. affirmative

(b) Writing affirmative sentences
Accept any correct sentences e.g. I am a good boy.

(c) Writing negative sentences
Accept any correct sentence e.g. I am not a good boy.

E. Grammar
I. Pronunciation of sounds /a/ and /ʌ/
(a) Let the teacher help pupils to pronounce the words correctly
(b) Filling the blanks
1. hat, hut 6. cap, cup
2. bat, but 7. mad, mud
3. hatch, hutch 8. shrunk
4. rushed, rash 9. sang
5. cat, cut 10. hutch

II. Pronunciation of /s/ and /ʃ/ /θ/ and /ʃ/ and / parameters
(a) Let the learner read the words loudly. Pay attention to how they pronounce the words
(b) 1. dish 6. march
    2. ditch 7. cheap
    3. ship 8. shock
    4. watch 9. wash
    5. harsh 10. mash
III. (a) Adjectives coming before nouns
1. long 6. two
2. four, main 7. far
3. accurate 8. short cut
4. big 9. right
5. nearest 10. other

(b) Filling in the blank with the correct adjectives
1. friendly 6. cloudy
2. golden 7. wealthy
3. lovely 8. foolish
4. woollen, beautiful 9. interesting
5. courageous 10. careful

F. Let’s write
(a) Description
2. Kenya
3. five
4. Uganda
5. Ethiopia and Sudan
6. Tanzania
7. Nairobi
8. 47
9. the learner to give his county of origin
10. accept any plant grown like: coffee, tea, cotton, tobacco, pyrethrum etc.
(Accept any other answer).

Unit 6: At home

A. Reading
B. Let’s recall the passage
1. D
2. because there was too much work to be done

C. Vocabulary
I. Using the words in the box to fill blank spaces
1. gate 5. neighbourhood
2. chores 6. homestead
3. split 7. hosepipe
4. mend 8. mow/slash

II. Sentences (possible) from the pictures given
1. George is roofing the house.
2. Chebet is brushing her teeth.
3. Ben is sweeping the compound.
4. Penny is polishing her shoes.

D. Language patterns
I. Use of the present continuous passive
1. The clothes are being washed by him.
2. The food is being cooked by her.
3. The child is being pushed by the mother.
4. The grass is being mowed by the neighbours.
5. The floor is being mopped by the house help.
6. The curtains are being drawn by him.
7. The flowers are being planted by Kamau.
8. The table is being laid by Koome.
9. The house is being built by the Mason.
10. By whom is the wheelbarrow being given out?

II. Use of compound adjectives formed with noun + -ed
1. single – bed roomed
2. long – handled
3. three-legged
4. dark- coloured
5. light – coloured
6. well-tarmacked
7. two-tiered
8. light-skinned
9. one-eyed
10. ten-storeyed

III. Use of the apostrophe to show possession

(a) 1. This shop sells men’s wear.
2. It’s not easy to grab a lady’s purse.
3. Kamau’s home is surrounded by flowers.
4. The dishes’ lids are missing.
5. My mother’s new dress is not good.
6. The dog’s always wagging its tail.
7. My brother’s car has a mechanical problem.
8. Agnes’ friend is unhappy with her conduct.
9. Moses’ suitcase is out of fashion.
10. Our neighbour’s compound is well-fenced.

(b) Rewriting sentences using the apostrophes
1. The red car is Mwaniki’s.
2. The big bull is Mkulima’s.
3. The new house is Moses’.
4. Is all that Haji’s?
5. Obu Football Club is Pele’s.
6. Is the young boy Mrs Kamau’s son?
7. That bed is the carpenters’.
8. The new computer is Philips’.
9. The helicopter is not vondule’s.
10. The old lorry is Feli’s.

E. Grammar

I. Use of ‘whatever’ as conjunction possible sentences
1. Tony is ready to pay whatever she wanted.
2. He is free to say whatever he desires.
3. Tom will buy a car whatever it takes.
4. Suzy will eat whatever dish you prepare.
5. Jane did whatever she wanted.
6. We will appreciate whatever dish you prepare.
7. He cooked whatever he desires.
8. Neno is free to say whatever her parents want.
9. The dish will be prepared whatever the case.
10. The dish will be prepared whatever it takes.

II. Passive in simple present tense
1. The dog is carried by Achi.
2. Good food is cooked by her.
3. Queen cakes are baked by him.
4. The walls are repaired by the mason.
5. Everyday, cows are milked by Korir.
6. Visitors are welcomed by Choge.
7. Clothes are washed by them all day long.
8. The cows are milked by Yusuf and Moha.
9. Good songs are sung by the choir.
10. Strangers are barked at by dogs at night.
11. Homework is done by pupils in school.
12. Grandchildren are told stories by their grandmothers.

III. Direct Speech
1. “The food is saltless,” my father said.
2. “The flowers are very good,” she said.
3. “Where have you been?” My aunt asked me.
4. “I did not like the way you welcomed the visitors,” my sister told me.
5. “Over-eating gave me a stomachache,” Mary said.
6. “The dinner is very tasty,” said my youngest brother.
7. “My hair is long,” said my friend William.
9. “Can I know the name of the stranger?” demanded Pauline.
10. “Please don’t hurt my younger brother,” Amina pleaded with the thieves.

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

Example
A visit
Paragraph 1 preparations
Paragraph 2 what you saw on the way
Paragraph 3 witnessed an accident
Paragraph 4 how did you help?
Paragraph 5 did you continue with the journey or not?
Paragraph 6 conclusion

C. Vocabulary
Using words in the table to fill in the blank spaces
accidents, occur, head-on collision, overspeeding, traffic rules, road safety, sidewalk, zebra-crossing, pedestrians, traffic police, first aid, accident victims, bandage, injuries, fractures, injured.

D. Language patterns
I. Use of show + nominal + how/where/what to
1. where 6. how
2. how 7. where
3. where 8. how
4. what 9. what
5. what 10. where

II. Use of certain/lucky/likely/unlucky + clause
1. likely 6. lucky
2. lucky 7. unlucky
3. lucky 8. likely
4. unlucky 9. likely
5. likely 10. lucky

III. Use of interrogatives with who/what
1. what 9. what
2. what 10. who
3. what 11. what
4. who 12. who
5. what 13. what
6. who 14. what
7. what 15. what
8. who

E. Grammar
I. Adjectives
a) fine, new, short, serious, minor, nearest, lengthy, rugged-looking, well, fine, younger, left.
Using adjectives to describe pictures
A. She is an active girl.
B. It is a neat bed.
C. He is a polite boy.
D. It is a dangerous bull.
E. These are ripe bananas.
F. It is a modern plane.
NB/ accept any sensible and relevant sentence. The underlined are adjectives

II. Adverbs
a) Adverbs of manner with -ly
1. Immediately 6. brightly
2. beautifully 7. bravely
3. hurriedly 8. unfortunately
4. carefully 9. carefully
5. narrowly 10. skillfully

b) Adverbs of place/time
1. late – adverb of time
2. everywhere – adverb of place
3. now – adverb of time
4. there – adverb of place
5. now – adverb of time
6. when – adverb of time
7. sunset- adverb of time
8. everyday- adverb of time
9. tomorrow – adverb of time
10. there – adverb of place

c) Adverbs of manner without -ly
1. fast 6. well
2. quick 7. better
3. hard 8. long
4. careless 9. far
5. late 10. soon

III. a) Personal pronouns
1. his 6. they, her
2. his 7. he
3. she 8. I, it
4. He 9. she
5. him 10. They

b) Filling blanks with the correct personal pronouns
1. her 6. you
2. they 7. her
3. I 8. she
4. it 9. he
5. it 10. they, it

c) Possessive pronouns
1. theirs 6. mine
2. hers 7. his
3. his 8. hers
4. his 9. yours
5. ours 10. ours
d) Proper nouns
Accept any correct names of people, places, rivers and mountains.

F. Let’s write
Let the Teacher remind the pupils on the format used to write a friendly letter, after which the learners should write the letter.

Unit 8: Travel

A. Reading
B. Let’s recall the passage
1. C
2. set off means to set out or to begin a journey
3. B
4. C
5. D
6. the writer’s father was helped by a mechanic
7. they had carried the first aid kit in case of an emergency
8. B
C. Vocabulary

Filling in the crossword
1. A glass window in front of a vehicle—windscreen.
2. The black wheel—rear-wheel.
3. An instrument showing the speed of a motor vehicle—speedometer.
4. A board that faces the motor vehicle driver—dash board.
5. To mend—repair
6. The metallic part of a vehicle covering the engine—bonnet.
7. A small hole in a tyre—puncture.

D. Language patterns

I. Use of present continuous passive
1. The car engine is being examined by James.
2. The rear wheel is being removed by father.
3. The car is being pushed by them.
4. The speedometer is being removed by the mechanics.
5. The car is being washed by him.
6. The wall is being painted by her.
7. Oranges are being sold by Fatuma.
8. The wound is being dressed by the nurse.
9. Are the trees being stepped on by the elephant?
10. Kenda is being congratulated by Lily.
11. A toy is being made by Derrick.
12. The boys are being pushed by Mr Ndolo.
13. New shops are being opened by the shopkeepers.
14. Are some books being read by the boys?
15. Food is being cooked by Imani.

II. Use of past continuous passive
1. Our car was being stopped by the traffic police.
2. A picture was being drawn by their cousin.
3. The mudguard was being dusted by my mother.
4. The windscreen was being wiped by him.
5. A dress was being stitched by Neema.
6. The tyre was being put in the boot by the driver.
7. When we entered the house the dog was being fed by father.
8. Was the baby being fed by Amina?
9. Hawa was not being beaten by Hellen this morning.
10. The cow was not being milked by Ndegwa when the thieves stormed into the house.
11. Were the guests being served by Atieno at the restaurant?
12. A car was not being driven by Ben.
13. The cat was not being chased by the dog.
14. Notes were being written by Mr Tito in the staff room.
15. The table was being made by the carpenter.

III. Use of really/quite/rather + adjective

Possible sentences from the table
1. It was rather hot and some of the boys removed their sweaters.
2. The baby is quite hungry; he has not eaten anything since morning.
3. The tyre is quite worn-out. Please buy another one.
4. The police are rather angry with the thief who robbed the old lady.
5. We are really tired; we cannot play another game.
6. Mr Njuguna is rather happy with the pupils who won the awards.
7. The girls were really sad for their friends got injured.
8. The weather was quite hot and some boys removed their sweaters.
9. We are rather tired, we can’t play another game.
10. It is quite dangerous to drive at night without headlights.

Let the pupils construct possible sentences from the words given. Correct them incase they make a mistake. Accept any sentence which is correct.

**IV. Use of ‘either... or’**

1. The mechanic may either be sick or has resigned.
2. Either the rear wheels or the headlights are damaged.
3. After the accident, the victims were either treated and discharged or admitted to hospital.
4. Since the roads are not in good condition, we can either take a plane or a train.
5. The government is either worried about population increase or ethnic violence.
6. Stella is either sick or has no money.
7. They will either use the Kisumu bus or the Kakamega bus.
8. The teacher is either in the staffroom or in the library.
9. Show me either the house or the car.
10. Jerry wants to feed either the dog or the cat.

**E. Grammar**

1. Pronunciation of the sounds /s/ and /sh/

Let the teacher help the pupils pronounce the words correctly.

**Filling in the blank spaces**

1. sit, sheet 6. share
2. harsh, has 7. ocean
3. see, she 8. shoulders
4. sky, shells 9. shears
5. bus, bush 10. soaked/shocked

**II. Use of apostrophes (’) in plurals without ‘S’**

1. oxen’s 6. children’s
2. sheep’s 7. men’s
3. geese’s 8. women’s
4. furnitures’ 9. stepchildren’s
5. bedding’s 10. firemen’s

**III. Apostrophes for contracted forms**

<table>
<thead>
<tr>
<th>Contracted form</th>
<th>Words</th>
</tr>
</thead>
<tbody>
<tr>
<td>doesn’t</td>
<td>does not</td>
</tr>
<tr>
<td>shouldn’t</td>
<td>should not</td>
</tr>
<tr>
<td>we’d</td>
<td>we would</td>
</tr>
<tr>
<td>I’ll</td>
<td>I will</td>
</tr>
<tr>
<td>shan’t</td>
<td>shall not</td>
</tr>
<tr>
<td>can’t</td>
<td>cannot</td>
</tr>
<tr>
<td>shouldn’t</td>
<td>should not</td>
</tr>
<tr>
<td>won’t</td>
<td>will not</td>
</tr>
<tr>
<td>we’re</td>
<td>we are</td>
</tr>
<tr>
<td>I’m</td>
<td>I am</td>
</tr>
</tbody>
</table>

**Contracting the underlined words**

1. couldn’t 6. shan’t
2. didn’t 7. doesn’t
3. didn’t 8. isn’t
4. i am 9. won’t
5. it’s 10. shouldn’t

**IV. Reflexive pronouns**

Underline the reflexive pronouns

1. himself 6. herself
2. themselves 7. himself
3. itself 8. themselves
4. ourselves 9. ourselves
5. itself 10. myself
Filling blanks with reflective pronouns
1. itself 6. itself
2. themselves 7. ourselves
3. myself 8. themselves
4. herself 9. themselves
5. herself 10. herself

F. Let’s write
Discuss in class before the pupils do the actual writing.

Unit 9: Virtues

A. Reading
Gachururiga’s grandmother

B. Let’s recall the passage
1. D 2. mean or stingy
3. A 4. D
5. better show someone how to get his own food instead of giving him food
6. B
7. the young man won respect because of his humility, kindness, generosity and being hardworking by nature
8. B
9. she reminded her to be a kind and a trustworthy person
10. A

C. Vocabulary

Studying the table and filling in the blanks

<table>
<thead>
<tr>
<th>Noun</th>
<th>Adjective</th>
<th>Adverb</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Obedience</td>
<td>obedient</td>
<td>obediently</td>
</tr>
<tr>
<td>2. responsibility</td>
<td>responsible</td>
<td>responsibly</td>
</tr>
<tr>
<td>3. kindness</td>
<td>kind</td>
<td>kindly</td>
</tr>
<tr>
<td>4. honesty</td>
<td>honest</td>
<td>honestly</td>
</tr>
<tr>
<td>5. Generosity</td>
<td>generous</td>
<td>generously</td>
</tr>
</tbody>
</table>

II. Choose the best word to fill in the blanks
1. trustworthy
2. hardworking
3. disobedience
4. honest

D. Language patterns

I. Use of get/remind/allow/encourage + nominal and infinitive

Possible sentences
1. It is wise to encourage others to choose a career of their choice.
2. Parents should allow their children to choose a career of their own.
3. The teacher reminded the class prefect to collect all the books on time.
4. The medical officer encouraged the youth to abstain from premarital sex.
5. Muthoni reminded Nafula to rest after a hard day’s work.
6. Has the prefect allowed the pupils to rest after a hard day’s work?
7. Mr Ndung’u got everyone to work hard in their studies.
8. The teacher reminded the class prefect to take all the rubbish to the compost pit.
9. Muthoni reminded Nafula to wait for her at the market.
10. It is wise to encourage others to work hard in their studies.

II. Use of question tags with present continuous tense

1. isn’t he? 6. aren’t they?
2. isn’t he/she? 7. are we?
3. isn’t she? 8. is she?
4. aren’t they? 9. is he?
5. aren’t we? 10. isn’t she
III. Question tags with present simple tense

Let the teacher accept any sentence that takes the given question tags. However, the words given below should be used along each sentence.

1. does 6. aren’t
2. are 7. shall not
3. am not 8. do not
4. does 9. are not
5. is 10. not

IV. Use of question tags with past tense

1. didn’t he 6. did he
2. didn’t it 7. didn’t they
3. was I 8. did they
4. was she 9. didn’t he
5. didn’t she 10. wasn’t I

IV. Use of question tags with future tense

1. won’t he 6. won’t he
2. won’t they 7. won’t he
3. shall we 8. will it
4. won’t it 9. won’t we
5. shall I 10. won’t they

E. Grammar

I. Punctuation

My name is Alfonso Kimumbai. I come from Rwanda. Yesterday, my friend Penja and I went to the forest to look for some game meat. No sooner had we arrived than we saw a big antelope. “Wow!” Penja shouted.

“Shhhhhhh!” I whispered to him. “The antelope will run away as soon as it notices our presence.” “How do you know?” he asked. “I have been a hunter ten years now,” I replied. I told him that I had killed fifty hyenas, two lions, seven cheetahs and seventy antelopes. Penja could not believe what I told him. As we approached the antelope, it quickly leapt towards our direction and I ran to the opposite direction yelling at the top of my voice. As we walked back home empty-handed, Penja asked me, “My friend, what happened to the ten-year experience?”

II. Direct speech with single sentences with a final reporting verb

1. “I will go today,” Kiruja said.
2. “We are very happy,” they told him.
3. “It will be very hot,” Kirigo said.
4. “I will tell you a story this evening,” my grandmother said.
5. “I have a headache,” Dave said.
6. “Pick the bag,” the class teacher told Linet.
7. “Please buckle up your seat belts,” the air hostess requested them.
8. “Do you need a ride?” Dan asked her.
9. “Can you please accompany us to the festival?” the pupils requested the head teacher.
10. “Can you lie on your back?” The doctor asked him.

III. Direct speech with questions with a final reporting verb

1. “Would you like to have more food?” he asked her.
2. “Would you like to go abroad?” they asked him.
3. “Can I go to a salon?” she asked her mother.
4. “Will you buy a new tyre?” the mechanic asked Tom.
5. “Can we be given more drinks?” we asked.
6. “Have you seen the lions?” Maina inquired.
7. “Did you see the thief who stole your bag?” the policemen asked my mother.
8. “Has my mother bought me a birthday present?” Terry asked.
9. “Has anyone seen my doll?” the little girl asked everyone.
10. “Have you done your homework?” Pauline inquired from her friend, Rose.

IV. Direct speech with exclamations with a final reporting verb
1. “Get out!” he shouted.
2. “Ouch! You have stepped on my toes.”
3. “Get in and close the door behind you!”
4. “Good heavens!” She shouted, “what has happened to you?”
5. “What a wonderful home you have!” said the guest.
7. “Come here quickly!” called the teacher on duty.
9. “Hurray! We have won the trophy!” shouted the boys.
10. “Congratulations!” the headteacher happily told the pupils.

V. Direct speech containing more than one sentence
1. “My brother is coming today,” said James, “he will buy us gifts.”
2. “Our teacher is good,” Peter said, “he doesn’t punish us most of the times.”
3. “We have to go now,” they said. “We are likely to be late for the party.”
4. “He has to be on the watch,” said his friend, “he has been careless with this life.”
5. “I will not come,” she said, “I think you are not serious.”
6. “How old are you?” he loudly inquired, “You look as old as the hills.”
7. “I have lost some money,” the boy cried. “What shall I do?”
8. “Geti is a good mother,” the children said, “She provides all our needs.”
9. “Where is she?” The teacher asked. “Tell her to see me when she arrives.”
10. “There will be an earthquake,” she said, “inform the others.”

VI. Use of exclamation marks
1. Oh my God! What has happened to the poor boy?
2. Ouch! You have stepped on my foot.
3. Good heavens! What a site to see!
4. How beautiful she looks!
5. Come here quickly!
6. What! Are you sure you know what you are talking about?
7. Shut up!
8. Ouch! You pinched me.
9. Hurrah! We won the match.
10. What a wonderful home!

F. Let’s write
Pictorial Composition
Let the learners study the given pictures and with the help of their teacher, make up an interesting composition relevant to the given ending.

Unit 10: Craft

A. Reading
B. Lets recall the passage
1. C
2. because the journey was boring at first
6. fibres with fresh dye have to be tended to ensure that the designed patterns do not get spoilt
7. a florist is a person who sells flowers
8. A
9. the writer found his friend, James waiting for him
10. accept any answer related to the passage: e.g. Kimemia’s visit to Malindi.

C. Vocabulary

Filling in the blanks using the given words
1. weaving 6. tourists
2. skilled 7. florists
3. wood 8. dye
4. material 9. stitched
5. papyrus 10. hangings

D. Language patterns

I. Use of compound noun + noun groups
(a) 1. classroom 6. evening dress
2. bedroom 7. shopping list
3. gas cooker 8. eye brows
4. first aid 9. lamp shade
5. Sunday school 10. black board
(b) Rewriting sentences changing the underlined into compound nouns
1. birthday present 6. morning prayer
2. brick house 7. dinner dress
3. fifty shilling note 8. air hostess
4. shopping list 9. lamp shade
5. handbag 10. a night nurse

II. Contrastive use of ‘keep’ and ‘put’

Accept any correct sentences from the table

Possible sentences
1. The mechanic keeps the hammer in the tool box and he puts the nuts in this pockets.
2. The games teacher keeps all the balls in the games store. He puts some in his office.
3. The pupils kept some of their books in their desks. They kept others in their bags.
4. The tailor kept the tailored cloths in the box but she keeps the unfinished ones on the table.
5. The secretary put some of the letters she types in the tray. Other letters were kept in the drawer.
6. The teacher keeps all the text books in the cupboard.
7. The teacher does not keep all the text books in the cupboard.

III. The use of clauses as noun qualifiers

possible words
1. she told us about
2. that was given
3. he sold
4. he showed us
5. she prepared for us
6. in which he lives
7. we have just finished?
8. we arranged
9. she received
10. you don’t require

E. Grammar

Adjectives as complements of be, become and get
1. resourceful 6. intelligent
2. beautiful 7. fatigued
3. wealthy 8. farmer
4. windy 9. obedient
5. angry 10. cold

F. Let’s write

Descriptive writing
Let the learners give brief oral description and then the teacher can pick on one for the learners to write on.
Unit 11: Weather and Climate

A. Reading

B. Let’s recall the passage

1. the writer and his classmates were accompanied by his class teacher during their visit to the meteorological station
2. Kipkoech
3. C
4. C
5. (a) barometer – used for measuring the atmospheric pressure
   (b) rain gauge – used for measuring the amount of rain
   (c) wind vane – used to measure the direction of wind
   (d) wind sock – used to measure the strength and direction of wind
6. A
7. rain, temperature and sunshine
8. cyclones are very strong winds that move in a circle
9. D
10. B

C. Vocabulary

Completing conversation

1. weather 6. climate
2. thermometer 7. barometer
3. rain-gauge 8. direction
4. cyclones 9. strength
5. lightning 10. wind vane

D. Language patterns

I. Use of really/quite/rather/with adjectives

1. cold 6. hot
2. muddy 7. poor/desperate
3. rainy 8. sick
4. windy 9. thirsty
5. cold 10. strong/healthy

II. Use of likely/certainly/unlikely/unlucky/lucky

1. unlikely 6. lucky
2. unlikely 7. certainly
3. certainly 8. unlucky
4. lucky 9. unlikely
5. unlucky 10. certainly

E. Grammar

I. Words containing silent consonants ‘l, b, w, h, gh’

a) Let the learners read the words aloud after the teacher to ensure the correct pronunciation.

b) Filling in the blanks

1. palm 6. heir
2. dough 7. knew
3. hour 8. knock
4. knife 9. kneeling
5. wring 10. thumb

II. Words containing -gh with the sound –f-

a) Let the learner read the words correctly with the help of the teacher.

b) Completing sentences using word in A above

1. tough 4. cough
2. rough 5. enough
3. trough 6. laughing

F. Let’s write

With the help of the teacher, let the learners develop a poem from any of the given pictures on weather conditions.
Unit 12: Environment

A. Reading

B. Let’s recall the passage

1. environment is what surrounds us
2. C
3. C
4. in order to have enough resources for future use
5. cactus, acacia, cypress and gum tree
8. preservation

C. Vocabulary

I. Fill in the word puzzle with the correct words

1. conservation 6. twig
2. adapt 7. climate
3. trees 8. undergrowth
4. cactus 9. erosion
5. felling 10. cacti

II) Let learners go through the sentences and come up with sentences of their own using the underlined words.

NB accept any relevant sentence

D. Language patterns

I. Use of compound adjectives formed with noun + -ed

1. They saw a flat – hooved animal.
2. Have you seen any pointed – leaves trees?
3. At the hedge of the forest, Fuji built a grass-thatched house.
4. Her house was six-roomed.
5. The environmental conservation officer is a left-handed driver.
6. The thief wore a stained shirt.
7. The injured kitten was strong-willed.
8. From a distance, we could see a snow-capped mountain.
9. The rough-skinned girl won the contest.
10. Our new head teacher was bald-headed.

II. Use of really/quite/rather with adjective + noun

1. important 4. smooth
2. unthoughtful 5. unproductive
3. incorrect

Sentences construction

Let the learners come up with their own sentences using the given adverbs. Accept any correct sentences.

E. Grammar

a) Omission of silent letter -e before -ed and -ing

1. dive, dived, diving 6. race, racing
2. placed 7. aping
3. faced, facing 8. cope, coped
4. blamed, blaming 9. proved, proving
5. move, moved 10. remove, removing

b) Fill in the blanks with the correct forms of the words in bracket

1. aping 6. faced
2. hoping 7. racing
3. dived 8. believed
4. removed 9. moving
5. blaming 10. proving

F. Let’s write

I. writing a poem

Let the learners go through the first stanza given and let them write stanzas 2 and 3 on their own.
II Letter writing (official letter)
Remind the learners of the format of an official letter and let them write down an official letter by filling in the blank spaces with the most appropriate words.

Unit 13: Athletics

A. Reading
B. Let’s recall the passage
1. B
2. Joseph was asked to ensure that the field was set in preparation for both the track and field events
3. examples of field events are: long jump, triple jump, high jump, shot put, javelin, discus
4. A
5. B
6. A
7. C
8. C

C. Vocabulary
Using words in the box to complete the given sentences
1. spectators
2. compete
3. marathon
4. awards
5. relay, trophy
6. track
7. shot put, high jump
8. steeplechase

D. Language patterns
I. Use of ‘whose’ as a relative pronoun
1. The athlete, whose mother died last year, fainted during the race.
2. The pupils, whose parents went to visit them, are happy.
3. The games teacher, whose cap was blown away by the wind, was very excited.
4. The boy, whose speed is known by everyone, beat all the standard six pupils in the race.
5. The pupils, whose best player was admitted to hospital, were unhappy.
6. Kioko, whose sister got an award for being the most disciplined pupils in the school, is rude.
7. The flower, whose vase is yellow in colour, is rotten.
8. The boy, who had a headache, left the room.
9. The girl, whose book was torn last week, is a prefect.
10. The man, whose car is new, is old.

II. Contrastive use of think and hope
Completing sentences with phrases containing ‘hope’ or ‘think’
Let the teacher accept the phrases relevant to the given sentences.

III. Use of conditional sentences involving impossible conditions
1. If I had a track suit, I would jog every morning.
2. If I had five million shillings, I would buy a car.
3. If we won the race, we would really celebrate.
4. If they had practiced enough, they would win.
5. If I knew, I would have spoken the truth.
6. If they did not cause the riots, their teacher would have appreciated.
7. If Tony broke his arm, he would be taken an x-ray.
8. If Amani learnt the truth, she would end her friendship with him.
9. If Greg reported the matter to the head teacher, he would be rewarded.
10. If she left early, she would not miss the bus.
E. Grammar

I. Simple forms of verbs including the forms of the verb ‘be’

1. are  6. was
2. is  7. has
3. am  8. are
4. are  9. has
5. will  10. shall

II. a) Verbs with auxiliaries

1. will  6. could
2. did  7. can
3. have  8. has
4. is  9. don’t
5. shall  10. had

b) Using auxiliaries in own sentences

NB/ accept any correct sentences

1. They cannot find the lost keys.
2. They can swim very well.
3. She could not escape the punishment.
4. We shall be seeing them after some time.
5. He will have to admit his mistake.
6. He had already decided on what to do.
7. The baby has eaten all the fruits.
8. She is going to Malindi next week.
9. Did they insist on knowing the truth?
10. We may come to your home or not.

F. Let’s write

A friendly letter

Let the teacher remind the learners of the format of a friendly letter after which they should write the same based on athletics. Ensure the vocabularies related to athletics have been used appropriately.

Unit 14: Child labour

A. Reading

B. Let’s recall the passage

1. child Labour is making children work for pay
2. B
3. (a) setting up programmes
   (b) establishment of rehabilitation centres
   (c) taking these children to school
4. C
5. C
6. (a) being orphaned
   (b) need to acquire income to sustain them
   (c) children may be unaware of the risks they expose themselves
7. the illegal buying and selling of drugs is called drug – trafficking
8. drug traffickers are punished by being made to pay heavy fines, being sent to approved school or being taken to juvenile jails

C. Vocabulary

Words with similar meaning

1. hazardous 7. global
2. eliminate 8. drug trafficker
3. chores 9. debt
4. income 10. campaign
5. prostitution 11. moral value
6. bondage 12. labour

D. Language patterns

I. Use of ‘make someone do something’ in the past passive

1. She was made to feel guilty by Joseph.
2. He was made to feel ashamed by the house help.
3. The parents were made by the government to protect the rights of their children.
4. Young girls were made to practise prostitution by poverty.
5. The boy was made to stop arriving home late by his mother.
6. Joe was made to join the football team by Leon.
7. Was he made by the teacher to collect the books?
8. Moha was made to polish his shoes by Ngatia.
9. The cat was made to run around the house by the dog.
10. Were you made to sing a song by him?

II. Use of understand/see/where/what/why/how
1. why 6. why
2. how 7. how
3. how 8. why
4. where 9. how
5. what 10. what

III. Passive formed with get + present perfect
1. washed 6. examined
2. stopped 7. marked
3. prescribed 8. sprayed
4. repainted 9. ironed
5. denied 10. taught

IV. Past simple tense
a) Using the given verbs in past simple tense
1. put 6. sold
2. burst 7. did
3. experienced 8. stopped
4. took 9. wrote
5. cost 10. rang

B. Writing the passage in simple past tense
As I walked along the streets I saw two people. One of them began to strangle me while the other struggled to take my luggage. I screamed for help but no one heard my cry. So I decided to try the Karate skills I acquired three years ago. After a fifteen-minute fight with the thugs, sirens were heard from a distance and the two men ran to hide behind the building in front of us. When the police arrived, I gave them a description of the two thugs. They launched a manhunt for these people whom I later learnt were the most wanted criminals.

E. Grammar
I. Words with -ph with the sound /f/
a) Let the learners read the poem aloud with the help of the teacher.

b) Arranging jumbled letters to fill in the blanks
1. graph 4. physics
2. photographs 5. pharmacist
3. paragraphs

II. a) Filling in the blanks in the table
1. big, biggest
2. cleverer
3. braver
4. busiest
5. laziest
6. better
7. courageous, more courageous
8. most attractive
9. interesting
10. serious, most serious
b) Completing sentences with comparative or superlative forms
1. best 6. more innocent
2. taller 7. worse
3. bravest 8. most courageous
4. more beautiful 9. most
5. sickest 11. cheaper

III. A. Studying the table
Let the learners study the adjectives given in the table.

Sentences construction from the table

a) Possible sentences
1. Jane bought a new blue nylon coat.
2. She was given a fashionable large Asian cutting blade.
3. The thief made off with an old orange Kenyan woollen bag.
4. He received an old long orange Kenyan dining table.
5. He bought a small expensive white Italian coffee table.
6. He gave out his beautiful light-blue Ugandan sisal mat.
7. They lost their new blue serving dish.
8. I found her small, expensive, white Italian purse.
10. I bought a beautiful, light-green, Ugandan, sisal, shopping bag.

b) Filling in the spaces with the correct order of adjectives given
1. beautiful, white, American
2. plump, young, Kenyan
3. small, outdated, cooking
4. beautiful, new, serving

F. Let’s write
Let the learners go through the opening sentences and come up with an interesting story.

Unit 15: Games

A. Reading

B. Let’s recall the passage
1. A
2. because he takes it as a service he is giving to his school
3. A
4. he reminded the pupils to be disciplined and accept the judgment of the umpire
5. A
6. the writer’s team scored the first goal
7. C
8. D
9. C

C. Vocabulary

I. Filling in the puzzle
1. coach  6. accept
2. indoor  7. whistle
3. captain  8. umpire
4. worn-out  9. cheer
5. table tennis  10. outdoor

II. Sentence construction
Accept any relevant sentences from the learners.
D. Language patterns
I. Using conditions with ‘could’ and ‘would’
1. have won
2. come home early
3. tarmac the roads up to the doorsteps
4. failed to buy the gift he had promised
5. had eaten the unwashed mangoes
6. severely punish those who mistreat young children
7. have bought his father a car
8. organize a party for us
9. enjoy the journey to the maximum
10. ask for a private plane
Accept any sensible answer

II. Use of conditional sentences involving impossible conditions affirmative and negative
1. If Susan had won, she would not have left the venue earlier than the other competitors.
2. If our vehicle had not developed a mechanical problem, we would have attended the ceremony.
3. If Alice had told the truth, the discipline master could not have punished her.
4. If the umpire had judged the match fairly, a fight could not have broken out after the match.
5. If it had not rained yesterday the match would not have been cancelled.
6. If Dana had studied hard, she would not have failed her exams.
7. If there was enough food, the pupils would have eaten to their fill.
8. If the workers had been paid well, they would not have gone on strike.
9. If the plants had been well tended, they would not have dried up.
10. If he had not arrived at the bus station late, he would not have missed the bus.

III. Use of get/remind/allow + nominal + infinitive
Possible sentences
1. Our games teacher reminded the players to eat well before the match.
2. Our teacher allowed us to sweep outside the class.
3. The umpire got the pupils to carry on with the game.
4. The guest of honour allowed the sick boys to see the nurse.
5. The head prefect got the untidy pupils to keep the balls in the store.
6. The chef allowed the opponents to cook any meal they wanted.
7. The class teacher got the pupils to collect books.
8. The games prefect reminded the members to carry on with the game.
9. The chairperson reminded the members to pay their debts on time.
10. Her mother allowed us to go to the market.

E. Grammar
I. Use of full stops, question marks and capital letters for sentences division
1. Ann could not beat her classmates.
2. When will we be through with practising?
3. When the coach called the goalkeeper, he responded immediately.
4. She goes to Wendani Junior Academy.
5. Who will be the master of ceremonies on the prize-giving day?
6. After the first-half, the players looked exhausted.
7. Ms Rotich, the games teacher, is unwell.
8. Is Lagos the capital city of Nigeria?
9. I am tall. My brother is short.
10. Go to the market and buy a packet of milk. Run to the market and buy some bananas and rush back home for breakfast.
11. Have you seen mother? I thought I saw her here.
12. As soon as the journey began, the police stopped our bus for inspection.
13. Miss Mona wants to see the class prefect. She also wants to see John Mukuria.
14. Billy, the goat, has escaped from the pen.
15. After the rain, we sat under a tree.

II. Some commonly confused words
1. tried, tired 6. peace, piece
2. quiet, quite 7. stationery, stationary
3. here, hare 8. principals, principles
4. released, realised 9. live
5. been, being 10. bare

III. Vowels and consonants
a) Completing words using suitable consonants
1. The scorer’s table was made from plywood.
2. My brother built a pigsty.
3. All birds can fly high up the tall trees.
4. Sometimes I wonder why the sky is blue.
5. Where is the frying pan?
6. Who is standing by the door?
7. Yuna is not short. He is a tall guy.
8. Please show the new pupil the dormitory.
9. My name is Mr Lugalo. I am your new teacher.
10. He is not feeling well, he is ill.

F. Let’s write
Let the learners study the picture and then write a composition ending with the given sentence. Let the learners give orally suggestions on the opening sentences.

Unit 16: Art

A. Reading

B. Let’s recall the passage
5. during printing, one has to be ready with pins to transfer the patterns
6. A
7. accept any suitable title e.g
A visit to a batik centre
A visit to a materials shop

C. Vocabulary

Using the given words to compete the sentences
1. fabric 6. jaunting
2. decorated 7. pins
3. dye 8. bleaches
4. paints 9. starching
5. resist 10. transferred

D. Language patterns
I. Use of present continuous passive
1. The wall hangings are being displayed by Peter.
2. The fabrics are being decorated by him.
3. The batik materials are being bought by them.
4. The screen is being taken out by Herbet.
5. Trees are being planted by the children.
6. The patterns are being transferred by
him.
7. The cotton materials are being put
starch by Pendo.
8. The material is being printed by Hawa.
9. The iron is being smelted by the
blacksmith.
10. The veranda is being built by Thoraya.

II. Use of continuous to show sequences
Possible sentences
1. What would you do if your jaunting
tools failed to work?
2. What would they do if their materials
failed to sell?
3. What would Amina do if she wanted
to starch the shirt?
4. What would our parents do if their
children failed to perform at school?
5. What would salespeople do if their
material failed to sell?
6. What would the teacher do if the
pupils became indisciplined?
7. What would I do if I won the lottery?
8. What would George do if he became
the president of his county?
9. What would you do if you wanted to
make a squeegee?
10. What would you do if you wanted to
bleach a coloured material?
Accept any other correct sentences

E. Grammar

Spelling rules
I. Words with the letter -i before the
letter -e rule
1. received 5. perceived
2. deceived 6. thief
3. besieged 7. relief
4. sieve 8. believe

II. a) Words ending with -tion
1. creation 6. decoration
2. celebration 7. observation
3. education 8. preparation
4. occupation 9. filtration
5. information 10. declaration

b) Nouns formation from the verbs
1. invitation 4. information
2. examination 5. decoration
3. reception

III. a) Changing of -ay to -ai in past
tense

<table>
<thead>
<tr>
<th>verbs</th>
<th>past tense</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. say</td>
<td>said</td>
</tr>
<tr>
<td>2. pay</td>
<td>paid</td>
</tr>
<tr>
<td>3. lay</td>
<td>laid</td>
</tr>
<tr>
<td>4. repay</td>
<td>repaid</td>
</tr>
<tr>
<td>5. waylay</td>
<td>waylaid</td>
</tr>
<tr>
<td>6. play</td>
<td>played</td>
</tr>
<tr>
<td>7. stay</td>
<td>stayed</td>
</tr>
<tr>
<td>8. delay</td>
<td>delayed</td>
</tr>
<tr>
<td>9. sly</td>
<td>slayed</td>
</tr>
<tr>
<td>10. bray</td>
<td>brayed</td>
</tr>
</tbody>
</table>

b) Changing sentences to the past
simple tense
1. The printer delayed on his way to the
shopping centre.
2. The children who played in the rain
became sick.
3. The head teacher said we had to work
hard.
4. After dyeing the fabrics, she laid them
in the sun to dry.
5. Who stayed in the house at the
corner?

F. Let’s write
Let the learners discuss in groups what
they think is happening in the picture then
they write the stories individually.
--- TEST PAPERS ---

Test Paper 1

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

Test Paper 2

41. B  42. C  43. D  44. D
49. A  50. D

Test Paper 3

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

Test Paper 4

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

Test Paper 5

41. C  42. A  43. B  44. B
49. A  50. A

Test Paper 6

33. A 34. D 35. B 36. D
41. A 42. A 43. B 44. D
49. B 50. D

Model Test Paper 1

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

Model Test Paper 2

41. B 42. B 43. D 44. B
49. A 50. D
Unit 1

Exercise 1

1. Eight thousand, nine hundred and fifty nine
2. 9000
3. 7500
4. 26
5. 33.72
6. $2 \frac{1}{2}$
7. $W = 108, X = 27 Y = 9$
8. 747 (is odd)
9. $2 \frac{7}{20}$
10. Sh 12 800
11. 240 cm
12. 8680 kg
13. $\frac{2}{16}$ or $\frac{1}{8}$
14. 4741
15. $\frac{15}{4}$ or $3 \frac{3}{4}$
16. $\frac{37}{100}$
17. 5
18. 54 km 29 m 43 cm
19. $\frac{3}{4}$
20. obtuse
21. 131 $\frac{2}{43}$ or 131 rem 2
22. 25 $\frac{1}{2}$
23. 96
24. Equilateral triangle
25. 9830
26. 12.15 pm
27. $14x + 7k$
28. 10 hr 25 min 55 s
29. 100 cm$^2$
30. 87$^o$
31. 11 408
32. 1466
33. 7.99
34. Sh 2400
35. 9
36. 8590
37. 75 cubes
38. XXXVI
39. 140 cm
40. 5 $\frac{4}{5}$
41. 36
42. 9761
43. $\frac{20}{7}$ or $2 \frac{6}{7}$
44. 35
45. 1 m 80 cm
46. 40
47. class 6
48. Class 2 and Class 5
49. 240 pupils
50. 740 pupils

Unit 2: Whole numbers

Exercise 2

A.
1. Thousands
2. Millions
3. Ten millions
4. Millions
5. Ten thousands
6. Hundreds
7. Hundred millions
8. Ten thousands

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

Exercise 3

A.
3. $3 \ 000 \ 000$
4. $3 \ 000 \ 000$
5. $5 \ 000$
6. $5 \ 000$
7. $9 \ 000$
8. $6 \ 000$
9. $6 \ 000$
10. $1 \ 000$
11. $2 \ 000$
12. $3 \ 000$

B.
1. 40 000 000
2. 400
3. 4
4. 4 000
5. 40 000
C.

<table>
<thead>
<tr>
<th>Number</th>
<th>Millions</th>
<th>Hundred thousands</th>
<th>Ten thousands</th>
<th>Thousands</th>
<th>Hundreds</th>
<th>Tens</th>
<th>Ones</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. 2 000 711</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>7</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>2. 41 053</td>
<td></td>
<td>4</td>
<td>1</td>
<td>0</td>
<td>5</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>3. 865 021</td>
<td>8</td>
<td>6</td>
<td>5</td>
<td>0</td>
<td>2</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>4. 340 634</td>
<td>3</td>
<td>4</td>
<td>0</td>
<td>6</td>
<td>3</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>5. 980 798</td>
<td>9</td>
<td>8</td>
<td>0</td>
<td>7</td>
<td>9</td>
<td>8</td>
<td></td>
</tr>
</tbody>
</table>

D.
1. 7 000 000
2. 7
3. 7000
4. 700 000
5. 70 000
6. 70 000 000
7. 700
8. 700 000

Exercise 4

A.
1. Six hundred and ninety-two
2. Thirteen million, twelve thousand, six hundred and thirty-four
3. One million
4. Three hundred and twenty-one thousand, four hundred and sixty-five
5. Five million, six hundred and thirty-three
6. Four hundred and one million, five hundred and sixty-eight thousand, two hundred and eleven
7. Eighteen million, five hundred and sixty-two thousand, nine hundred and eleven
8. Nine hundred and ninety-nine million, nine hundred and ninety-nine thousand, eight hundred and seventy-nine

B.
1. 514 307
2. 7 000 230
3. 6 030 704
4. 93 004 029
5. 524 609 113
6. 854 200 101

C.
1. 300
2. 8000
3. 70 000
4. 9000
5. 0
6. 500

D.
1. 90 212
2. 796
3. 89 511
4. 15 405
5. 6006
6. 1909

E.
1. Eighty-seven thousand six hundred and eleven
2. Fifteen thousand six hundred and eleven
3. Four thousand four hundred and sixty-five
4. Sixty-five thousand four hundred and sixty-five
5. Thirty-three thousand five hundred and fifteen
6. Ninety-nine thousand nine hundred and ninety-nine
7. Five hundred and thirteen
8. Fifty two thousand two hundred and eighty-nine

**Exercise 5**

1. 1 000 000
2. 7 800 000
3. Two hundred and twenty-four million, seven hundred and sixty thousand, one hundred and seventy-nine

**Exercise 6**

A.
1. 50 090
2. 43 230
3. 92 607 260
4. 325 680
5. 65 320
6. 440
7. 56 350
8. 482 061 880
9. 330
10. 90

B.
1. 400
2. 35 500
3. 13 600
4. 84 700
5. 52 600
6. 529 900
7. 24 400
8. 91 900
9. 7400
10. 4400

**Exercise 7**

1. 2000
2. 1000
3. 4000
4. 5000
5. 23 000
6. 155 000
7. 85 000
8. 2 582 000
9. 1000
10. 404 000
11. 79 000
12. 528 000
13. 36 000
14. 1000
15. 8000
16. 1000

**Exercise 8**

A. 1, 4, 6
B. 1,
C. 2, 5, 6
D. 2, 4, 5, 7
E. 3, 5, 6
F. 3, 4, 6

**Exercise 9**

A. 3, 4, 6
B. 2, 3, 4, 6, 8
C. 1, 5, 6, 7
D. 1, 4, 7, 8

**Exercise 10**

A.
1. 25
2. 9
3. 100
4. 121
5. 256
6. 64
7. 225
8. 900
9. 289
10. 169
11. 400
12. 144

B.
1. 225
2. 9
3. 10
4. 324
5. 19
6. 12
7. 625
8. 16
9. 529

C.
1. 4
2. 1
3. 2500
4. 121
5. 441
6. 196
7. 49
8. 81

**Exercise 11**

A.
1. 5
2. 12
3. 9
4. 6
### Unit 3: Operations on whole numbers

#### Exercise 12

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>3 977 993</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>39 973</td>
<td>4</td>
</tr>
<tr>
<td>5</td>
<td>7 922 694</td>
<td>6</td>
</tr>
<tr>
<td>7</td>
<td>510 408</td>
<td>8</td>
</tr>
<tr>
<td>9</td>
<td>1 608 438</td>
<td>10</td>
</tr>
<tr>
<td>11</td>
<td>806 508 438</td>
<td>12</td>
</tr>
<tr>
<td>13</td>
<td>2 069 046</td>
<td>14</td>
</tr>
<tr>
<td>15</td>
<td>48 072 262</td>
<td>16</td>
</tr>
<tr>
<td>17</td>
<td>7 007 943</td>
<td>18</td>
</tr>
<tr>
<td>19</td>
<td>36 712 715</td>
<td>20</td>
</tr>
<tr>
<td>21</td>
<td>3205</td>
<td>22</td>
</tr>
<tr>
<td>23</td>
<td>370 299 923</td>
<td>24</td>
</tr>
</tbody>
</table>

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>756 898 people</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>1 606 422</td>
<td>4</td>
</tr>
<tr>
<td>5</td>
<td>1 650 612</td>
<td>6</td>
</tr>
<tr>
<td>7</td>
<td>Sh 555 750</td>
<td>8</td>
</tr>
<tr>
<td>9</td>
<td>Sh 997 770</td>
<td>10</td>
</tr>
</tbody>
</table>

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>1534</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>983</td>
<td>4</td>
</tr>
<tr>
<td>5</td>
<td>6 270 696</td>
<td>6</td>
</tr>
<tr>
<td>7</td>
<td>15 009 890</td>
<td>8</td>
</tr>
<tr>
<td>9</td>
<td>24 306 608</td>
<td>10</td>
</tr>
<tr>
<td>11</td>
<td>767 763 086</td>
<td>12</td>
</tr>
<tr>
<td>13</td>
<td>398 176</td>
<td>14</td>
</tr>
<tr>
<td>15</td>
<td>11</td>
<td>16</td>
</tr>
<tr>
<td>17</td>
<td>178 000 520</td>
<td>18</td>
</tr>
<tr>
<td>19</td>
<td>231 029 017</td>
<td>20</td>
</tr>
</tbody>
</table>

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>4 609 692</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>748 951</td>
<td>4</td>
</tr>
<tr>
<td>5</td>
<td>37 788 193</td>
<td>6</td>
</tr>
<tr>
<td>7</td>
<td>57 051 795</td>
<td>8</td>
</tr>
<tr>
<td>9</td>
<td>897</td>
<td>10</td>
</tr>
</tbody>
</table>

#### Exercise 13

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>162</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>603</td>
<td>4</td>
</tr>
<tr>
<td>5</td>
<td>2806</td>
<td>6</td>
</tr>
<tr>
<td>7</td>
<td>2050</td>
<td>8</td>
</tr>
<tr>
<td>9</td>
<td>22 306</td>
<td>10</td>
</tr>
<tr>
<td>11</td>
<td>38 760</td>
<td>12</td>
</tr>
<tr>
<td>13</td>
<td>40 425</td>
<td>14</td>
</tr>
<tr>
<td>15</td>
<td>19680</td>
<td>16</td>
</tr>
<tr>
<td>17</td>
<td>81 285</td>
<td>18</td>
</tr>
<tr>
<td>19</td>
<td>753 806</td>
<td>20</td>
</tr>
<tr>
<td>21</td>
<td>878 682</td>
<td>22</td>
</tr>
<tr>
<td>23</td>
<td>686 425</td>
<td>24</td>
</tr>
</tbody>
</table>

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>4 609 692</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>748 951</td>
<td>4</td>
</tr>
<tr>
<td>5</td>
<td>37 788 193</td>
<td>6</td>
</tr>
<tr>
<td>7</td>
<td>57 051 795</td>
<td>8</td>
</tr>
<tr>
<td>9</td>
<td>897</td>
<td>10</td>
</tr>
</tbody>
</table>
### Exercise 15

#### A.
1. 398 046
2. 206 032
3. 126 224
4. 176 640
5. 6 190 340
6. 2 896 275
7. 400 300
8. 5 674 620
9. 4 651 983
10. 51 858 371
11. 36 266 898
12. 10 949 706
13. 48 970 800
14. 9 401 532
15. 4 899 819
16. 53 160 268
17. 23 846 532
18. 7 478 163
19. 1 989 225
20. 8 145 676
21. 22 207 375
22. 4 764 474
23. 37 017 916
24. 6 087 900

#### B.
1. 543 123
2. 1 470 000
3. 368 250
4. 113 435 634
5. 1 289 763
6. 3 056 875
7. 24 250 720
8. 125 222
9. 3 821 000
10. 541 250

### Exercise 16

#### A.
1. 9
2. 9
3. 45
4. 60
5. 36
6. 22
7. 315
8. 50
9. 140
10. 56
11. 560
12. 65

#### B.
1. \(10 \div 6\) or 10 rem 12
2. 162
3. \(10 \div 34\) or 10 rem 34
4. 25
5. 64
6. 9
7. \(141 \div 7\) or 141 rem 24
8. \(70 \div 97\) or 70 rem 97
9. \(55 \div 23\) or 55 rem 11
10. \(113 \div 16\) or 113 rem 80
11. 105
12. \(506 \div 13\) or 506 rem 6
13. 28
14. \(21 \div 25\) or 21 rem 25
15. 465
16. 100
17. 56
18. 17

### Exercise 17

#### A.
1. 872
2. 346
3. 831
4. 275
5. 1334 rem 5
6. 1611
7. 2141 rem 13
8. 606 rem 72
9. 261 rem 52
10. 1111
11. 1754 rem 5
12. 850
13. 2025 rem 18
14. 991
15. 1211 rem 24
16. 9090

#### B.
1. 2421 books
2. 657 sacks
3. Sh 286
4. 545 seedlings
5. 1639 rem 38
6. 1041 packets
7. Sh 4000
8. Sh 20
9. 1515
10. 8080 kg
Exercise 18
A.
1. 68, 89
2. 107, 142
3. 29, 36
4. 32, 64
5. 6, 3
6. 60, 55
7. 105, 90
8. 54, 63
9. 25, 19
10. 49, 64
11. $15 \times 17 = 255$
12. $31 + 46 = 77$
13. $6 + 3 = 9$

Exercise 19
A.
1. 1, 2, 4, 8
2. 1, 3, 9
3. 1, 2, 5, 10
4. 1, 3, 5, 15
5. 1, 3, 9, 27, 81
6. 1, 2, 3, 4, 6, 8, 12, 16, 24, 48
7. 1, 2, 3, 4, 5, 6, 8, 12, 15, 20, 24, 30, 40, 60, 120
8. 1, 3, 5, 9, 15, 25, 45, 75, 225

B.
1. 4, 8
2. 5, 10
3. 2, 4
4. 10, 20
5. 6, 12
6. 100, 200
7. 140, 280
8. 120, 240

C.
1. 180
2. 60
3. 60
4. 72
5. 30
6. 70
7. 36
8. 180

Exercise 20
1. 4
2. 11th February
3. 4
4. 3
5. 28
6. 120
7. 30
8. 5.01 am
9. 30 m
10. 30 seconds
11. 15
12. 14
13. 36
14. 7
15. 6 months
16. 60 days

Unit 4: Fractions
Exercise 21
A.
1. $\frac{11}{14}$
2. $\frac{33}{20}$ or $1\frac{13}{20}$
3. $\frac{9}{8}$ or $1\frac{1}{8}$
4. $\frac{7}{9}$ or $1\frac{1}{6}$
5. $\frac{9}{6}$ or $1\frac{1}{2}$
6. $\frac{16}{21}$
7. $\frac{10}{12}$ or $\frac{5}{6}$
8. $\frac{29}{40}$
9. $\frac{94}{90}$ or $1\frac{4}{90}$ or $1\frac{2}{45}$
10. $\frac{5}{6}$
11. $\frac{65}{60}$ or $1\frac{5}{6}$ or $1\frac{1}{12}$
12. $\frac{5}{4}$ or $1\frac{1}{4}$
13. $\frac{37}{60}$
14. $\frac{11}{22}$ or $\frac{1}{2}$
15. $\frac{26}{21}$ or $1\frac{5}{6}$
16. $\frac{19}{18}$ or $1\frac{1}{6}$
### Exercise 22

1. \( \frac{117}{24} \)  
2. \( \frac{7}{12} \)  
3. \( \frac{31}{48} \)  
4. \( \frac{2}{21} \)  
5. \( \frac{43}{54} \)  
6. \( \frac{1}{5} \)  
7. \( \frac{7}{30} \)  
8. \( \frac{15}{16} \)  
9. \( \frac{11}{18} \)  
10. \( \frac{3}{8} \)  
11. \( \frac{17}{18} \)  
12. \( \frac{1}{7} \)  
13. \( \frac{29}{30} \)  
14. \( \frac{23}{32} \)  
15. \( \frac{1}{12} \)  
16. \( \frac{17}{24} \)  
17. \( \frac{23}{40} \)  
18. \( \frac{49}{72} \)  
19. \( \frac{37}{48} \)  
20. 1 litre \( \frac{48}{48} \)

### Exercise 23

1. \( \frac{9}{4} \)  
2. \( \frac{5}{8} \)  
3. \( \frac{7}{8} \)  
4. \( \frac{5}{7} \)  
5. \( \frac{8}{35} \)  
6. \( \frac{11}{20} \)  
7. \( \frac{3}{8} \)  
8. \( \frac{6}{35} \)  
9. \( \frac{12}{12} \)  
10. \( \frac{5}{21} \)  
11. \( \frac{15}{22} \)  
12. \( \frac{28}{15} \)

### Exercise 24

1. \( 17 \frac{19}{40} \)  
2. \( 75 \frac{1}{3} \)  
3. \( 11 \frac{7}{24} \)  
4. \( 14 \frac{1}{12} \)  
5. \( 17 \frac{3}{7} \)  
6. \( 33 \frac{61}{40} \)  
7. \( 43 \frac{11}{120} \)  
8. \( 18 \frac{8}{21} \)  
9. \( 10 \frac{11}{28} \)  
10. \( 14 \frac{9}{32} \)  
11. \( 6 \frac{52}{75} \)  
12. \( 5 \frac{1}{2} \)  
13. \( 11 \frac{38}{105} \)  
14. \( 20 \frac{11}{30} \)  
15. \( 48 \frac{1}{12} \)  
16. \( 107 \frac{17}{24} \) \( \text{m}^2 \)  
17. \( 2 \frac{2}{3} \) \( \text{hr} \)  
18. \( 34 \frac{16}{35} \) \( \text{m} \)  
19. \( 24 \frac{37}{48} \)  
20. \( 63 \frac{29}{45} \) \( \text{litres} \)

### Exercise 25

1. \( \frac{3}{15} \) or \( \frac{1}{5} \)  
2. \( \frac{1}{14} \)  
3. \( \frac{1}{20} \)  
4. \( \frac{3}{8} \)  
5. \( \frac{17}{24} \)  
6. \( \frac{2}{15} \)  
7. \( \frac{38}{72} \) or \( \frac{19}{36} \)  
8. \( \frac{1}{90} \)  
9. \( \frac{10}{20} \) or \( \frac{1}{2} \)  
10. \( \frac{4}{15} \)  
11. \( \frac{5}{36} \)  
12. \( \frac{3}{22} \)  
13. \( \frac{17}{60} \) or \( \frac{1}{5} \)  
14. \( \frac{7}{14} \) or \( \frac{1}{2} \)  
15. \( \frac{4}{12} \) or \( \frac{1}{3} \)  
16. \( \frac{5}{15} \) or \( \frac{1}{3} \)

### Exercise 26

1. \( \frac{4}{8} \)  
2. \( \frac{7}{8} \)  
3. \( \frac{2}{2} \)  
4. \( \frac{2}{3} \)  
5. \( \frac{5}{3} \)  
6. \( \frac{4}{21} \)  
7. \( \frac{2}{12} \)  
8. \( \frac{2}{8} \)  
9. \( 9 \)  
10. \( \frac{3}{4} \)  
11. \( \frac{2}{8} \)  
12. \( \frac{7}{10} \)  
13. \( \frac{3}{4} \)  
14. \( 18 \frac{85}{88} \)  
15. \( \frac{7}{33} \)  
16. \( \frac{3}{4} \)  
17. \( 10 \frac{1}{4} \) \( \text{years} \)  
18. \( 3 \frac{2}{3} \) \( \text{litres} \)  
19. \( \frac{5}{6} \) \( \text{hours} \)  
20. \( 1 \frac{2}{3} \)

### Exercise 27

1. \( \frac{11}{32} \)  
2. \( \frac{1}{4} \)  
3. \( \frac{7}{24} \)  
4. \( \frac{7}{30} \)  
5. \( \frac{3}{28} \)  
6. \( \frac{23}{45} \)  
7. \( \frac{13}{40} \)  
8. \( \frac{11}{40} \)  
9. \( \frac{1}{20} \)  
10. \( \frac{13}{84} \)  
11. \( \frac{59}{96} \)  
12. \( \frac{5}{18} \)

---

ANS BT Eng and Maths Std 5.indd   38  
4/21/15 9:19 AM
Exercise 28

A.
1. \(\frac{1}{8}\) or \(\frac{2}{5}\)
2. \(\frac{1}{15}\)
3. \(\frac{4}{10}\) or \(\frac{2}{5}\)
4. \(\frac{6}{20}\) or \(\frac{3}{10}\)
5. \(\frac{12}{35}\)
6. \(\frac{3}{20}\)
7. \(\frac{15}{40}\) or \(\frac{3}{8}\)
8. \(\frac{21}{40}\)
9. \(\frac{3}{12}\) or \(\frac{1}{4}\)
10. \(\frac{360}{525}\) or \(\frac{72}{105}\)
11. \(\frac{12}{72}\) or \(\frac{1}{6}\)
12. \(\frac{35}{120}\) or \(\frac{7}{24}\)
13. \(\frac{275}{36}\) or \(\frac{723}{36}\)
14. \(\frac{36}{60}\) or \(\frac{1}{20}\)
15. \(\frac{35}{96}\)
16. \(\frac{28}{336}\) or \(\frac{1}{12}\)
17. \(\frac{4}{10}\) or \(\frac{2}{5}\)
18. \(\frac{3}{8}\)
19. \(\frac{1}{16}\)
20. \(\frac{1}{16}\) kg

B.
1. \(\frac{1}{36}\)
2. \(\frac{1}{49}\)
3. \(\frac{25}{81}\)
4. \(\frac{9}{25}\)
5. \(\frac{1089}{64}\) or \(17\frac{1}{64}\)
6. \(\frac{1225}{36}\) or \(34\frac{1}{36}\)
7. \(\frac{400}{9}\) or \(44\frac{4}{9}\)
8. \(44\frac{1}{25}\) or \(17\frac{16}{25}\)
9. \(\frac{1089}{16}\) or \(68\frac{1}{16}\)
10. \(\frac{121}{80}\) or \(1\frac{30}{81}\)
11. \(\frac{144}{16}\) or \(27\frac{9}{16}\)
12. \(\frac{100}{9}\) or \(11\frac{1}{9}\)

Exercise 29

A.
1. \(\frac{5}{8}\)
2. \(\frac{49}{24}\) or \(\frac{43}{8}\)
3. \(2\frac{2}{7}\)
4. \(2\frac{7}{24}\)
5. \(5\)
6. \(\frac{41}{48}\)
7. \(\frac{1}{6}\)
8. \(\frac{1}{4}\)
9. \(3\frac{23}{24}\)
10. \(14\frac{2}{5}\)
11. \(4\frac{2}{3}\)
12. \(25\frac{1}{2}\)
13. \(\frac{7}{18}\)
14. \(5\frac{5}{6}\)
15. \(16\frac{1}{7}\)
16. \(6\frac{7}{48}\)
17. \(12\)
18. \(8\frac{1}{2}\)
19. \(3\)
20. \(2\)
21. \(3\frac{1}{3}\)
22. \(7\frac{1}{8}\)
23. \(5\frac{3}{4}\)
24. \(9\frac{1}{3}\)
25. \(7\) m²
26. \(39\) litres
27. \(5\frac{2}{6}\) m or \(5\frac{1}{3}\) m
28. \(34\frac{3}{8}\)

Exercise 30

A.
1. \(\frac{1}{16}\)
2. \(\frac{9}{25}\)
3. \(\frac{1}{125}\)
4. \(\frac{49}{169}\)
5. \(\frac{49}{4}\) or \(12\frac{1}{4}\)
6. \(\frac{625}{36}\) or \(17\frac{13}{36}\)
7. \(\frac{196}{25}\) or \(7\frac{21}{25}\)
8. \(\frac{6889}{100}\) or \(68\frac{89}{100}\)
9. \(\frac{144}{9}\) or \(16\)
10. \(\frac{625}{64}\) or \(9\frac{49}{64}\)
11. \(\frac{324}{100}\) or \(3\frac{24}{100}\) or \(3\frac{6}{25}\)
12. \(\frac{2500}{289}\) or \(8\frac{188}{289}\)
B.
1. \(\frac{1}{36}\)
2. \(\frac{1}{49}\)
3. \(\frac{25}{81}\)
4. \(\frac{9}{25}\)
5. \(\frac{1089}{64}\) or \(17\frac{1}{64}\)
6. \(\frac{1225}{36}\) or \(34\frac{1}{36}\)
7. \(\frac{400}{9}\) or \(44\frac{4}{9}\)
8. \(44\frac{1}{25}\) or \(17\frac{16}{25}\)
9. \(\frac{1089}{16}\) or \(68\frac{1}{16}\)
10. \(\frac{121}{80}\) or \(1\frac{30}{81}\)
11. \(\frac{144}{16}\) or \(27\frac{9}{16}\)
12. \(\frac{100}{9}\) or \(11\frac{1}{9}\)

Exercise 31

A.
1. \(\frac{5}{9}\)
2. \(\frac{2}{9}\)
3. \(\frac{5}{8}\)
4. \(\frac{9}{15}\)
5. \(\frac{2}{5}\)
6. \(\frac{9}{10}\)
7. \(\frac{11}{25}\)
8. \(\frac{6}{5}\) or \(\frac{11}{5}\)
9. \(\frac{13}{4}\)
10. \(\frac{8}{3}\) or \(2\frac{2}{3}\)
11. \(\frac{4}{7}\)
12. \(\frac{3}{2}\) or \(1\frac{1}{2}\)
13. \(\frac{13}{5}\) or \(2\frac{3}{5}\)
14. \(\frac{5}{6}\)
15. \(\frac{7}{25}\)
16. \(\frac{10}{7}\) or \(\frac{3}{7}\)
Exercise 32

A.
1. $\frac{3}{1}$
2. $\frac{17}{6}$
3. $\frac{2}{1}$
4. $\frac{3}{2}$
5. $\frac{7}{1}$
6. $\frac{10}{1}$
7. $\frac{8}{1}$
8. $\frac{17}{6}$
9. $\frac{11}{4}$
10. $\frac{3}{1}$
11. $\frac{15}{10}$
12. $\frac{25}{3}$

B.
1. $\frac{1}{9}$
2. $\frac{1}{43}$
3. $\frac{1}{3}$
4. $\frac{1}{16}$
5. $\frac{1}{1000}$
6. $\frac{1}{15}$
7. $\frac{1}{11}$
8. $\frac{1}{73}$
9. $\frac{1}{13}$
10. $\frac{1}{20}$
11. $\frac{1}{17}$
12. $\frac{1}{1000}$

C.
1. $\frac{6}{34}$
2. $\frac{8}{14}$
3. $\frac{4}{29}$
4. $\frac{9}{95}$
5. $\frac{12}{76}$
6. $\frac{3}{55}$
7. $\frac{3}{55}$
8. $\frac{30}{1217}$
9. $\frac{3}{4}$
10. $\frac{7}{39}$
11. $\frac{6}{23}$
12. $\frac{2}{31}$

Exercise 33

1. 6
2. 8
3. 6$\frac{2}{3}$
4. 10$\frac{1}{2}$
5. 48
6. 48
7. 14
8. 24
9. 21
10. 16
11. 30
12. 144
13. 20$\frac{1}{5}$
14. 39
15. 40
16. $\frac{36}{5}$ or $7\frac{1}{5}$
17. 2000 people
18. 125 people
19. 80 packets
20. 72 families

Exercise 34

1. $\frac{1}{8}$
2. $\frac{3}{15}$ or $\frac{1}{5}$
3. $\frac{1}{30}$
4. $\frac{2}{24}$ or $\frac{1}{12}$
5. $\frac{4}{36}$ or $\frac{1}{9}$
6. $\frac{1}{12}$
7. $\frac{2}{21}$
8. $\frac{1}{72}$
9. $\frac{3}{75}$ or $\frac{1}{25}$
10. $\frac{3}{84}$ or $\frac{1}{28}$
11. $\frac{7}{168}$ or $\frac{1}{24}$
12. $\frac{2}{36}$ or $\frac{1}{18}$
13. $\frac{7}{56}$ or $\frac{1}{8}$
14. $\frac{14}{840}$ or $\frac{1}{60}$
15. $\frac{2}{65}$
16. $\frac{1}{24}$
17. $\frac{2}{9}$
18. $\frac{3}{20}$

Exercise 35

1. $\frac{4}{5}$
2. $\frac{1}{2}$
3. $\frac{5}{3}$ or $1\frac{2}{3}$
4. 1
5. $\frac{12}{25}$
6. $\frac{21}{40}$
7. $\frac{3}{2}$ or $1\frac{1}{2}$
8. $\frac{7}{6}$ or $1\frac{1}{6}$
9. $\frac{1}{2}$
10. $\frac{2}{3}$
11. $\frac{7}{6}$ or $1\frac{1}{6}$
12. $\frac{5}{4}$ or $1\frac{1}{4}$
13. $\frac{3}{2}$ or $1\frac{1}{2}$
14. $\frac{845}{648}$ or $1\frac{197}{648}$
15. $\frac{38}{21}$ or $1\frac{17}{21}$
16. $\frac{82}{21}$ or $1\frac{1}{3}$
17. 10 pieces
18. 2 children

19. 80 packets
20. 72 families

18. 125 people
Exercise 36

1. \( \frac{44}{3} \) or \( 14\frac{2}{3} \)
2. \( \frac{1}{3} \)
3. \( \frac{1}{3} \)
4. \( 13\frac{1}{5} \)
5. \( 4\frac{1}{2} \)
6. \( \frac{1}{13} \)
7. \( \frac{2}{3} \)
8. \( \frac{5}{9} \)
9. \( \frac{45}{32} \) or \( 1\frac{13}{32} \)
10. \( \frac{55}{28} \) or \( 1\frac{27}{28} \)
11. \( 2\frac{23}{36} \)
12. \( 3\frac{27}{40} \)
13. \( 5\frac{43}{60} \)
14. \( 1\frac{3}{4} \)
15. \( 1\frac{1}{8} \)
16. \( \frac{4}{5} \)
17. 11 pieces
18. 75 packets
19. 10 customers

Exercise 37

1. 0
2. \( 7\frac{1}{4} \)
3. \( 1\frac{2}{3} \)
4. \( 4\frac{1}{4} \)
5. 9
6. \( \frac{1}{162} \)
7. \( 1\frac{1}{2} \)
8. \( \frac{27}{254} \)
9. 2

Exercise 38

A.
1. Hundredths
2. Thousandths
3. Ten thousandths
4. Ones
5. Ones
6. Hundredths
7. Tens
8. Tenths

B.
1. 0.004
2. 0.0
3. 40
4. 0.0008
5. 0.9
6. 0.00
7. 0.03
8. 0.0

C.
5 – 500
1 – 10
2 – 2
4 – 0.4
8 – 0.08
0 – 0.000
7 – 0.0007

D.

<table>
<thead>
<tr>
<th>Number</th>
<th>Tens</th>
<th>Ones</th>
<th>Tenths</th>
<th>Hundredths</th>
<th>Thousandths</th>
<th>Ten thousands</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. 2.567</td>
<td>2</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. 14.9253</td>
<td>1</td>
<td>4</td>
<td>9</td>
<td>2</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>3. 0.3928</td>
<td>0</td>
<td>3</td>
<td>9</td>
<td>2</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>4. 24.057</td>
<td>2</td>
<td>4</td>
<td>0</td>
<td>5</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>5. 0.0006</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>6. 9.7346</td>
<td>9</td>
<td>7</td>
<td>3</td>
<td>4</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td>0</td>
<td>4</td>
<td>4</td>
<td>5</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>8.</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>8</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>9. 0.2926</td>
<td>0</td>
<td>2</td>
<td>9</td>
<td>2</td>
<td>6</td>
<td></td>
</tr>
</tbody>
</table>
Exercise 39

A.
1. 101.8  2. 25.6  3. 477.1
4. 721.1  5. 2.1  6. 0.1
7. 99.0  8. 0.1

B.
1. 68.21  2. 84.35  3. 16.73
4. 11.32  5. 0.06  6. 49.72
7. 0.10  8. 431.06

C.
1. 251.00  2. 31.00  3. 5.421
4. 158.8  5. 0.59  6. 68.456
7. 877.9  8. 735.46

Exercise 40

A.
1. 0.15  2. 0.125  3. 0.28
4. 0.66  5. 0.375  6. 0.4
7. 0.25  8. 0.8  9. 0.8
10. 0.024  11. 0.75  12. 0.94

B.
1. 0.545  2. 0.143  3. 0.667
4. 0.556  5. 0.515  6. 0.833
7. 0.273  8. 0.267

C.
1. 0.9 (Not recurring)
2. 0.777 (Recurring)
3. 0.625 (Not recurring)
4. 0.5454 (Recurring)
5. 0.9333 (Recurring)
6. 0.28 (Not recurring)
7. 0.6153846 (Recurring)
8. 0.333 (Recurring)

Exercise 41

1. \( \frac{1}{2} \)  2. \( \frac{1}{8} \)  3. \( \frac{1}{20} \)
4. \( \frac{29}{40} \)  5. \( \frac{5}{8} \)  6. \( \frac{7}{8} \)
7. \( \frac{9}{100} \)  8. \( \frac{7}{50} \)  9. \( \frac{8}{25} \)
10. \( \frac{39}{50} \)  11. \( \frac{1}{4} \)  12. \( \frac{27}{200} \)
13. \( \frac{13}{40} \)  14. \( \frac{21}{25} \)  15. \( \frac{49}{50} \)
16. \( \frac{1}{5} \)  17. \( \frac{1349}{500} \) or \( \frac{2349}{500} \)
18. \( \frac{7}{20} \)  19. \( \frac{9}{40} \)  20. \( \frac{5}{8} \)
21. \( \frac{7}{100} \)  22. \( \frac{1}{10} \)  23. \( \frac{1}{200} \)
24. \( \frac{9}{4} \) or \( 2 \frac{1}{4} \)

Exercise 42

1. 88.975  2. 599.37
3. 16090.429  4. 1649.284
5. 118.975  6. 172.892  7. 88.69
8. 5.6833  9. 32.24  10. 120.952
11. 396.023  12. 415.96  13. 1211.941
14. 22.43  15. 107.655  16. 89.9963
17. 208.9112  18. 19.6 kg  19. 28.911 km

Exercise 43
1. 11.36  2. 3.395  3. 20.51
4. 23.094  5. 1169.5771 6. 147.1679
8. 342.487  9. 605.27  10. 386.29
11. 96.984  12. 28.925  13. 348.049
14. 22.43  15. 107.655  16. 89.9963
17. 8.15 kg  18. 1.31 m  19. 1.5 litres

Exercise 44
1. 43  2. 514  3. 45.6
4. 840  5. 8  6. 245.8
7. 842  8. 23.625  9. 103.7
10. 0.65  11. 21080  12. 1054.8
13. 445.56  14. 780  15. 90
16. 3030  17. 5  18. 9830.1
19. 3500  20. 5214

Exercise 45
1. 3.2  2. 64  3. 26.52
4. 34.32  5. 110.946  6. 18.72
7. 1.95  8. 61.76  9. 50.4
10. 151.8  11. 18.54  12. 1.54
13. 40  14. 268.8  15. 47.2
16. 228.16  17. 5386.25  18. 1330
19. 663  20. 5300  21. 38.7

Exercise 46
A.
1. 0.35  2. 0.282  3. 0.0147
4. 30.24  5. 1128.75  6. 0.648
7. 35.25  8. 186.6875  9. 23.66
10. 3.735  11. 0.96  12. 43.401
13. 0.075  14. 59.818  15. 14.63
16. 0.02  17. 125.125 km  18. 47.1425 m²
19. 40  20. 50

Exercise 47
1. 0.499  2. 0.932  3. 2.065
4. 1.2  5. 0.3225  6. 1.64
7. 2.165  8. 3.75  9. 0.7225
10. 0.209  11. 0.235  12. 0.625
13. 6.50  14. 2.05 m

Exercise 48
A.
1. 200  2. 540  3. 40
4. 270  5. 40  6. 120
7. 270  8. 2200  9. 870
10. 40  11. 50  12. 270
13. 20  14. 160  15. 50
16. 2000  17. 40  18. 1000
19. 20  20. 10

Exercise 49
1. 660.1  2. 1.2  3. 0.04
4. 5.6  5. 1.54  6. 0.0004
7. 1626.2  8. 0.1  9. 5
10. 0.31  11. 12.6  12. 58.02
13. 45.9  14. 4  15. 1.5
16. 0.5  17. 15  18. 45.1
19. 3.25  20. 30.02972
# Unit 6 Percentages

## Exercise 50

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.</td>
<td>26%</td>
<td>2.</td>
</tr>
<tr>
<td>4.</td>
<td>56%</td>
<td>5.</td>
</tr>
<tr>
<td>7.</td>
<td>73%</td>
<td>8.</td>
</tr>
<tr>
<td>B.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.</td>
<td>$\frac{65}{100}$</td>
<td>2.</td>
</tr>
<tr>
<td>4.</td>
<td>$\frac{3}{100}$</td>
<td>5.</td>
</tr>
<tr>
<td>7.</td>
<td>$\frac{22}{100}$</td>
<td>8.</td>
</tr>
<tr>
<td>C.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.</td>
<td>$\frac{25}{100}$</td>
<td>2.</td>
</tr>
<tr>
<td>4.</td>
<td>$\frac{88}{100}$</td>
<td></td>
</tr>
</tbody>
</table>

## Exercise 51

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.</td>
<td>30%</td>
<td>2.</td>
</tr>
<tr>
<td>4.</td>
<td>52%</td>
<td>5.</td>
</tr>
<tr>
<td>7.</td>
<td>22%</td>
<td>8.</td>
</tr>
<tr>
<td>B.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.</td>
<td>80%</td>
<td>2.</td>
</tr>
<tr>
<td>4.</td>
<td>18%</td>
<td>5.</td>
</tr>
<tr>
<td>7.</td>
<td>45%</td>
<td>8.</td>
</tr>
<tr>
<td>10.</td>
<td>75%</td>
<td>11.</td>
</tr>
<tr>
<td>C.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.</td>
<td>$\frac{99}{100}$</td>
<td>2.</td>
</tr>
<tr>
<td>4.</td>
<td>$\frac{56}{100}$</td>
<td>5.</td>
</tr>
</tbody>
</table>

## Exercise 52

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.</td>
<td>86%</td>
<td>2.</td>
</tr>
<tr>
<td>4.</td>
<td>18%</td>
<td>5.</td>
</tr>
<tr>
<td>7.</td>
<td>64%</td>
<td>8.</td>
</tr>
<tr>
<td>10.</td>
<td>45%</td>
<td>11.</td>
</tr>
<tr>
<td>13.</td>
<td>40%</td>
<td>14.</td>
</tr>
<tr>
<td>B.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.</td>
<td>0.12</td>
<td>2.</td>
</tr>
<tr>
<td>4.</td>
<td>0.77</td>
<td>5.</td>
</tr>
<tr>
<td>7.</td>
<td>0.67</td>
<td>8.</td>
</tr>
<tr>
<td>10.</td>
<td>0.95</td>
<td>11.</td>
</tr>
</tbody>
</table>

## Exercise 53

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>48</td>
<td>2.</td>
</tr>
<tr>
<td>4.</td>
<td>112</td>
<td>5.</td>
</tr>
<tr>
<td>7.</td>
<td>12</td>
<td>8.</td>
</tr>
</tbody>
</table>
Exercise 54

\[
\begin{array}{|c|c|c|c|}
\hline
& & & \\
1. 10\% &= 75 & 40\% &= \frac{40 \times 75}{10} = 300 & 80\% &= \frac{80 \times 75}{10} = 600 & 100\% &= 750 \\
2. 50\% &= 45 & 20\% &= \frac{20 \times 45}{50} = 18 & 75\% &= \frac{75 \times 45}{50} = 67.5 & 100\% &= \frac{100 \times 45}{50} = 90 \\
3. 25\% &= 25 & 1\% &= \frac{1 \times 25}{25} = 1 & 60\% &= \frac{60 \times 25}{25} = 60 & 95\% &= \frac{95 \times 25}{25} = 95 \\
4. 40\% &= 350 & 55\% &= \frac{55 \times 350}{40} = 481.25 & 75\% &= \frac{75 \times 350}{40} = 656.25 & 90\% &= \frac{90 \times 350}{40} = 787.5 \\
5. 12\% &= 144 & 45\% &= \frac{45 \times 144}{12} = 540 & 60\% &= \frac{60 \times 144}{12} = 720 & 80\% &= \frac{80 \times 144}{12} = 960 \\
6. 8\% &= 640 & 24\% &= \frac{24 \times 640}{8} = 1920 & 64\% &= \frac{64 \times 640}{8} = 5120 & 72\% &= \frac{72 \times 640}{8} = 5760 \\
7. 96\% &= 100 & 97\% &= \frac{97 \times 100}{96} = 101.04167 & 98\% &= \frac{98 \times 100}{96} = 102.0833 & 100\% &= \frac{100 \times 100}{96} = 104.166 \\
8. 80\% &= 280 & 87\% &= \frac{87 \times 280}{80} = 304.5 & 90\% &= \frac{90 \times 280}{80} = 315 & 95\% &= \frac{95 \times 280}{80} = 332.5 \\
9. 15\% &= 150 & 45\% &= \frac{45 \times 150}{15} = 450 & 66\% &= \frac{66 \times 150}{15} = 660 & 88\% &= \frac{88 \times 150}{15} = 880 \\
10. 30\% &= 270 & 75\% &= \frac{75 \times 270}{30} = 675 & 85\% &= \frac{85 \times 270}{30} = 765 & 100\% &= \frac{100 \times 270}{30} = 900 \\
\hline
\end{array}
\]

Exercise 55

1. 6 litres  
2. 60%  
3. 200 tickets  
4. Sh 450  
5. 84 000 people  
6. 750 pupils  
7. (a) \(\frac{120}{150}\) or \(\frac{4}{5}\)  
(b) 20%  
8. 20%  
9. 200 km  
10. 2880 litres  
11. 12 girls  
12. Sh 660  
13. 15%  
14. 87 500

Unit 7 Length

Exercise 56

A.

1. 58 mm  
2. 21 mm  
3. 79 mm  
4. 43 mm  
5. 65 mm  
6. 36 mm  
7. 51 mm  
8. 90 mm

B. Teacher check

C.

1. 3 cm 3 mm  
2. 4 cm 8 mm  
3. 1 cm 4 mm  
4. 6 cm 7 mm  
5. 5 cm 2 mm  
6. 8 cm  
7. 2 cm 6 mm  
8. 9 cm 1 mm
Exercise 57

A.  
1. 440 mm  
2. 950 mm  
3. 760 mm  
4. 1090 mm  
5. 35 mm  
6. 489 mm  
7. 178 mm  
8. 948 mm

B.  
1. 9 cm  
2. 6 cm  
3. 1 cm  
4. 3 cm  
5. 4.5 cm  
6. 12.8 cm  
7. 24.3 cm  
8. 51.2 cm

C.  
1. 101 mm  
2. 183 mm  
3. 483 mm  
4. 3680 mm  
5. 2000 mm  
6. 8000 mm  
7. 164 mm  
8. 7040 mm  
9. 9099 mm  
10. 2980 mm  
11. 23 cm 3 mm  
12. 13 cm 9 mm

Exercise 58

A.  
1. AC  
2. GE

B.  
1. 6 cm  
2. 30 m  
3. 14 cm  
4. 20 m

C.  
1. 9 cm  
2. 4.5 m  
3. 21 cm  
4. 42 m

Exercise 59

A.  
1. 8.8 cm  
2. 26.4 cm  
3. 13.2 cm  
4. 11 cm  
5. 4.4 cm  
6. 35.2 cm  
7. 92.4 cm  
8. 39.6 cm

Exercise 60

A.  
1. 22 m  
2. 44 cm  
3. 22 m  
4. 22 cm  
5. 110 m  
6. 110 cm  
7. 66 cm  
8. 165 cm
Exercise 61
1. 72 cm  
2. 7.2 cm  
3. 252 cm  
4. 144 m  
5. 360 m  
6. 18 m  
7. 216 cm  
8. 57.6 cm  

Unit 8 Area

Exercise 62
A.
1.  
3. 24 cm$^2$  
4. GJ = 4 cm  
5. IJ = 6 cm  
6. $\frac{1}{2} \times 6 \times 4 = 12$ cm$^2$

Exercise 63
1. 27 cm$^2$  
2. 95 cm$^2$  
3. 15 cm$^2$  
4. WTZ = 24 cm$^2$; TXY = 54 cm$^2$, 
Total = 78 cm$^2$  
5. 25 cm$^2$  
6. 16 cm$^2$  

B.
1. 78 cm$^2$  
2. 51 cm$^2$  
3. 49 cm$^2$  
4. 12.8 cm$^2$  
5. 9 cm$^2$  
6. 300 cm$^2$  
7. 495 cm$^2$  
8. 89.18 cm$^2$  
9. 196 cm$^2$

Exercise 64
A.
1. 20 cm  
2. 8 cm  
3. 4 cm  
4. 12 cm  
5. 7 cm  
6. 10 cm  

B.

<table>
<thead>
<tr>
<th>Base of triangle</th>
<th>Height of triangle</th>
<th>Area of triangle</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. 24 cm</td>
<td>17 cm</td>
<td>204 cm$^2$</td>
</tr>
<tr>
<td>2. 29 cm</td>
<td>24 cm</td>
<td>348 cm$^2$</td>
</tr>
<tr>
<td>3. 8 cm</td>
<td>13 cm</td>
<td>54 cm$^2$</td>
</tr>
<tr>
<td>4. 16 cm</td>
<td>5 cm</td>
<td>40 cm$^2$</td>
</tr>
<tr>
<td>5. 18 cm</td>
<td>9 cm</td>
<td>81 cm$^2$</td>
</tr>
</tbody>
</table>

6. 8 m  
7. 49 cm$^2$  
8. 81 cm$^2$

Exercise 65
1. 30 cm$^2$  
2. 70 cm$^2$  
3. 24 cm$^2$  
4. 1231 cm$^2$  
5. 1276 cm$^2$  
6. 83 cm$^2$  
7. 252 cm$^2$  
8. 240 cm$^2$  
9. 480 cm$^2$

Exercise 66
A.
1. 500 ares  
2. 228 ares  
3. 105 ares  
4. 450 ares  
5. 200 ares  
6. 302 ares  
7. 217.34 ares  
8. 100.29 ares  

B.
1. 1500 m$^2$  
2. 4800 m$^2$  
3. 1300 m$^2$  
4. 10 000 m$^2$  
5. 1230 m$^2$  
6. 370 m$^2$  
7. 2 173 400 m$^2$  
8. 1 002 900 m$^2$

C.
1. 16 ares  
3. 34.83 ares  
5. 34.83 ares  
7. 6.27 ares  
9. 1541.92 ares

2. 46.08 ares  
4. 14.56 ares  
6. 172.22 ares  
8. 89.1 ares
Exercise 67

A.
1. 1 ha
2. 15 ha
3. 0.65 ha
4. 15.08 ha
5. 1.5 ha
6. 33.1 ha
7. 6.35 ha
8. 12 ha

B.
1. 480 000 m²
2. 300 000 m²
3. 12 500 m²
4. 96 000 m²
5. 150 000 m²
6. 52 500 m²
7. 35 000 m²
8. 77 000 m²

C.
1. 0.12 ha
2. 0.8 ha
3. 0.75 ha
4. 1.75 ha
5. 6 ha
6. 2.55 ha
7. 0.93 ha
8. 8.2344 ha
9. 50 plots
10. 356 000 m²
11. 300 m

Exercise 68

A.

<table>
<thead>
<tr>
<th>Area in m²</th>
<th>Area in ares</th>
<th>Area in ha</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. 5000</td>
<td>50</td>
<td>0.5</td>
</tr>
<tr>
<td>2. 6250</td>
<td>62.5</td>
<td>0.625</td>
</tr>
<tr>
<td>3. 73 000</td>
<td>730</td>
<td>7.3</td>
</tr>
<tr>
<td>4. 90 074</td>
<td>900.74</td>
<td>9.0074</td>
</tr>
<tr>
<td>5. 38 000</td>
<td>380</td>
<td>3.8</td>
</tr>
<tr>
<td>6. 4719</td>
<td>47.19</td>
<td>0.4719</td>
</tr>
<tr>
<td>7. 81700</td>
<td>817</td>
<td>8.17</td>
</tr>
<tr>
<td>8. 220 000</td>
<td>2200</td>
<td>22</td>
</tr>
<tr>
<td>9. 1400</td>
<td>14</td>
<td>0.14</td>
</tr>
<tr>
<td>10. 810</td>
<td>8.1</td>
<td>0.081</td>
</tr>
</tbody>
</table>

B.
1. 500 ares
2. 3200 ares
3. 900 ares
4. 4520 ares
5. 375 ares
6. 1400 ares
7. 485 ares
8. 1560 ares

C.
1. 214 hectares
2. 0.85 hectares
3. 56.36 hectares
4. 4.50 hectares
5. 1060 hectares
6. 0.18 hectares
7. 3.12 hectares
8. 75 hectares
9. (a) 120 ares (b) 1.2 ha
10. 16 ha
11. 9.6 ha

Unit 9 Volume

Exercise 69

A.
1. 12 000 000 cm³
2. 25 000 000 cm³
3. 7 600 000 cm³
4. 18 000 000 cm³
5. 3 300 000 cm³
6. 2 300 000 cm³
7. 8 200 000 cm³
8. 170 000 cm³
9. 6 500 000 cm³
10. 650 000 cm³
11. 750 000 cm³
12. 43 000 000 cm³

B.
1. 0.1 m³
2. 0.004445 m³
3. 6.065345 m³
4. 0.000155 m³
5. 0.083150 m³
6. 680.945 m³
7. 0.048 m³
8. 9.652 m³
9. 240 m³
10. 0.015706 m³
11. 0.008174 m³
12. 0.002193 m³

Exercise 70

<table>
<thead>
<tr>
<th>Length</th>
<th>Width</th>
<th>Height</th>
<th>Volume</th>
</tr>
</thead>
<tbody>
<tr>
<td>12 m</td>
<td>4 m</td>
<td>5 m</td>
<td>240 m³</td>
</tr>
<tr>
<td>21.8</td>
<td>10 m</td>
<td>9 m</td>
<td>1962 m³</td>
</tr>
<tr>
<td>7.5 m</td>
<td>5.5 m</td>
<td>6 m</td>
<td>247.5 m³</td>
</tr>
<tr>
<td>(\frac{2}{3}) m</td>
<td>(\frac{1}{2}) m</td>
<td>(\frac{1}{4}) m</td>
<td>0.2475 m³</td>
</tr>
</tbody>
</table>
Exercise 71

A.
1. 350 000 cm³  2. 240 m³  3. 840 m³

C.

<table>
<thead>
<tr>
<th>Length</th>
<th>Width</th>
<th>Height</th>
<th>Volume in (m³)</th>
<th>Volume (cm³)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. 12 m</td>
<td>8 m</td>
<td>4 m</td>
<td>384</td>
<td>384 000 000</td>
</tr>
<tr>
<td>2. 4 m</td>
<td>54 m</td>
<td>100 m</td>
<td>21 600</td>
<td>21 600 000 000</td>
</tr>
<tr>
<td>3. 5.4 m</td>
<td>4.2 m</td>
<td>3.6 m</td>
<td>81.648</td>
<td>81 648 000</td>
</tr>
<tr>
<td>4. 20 m</td>
<td>15 m</td>
<td>22 m</td>
<td>6600</td>
<td>6 600 000 000</td>
</tr>
<tr>
<td>5. 1.2 m</td>
<td>1 m</td>
<td>0.5 m</td>
<td>0.6</td>
<td>600 000</td>
</tr>
</tbody>
</table>

Exercise 72

A.
1. 0.3 litres  2. 0.5 litres  
3. 0.75 litres  4. 0.4 litres  
5. 0.55 litres  6. 7.5 litres  
7. 0.05 litres  8. 4.5 litres  
9. 1 litres   10. 36.5 litres  
11. 41 litres  12. 83.55 litres  
13. 30 litres  14. 5.5 litres  
15. 0.25 litres  16. 1.31 litres  
17. 3 litres

B.
1. 2000  2. 5000  3. 6000
4. 13 000  5. 3500  6. 4400
7. 900  8. 4750  9. 2300

C.
1. 10 decilitres  2. 40 decilitres  
3. 90 decilitres  4. 140 decilitres  
5. 760 decilitres  6. 1080 decilitres  
7. 1530 decilitres  8. 8400 decilitres  
9. 203 decilitres  10. 787 decilitres  
11. 123 decilitres  12. 154 decilitres  
13. 780 bottles  14. 4800 decilitres

D.
1. 0.2 litres  2. 0.8 litres  
3. 0.5 litres  4. 1 litres  
5. 5 litres  6. 8 litres  
7. 18 litres  8. 45 litres

Unit 10 Capacity
<table>
<thead>
<tr>
<th>9.</th>
<th>88 litres</th>
<th>10.</th>
<th>0.32 litres</th>
</tr>
</thead>
<tbody>
<tr>
<td>11.</td>
<td>0.21 litres</td>
<td>12.</td>
<td>3.025 litres</td>
</tr>
<tr>
<td>13.</td>
<td>87.5 litres</td>
<td>14.</td>
<td>150 litres</td>
</tr>
<tr>
<td>15.</td>
<td>1.2 litres</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Exercise 73**

1. \(2 \frac{1}{8} \text{ dl} 65 \text{ ml}\)  
2. \(38 \text{ l} 00 \text{ dl} 58 \text{ ml}\)  
3. 124.18 dl  
4. \(11 \text{ l} 15 \text{ dl} 98 \text{ ml}\)  
5. \(17 \text{ l} 1 \text{ dl} 44 \text{ ml}\)  
6. \(16 \text{ l} 02 \text{ dl} 61 \text{ ml}\)  
7. \(71 \text{ l} 04 \text{ dl} 06 \text{ ml}\)  
8. \(434 \text{ l} 7 \text{ dl} 06 \text{ ml}\)  
9. \(71 \text{ l} 40 \text{ ml}\)  
10. \(58 \text{ l} 06 \text{ dl} 55 \text{ ml}\)  
11. \(680 \text{ l} 9 \text{ dl} 20 \text{ ml}\)  
12. \(107 \text{ l} 2 \text{ dl} 30 \text{ ml}\)  
13. \(33 \text{ l} 03 \text{ dl} 08 \text{ ml}\)  
14. \(92 \text{ l} 03 \text{ dl} 04 \text{ ml}\)  
15. \(99 \text{ l} 4 \text{ dl} 57 \text{ ml}\)  
16. \(21 \text{ l} 00 \text{ dl} 52 \text{ ml}\)  
17. \(13 \text{ l} 9 \text{ dl} 92 \text{ ml}\)  
18. \(107 \text{ l} 9 \text{ dl} 49 \text{ ml}\)  
19. \(354 \text{ l} 05 \text{ dl} 50 \text{ ml}\)  
20. \(555 \text{ l} 5 \text{ dl} 32 \text{ ml}\)  
21. \(385 \text{ l} 00 \text{ dl} 60 \text{ ml}\)  
22. \(33 \text{ l} 00 \text{ dl} 160 \text{ ml}\)  
23. \(186 \text{ l} 00 \text{ dl} 73 \text{ ml}\)  

**Exercise 74**

1. \(20 \text{ dl} 2 \text{ ml}\)  
2. \(9 \text{ l} 5 \text{ dl} 90 \text{ ml}\)  
3. \(1 \text{ l} 6 \text{ dl} 95 \text{ ml}\)  
4. \(7 \text{ l} 2 \text{ ml}\)  
5. \(76 \text{ l} 4 \text{ dl} 10 \text{ ml}\)  
6. \(38 \text{ l} 7 \text{ dl} 93 \text{ ml}\)  
7. \(6 \text{ dl} 1 \text{ ml}\)  
8. \(13 \text{ l} 8 \text{ dl} 88 \text{ ml}\)  
9. \(65 \text{ l} 7 \text{ dl} 85 \text{ ml}\)  
10. \(10 \text{ l} 2 \text{ dl} 10 \text{ ml}\)  
11. \(28 \text{ l} 7 \text{ dl} 50 \text{ ml}\)  
12. \(89 \text{ l} 8 \text{ dl} 80 \text{ ml}\)  
13. \(6 \text{ l} 6 \text{ dl} 67 \text{ ml}\)  
14. \(0 \text{ l} 2 \text{ dl} 92 \text{ ml}\)  
15. \(0 \text{ l} 6 \text{ dl} 80 \text{ ml}\)  
16. \(115 \text{ l} 5 \text{ dl} 565 \text{ ml}\)  
17. \(3 \text{ dl} 85 \text{ ml}\)  
18. \(16 \text{ l} 6 \text{ dl} 86 \text{ ml}\)  

**Exercise 75**

1. \(100 \text{ l} 650 \text{ ml}\)  
2. \(300 \text{ l} 870 \text{ ml}\)  
3. \(302 \text{ l} 00 \text{ ml}\)  
4. \(6 \text{ dl} 51 \text{ ml}\)  
5. \(301 \text{ dl} 45 \text{ ml}\)  
6. \(219 \text{ dl} 42 \text{ ml}\)  
7. \(200 \text{ dl} 16 \text{ ml}\)  
8. \(1200 \text{ dl} 12 \text{ ml}\)  

**Unit 11 Mass**

**Exercise 76**

A.

1. \(300 \text{ ml}\)  
2. \(5 \text{ dl} 150 \text{ ml} \text{ or} 6 \text{ dl} 50 \text{ ml}\)  
3. \(12 \text{ dl} 100 \text{ ml}\)  
4. \(2 \text{ dl} 51 \text{ ml}\)  
5. \(1 \text{ dl} 95 \text{ ml}\)  
6. \(4 \text{ dl} 10 \text{ ml}\)  
7. \(10 \text{ l} 4 \text{ dl}\)  
8. \(40 \text{ l} 4 \text{ dl}\)  
9. \(64 \text{ l} 9 \text{ dl}\)  
10. \(15 \text{ l} 4 \text{ dl} 40 \text{ ml}\)  
11. \(24 \text{ l} 6 \text{ dl} 60 \text{ ml}\)  
12. \(5 \text{ l} 8 \text{ dl} 41 \text{ ml}\)  
13. \(7 \text{ l} 2 \text{ dl} 42 \text{ ml}\)  
14. \(24 \text{ l} 06 \text{ dl} 60 \text{ ml}\)  
15. \(312 \text{ l} 1 \text{ dl} 12 \text{ ml}\)  

**Exercise 77**

A.

1. \(89 \text{ tonnes}\)  
2. \(0.036 \text{ tonnes}\)  
3. \(12.326 \text{ tonnes}\)  
4. \(1 \text{ tonnes}\)  
5. \(0.46 \text{ tonnes}\)  
6. \(1.578 \text{ tonnes}\)  
7. \(0.918 \text{ tonnes}\)  
8. \(575.555 \text{ tonnes}\)  
9. \(26.517 \text{ tonnes}\)  
10. \(960.857 \text{ tonnes}\)  
11. \(1.500276 \text{ tonnes}\)  
12. \(3.691768 \text{ tonnes}\)  
13. \(49.025445 \text{ tonnes}\)  
14. \(621.9 \text{ tonnes}\)  
15. \(0.098467 \text{ tonnes}\)  
16. \(180 \text{ tonnes}\)  
17. \(0.518785 \text{ tonnes}\)  
18. \(9.5555 \text{ tonnes}\)  
19. \(0.004784 \text{ tonnes}\)  
20. \(0.814 \text{ tonnes}\)  

B.

1. \(4500 \text{ kg}\)  
2. \(875 \text{ kg}\)  
3. \(2000 \text{ kg}\)  
4. \(30600 \text{ kg}\)  
5. \(400000 \text{ kg}\)  
6. \(1000 \text{ kg}\)  
7. \(2200 \text{ kg}\)  
8. \(750 \text{ kg}\)
9. 300 kg  
10. 5900 kg  
11. 752 kg  
12. 87 450 kg  
13. 0.545 kg  
14. 0.094 kg  
15. 1.861 kg  
16. 92 kg  
17. 874.853 kg  
18. 69.145 kg  
19. 2308.4 kg  
20. 708 777 kg

C.

<table>
<thead>
<tr>
<th>Mass in grams (g)</th>
<th>Mass in kilograms (kg)</th>
<th>Mass in tonnes (t)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. 36 500</td>
<td>36.5</td>
<td>0.0365</td>
</tr>
<tr>
<td>2. 43 020</td>
<td>43.020</td>
<td>0.043020</td>
</tr>
<tr>
<td>3. 5 158 000</td>
<td>5158</td>
<td>5.158</td>
</tr>
<tr>
<td>4. 759 000</td>
<td>759</td>
<td>0.759</td>
</tr>
<tr>
<td>5. 900 000</td>
<td>900</td>
<td>0.9</td>
</tr>
<tr>
<td>6. 613 000</td>
<td>613</td>
<td>0.613</td>
</tr>
<tr>
<td>7. 250 000</td>
<td>250</td>
<td>1/4</td>
</tr>
<tr>
<td>8. 43 712 800</td>
<td>43712.8</td>
<td>43.7128</td>
</tr>
<tr>
<td>9. 20 000 000</td>
<td>20 000</td>
<td>20</td>
</tr>
<tr>
<td>10. 2500</td>
<td>2.5</td>
<td>0.0025</td>
</tr>
</tbody>
</table>

Exercise 78

1. 2 tonnes  
2. 14.2 kilograms  
3. 1600 kilograms  
4. 15 kilograms  
5. 400 000 grams  
6. 6280 kilograms  
7. 183 400 grams

Exercise 79

A.
1. 98 t 353 kg 937 g  
2. 50 t 702 kg 000 g  
3. 10 t 071 kg 459 g  
4. 112 t 940 kg 060 g  
5. 67 t 861 kg 725 g  
6. 13 t 734 kg 326 g  
7. 133 t 110 kg 373 g  
8. 78 t 726 kg 281 g  
9. 94 t 452 kg 824 g  
10. 7 t 8 kg 865 g

B.
1. 10 t 896 kg 490 g  
2. 39 t 951 kg 637 g  
3. 16 t 821 kg 10 g  
4. 22 t 828 kg 142 g  
5. 19 t 81 kg 470 g  
6. 1 t 336 kg 216 g  
7. 13 kg 80 g  
8. 12 t 2 kg 520 g  
9. 14 t 137 kg 50 g  
10. 33 t 511 kg 70 g

Exercise 80

A.
1. 7 t 64 kg 1 g  
2. 20 t 669 kg 820 g  
3. 76 t 24 kg 388 g  
4. 20 t 991 kg 572 g  
5. 1 t 978 kg  
6. 1 t 999 kg 813 g
7. 25 t 991 kg 990 g
8. 10 t 150 kg 523 g
9. 3 t 883 kg 915 g
10. 3 t 491 kg 993 g
11. 190 t 45 kg 960 g
12. 107 t 969 kg 996 g

B.
1. 10 t 820 kg
2. 13 t 343 kg
3. 14 t 89 kg 795 g
4. 5 t 219 kg 420 g
5. 3 t 898 kg 850 g
6. 6 t 664 kg 418 g
7. 12 kg 850 g
8. 7 t 759 kg 920 g
9. 12280.35 kg
10. 9.75 t
11. 549 kg 850 g
12. 6 t 664 kg 418 g

Exercise 81

A.
1. 16 t 000 kg 530 g
2. 24 t 221 kg 400 g
3. 147 t 529 kg 512 g
4. 404 t 013 kg 360 g
5. 412 t 20 kg 500 g
6. 139 t 963 kg 356 g
7. 15 t 562 kg 854 g
8. 1767 t 143 kg 484 g
9. 12 t 60 kg 624 g
10. 1 t 5 kg 52 g
11. 3 t 15 kg 156 g
12. 251 kg 263 g
13. 30 t 151 kg 531 g
14. 6 t 9 g
15. 12 t 60 kg 624 g
16. 1 t 5 kg 52 g
17. 16 t 80 kg 120 g
18. 162 kg 232 g
19. 1580 t 207 kg 232 g
20. 549 kg 850 g
21. 1525 kg

Exercise 82

A.
1. 36 kg 415 g
2. 4 t 11 kg 505 g
3. 14 t 605 kg 440 g
4. 16 t 30 kg 120 g
5. 62 t 90 kg 187 g
6. 30 t 151 kg 531 g
7. 6 t 9 g
8. 24 t 12 g
9. 12 t 60 kg 624 g
10. 1 t 5 kg 52 g
11. 3 t 15 kg 156 g
12. 251 kg 263 g
13. 1 t 5 kg 52 g
14. 45 kg 612 g
15. 16 t 80 kg 120 g
16. 162 kg 232 g
17. 32 kg 331 g

Unit 12: Money

Exercise 83

A.
1. sh 335
2. sh 1210
3. sh 500
4. sh 500
5. Item sh         cts
21/2 kg sugar @ sh 48.00  120 00
31/2 flour @ sh 36.00      126 00
2 kg meat @                 421 00
3 kg rice @ sh 80.00         240 00
Total 907 00

Exercise 84

1. sh 1500
2. sh 92 000
3. sh 2000
4. sh 45
5. sh 6000
6. sh 90
7. sh 2 950 000
8. sh 2130
9. sh 5500
10. sh 4.1 million

Exercise 85

A.
1. sh 500
2. sh 250
3. sh 30
4. sh 13 529.75
5. sh 5.5 each or sh 99 for all
6. sh 180
7. sh 21 250
8. sh 300
9. sh 19 175.75
10. sh 9520

Exercise 86
1. 12.5 %
2. 20 %
3. 9 %
4. 15.15 %
5. 20 %
6. 41.66 %
7. 10 %
8. sh 472
9. sh 5660.38
10. sh 34 500

Exercise 87
1. 15 %
2. 10 %
3. 6.4 %
4. 12.5 %
5. (a) sh 324
   (b) 16.67 %
6. (a) sh 4000
   (b) 6.25 %
7. sh 937 500
8. sh 473.68
9. sh 25 200
10. 1.85 %

Unit 13: International postal charges

Exercise 88

A.
1. sh 135.00
2. sh 280.00
3. sh 530.00
4. sh 1095.00
5. sh 530.00
6. sh 1095.00

B.
1. sh 25.00
2. sh 55.00
3. sh 60.00
4. sh 45.00
5. sh 45.00
6. sh 55.00

C.
1. sh 35.00
2. sh 160.00
3. sh 225.00
4. sh 260.00
5. sh 70.00
6. sh 35.00

D.
1. sh 600.00
2. sh 420.00
3. sh 240.00
4. sh 90.00
5. sh 27.00
6. sh 174.00

Exercise 89
1. sh 605
2. sh 480
3. sh 1610
4. sh 1500
5. sh 310
6. sh 2430
7. sh 1170
8. sh 2760

Exercise 90

A.
1. sh 17.25
2. sh 19.55
3. sh 16.10
4. sh 21.85
5. sh 14.95

B.
1. sh 13.00
2. sh 17.50
3. sh 10.00
4. sh 13.00
5. sh 10.00

C.
1. sh 18.70
2. sh 13.20
3. sh 15.40
4. sh 9.90
5. sh 9.90

Exercise 91

A. Teacher check
B. Teacher check
Exercise 92

1. sh 42.00  
2. sh 174.00  
3. sh 209.00  
4. sh 295.00  
5. sh 295.00  
6. sh 441.00  
7. sh 617.00  
8. sh 617.00  
9. sh 617.00  
10. sh 617.00  
11. sh 617.00  
12. sh 1388.00 (buy 2 money orders: One for sh 35 000 and the other for sh 34 989)

B.

1. sh 125.00  
2. sh 240.00  
3. sh 330.00  
4. sh 380.00  
5. sh 450.00  
6. sh 635.00  
7. sh 890.00  
8. sh 925.00  
9. sh 925.00  
10. sh 1255.00 (buy 2 money orders: One for sh 30 000 and the other for sh 4 500)  
11. sh 890.00  
12. sh 2385.00 (buy 3 money orders: Two for sh 30 000 and one for sh 9989)

C.

<table>
<thead>
<tr>
<th>Money order to be sent</th>
<th>Commission payable</th>
<th>Total amount payable</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. 237</td>
<td>42.00</td>
<td>279.00</td>
</tr>
<tr>
<td>2. 640</td>
<td>114.00</td>
<td>754.00</td>
</tr>
<tr>
<td>3. 1900</td>
<td>174.00</td>
<td>2074.00</td>
</tr>
<tr>
<td>4. 5500</td>
<td>295.00</td>
<td>5795.00</td>
</tr>
<tr>
<td>5. 6001</td>
<td>295.00</td>
<td>6296.00</td>
</tr>
<tr>
<td>6. 10010</td>
<td>441.00</td>
<td>10 451.00</td>
</tr>
<tr>
<td>7. 21000</td>
<td>617.00</td>
<td>21 617.00</td>
</tr>
<tr>
<td>8. 25000</td>
<td>617.00</td>
<td>25 617.00</td>
</tr>
<tr>
<td>9. 29999</td>
<td>617.00</td>
<td>30 616.00</td>
</tr>
<tr>
<td>10. 32100</td>
<td>667.00</td>
<td>32 767.00</td>
</tr>
</tbody>
</table>

D.

<table>
<thead>
<tr>
<th>Money sent interstate</th>
<th>Commission payable</th>
<th>Total amount payable</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. 29 999</td>
<td>925.00</td>
<td>30 924.00</td>
</tr>
<tr>
<td>2. 7500</td>
<td>430.00</td>
<td>7930.00</td>
</tr>
<tr>
<td>3. 475</td>
<td>105.00</td>
<td>580.00</td>
</tr>
<tr>
<td>4. 10 958</td>
<td>555.00</td>
<td>11 513.00</td>
</tr>
<tr>
<td>5. 6643</td>
<td>400.00</td>
<td>7043.00</td>
</tr>
<tr>
<td>6. 14 410</td>
<td>635.00</td>
<td>15 045.00</td>
</tr>
<tr>
<td>7. 17 811</td>
<td>770.00</td>
<td>18 581.00</td>
</tr>
<tr>
<td>8. 22 000</td>
<td>890.00</td>
<td>22 890.00</td>
</tr>
<tr>
<td>9. 27 850</td>
<td>925.00</td>
<td>28 775.00</td>
</tr>
<tr>
<td>10. 13 290</td>
<td>635.00</td>
<td>13 925.00</td>
</tr>
</tbody>
</table>
Exercise 93
1. sh 15 391
2. (a) sh 925 (b) sh 531
3. sh 3359
4. sh 1955
5. (a) sh 14 559 (b) sh 385

Unit 14: Time and speed

Exercise 94
A.
1. 45 min  2. 90 min
3. 192 min  4. 375 min
5. 348 min  6. 285 min
7. 624 min  8. 270 min
9. 1040 min  10. 35 min
11. 210 min  12. 90 min
13. 1 hr 30 min  14. 156 min
15. 915 min  16. 195 min

Exercise 95
1. 195 sec  2. 1200 sec
3. 678 sec  4. 6000 sec

Exercise 96
1. 4 min  2. 10 min
3. 30 min  4. 90 min
5. 110 min  6. 150 min
7. 120 min  8. 60 min
9. 112 min  10. 165 min
11. 607 min 30 sec  12. 11.30 am
13. 180 min

Exercise 97
1. 1 day  2. 6 days
3. 7 days  4. 10 days
5. 14 days  6. 24 days
7. 30 days  8. 31 days
9. 60 days  10. 66 days
11. 28 days  12. 672 days

Exercise 98
A.

<table>
<thead>
<tr>
<th>Time</th>
<th>Time in 24-hour clock</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. 1.20 am</td>
<td>0120 h</td>
</tr>
<tr>
<td>2. 3.30 pm</td>
<td>1530 h</td>
</tr>
<tr>
<td>3. 4.12 pm</td>
<td>1612 h</td>
</tr>
<tr>
<td>4. Ten to seven in the afternoon</td>
<td>1850 h</td>
</tr>
<tr>
<td>5. 2 hours 30 min after midday</td>
<td>1430 h</td>
</tr>
<tr>
<td>6. 3 hours 45 minutes to midnight</td>
<td>2015 h</td>
</tr>
<tr>
<td>7. Five minutes past three in the afternoon</td>
<td>1505 h</td>
</tr>
<tr>
<td>8. Twenty to twelve in the morning</td>
<td>1140 h</td>
</tr>
</tbody>
</table>
### Time in 24-hour clock

<table>
<thead>
<tr>
<th>Time</th>
<th>Time in 24-hour clock</th>
</tr>
</thead>
<tbody>
<tr>
<td>9. Five minutes to six in the evening</td>
<td>1755 h</td>
</tr>
<tr>
<td>10. Quarter to two in the morning</td>
<td>0145 h</td>
</tr>
<tr>
<td>11. 2 hours to midday</td>
<td>1000 h</td>
</tr>
<tr>
<td>12. 2 hours midnight</td>
<td>2200 h</td>
</tr>
<tr>
<td>13. 4 hours after midday</td>
<td>1600 h</td>
</tr>
<tr>
<td>14. 5 hours before midday</td>
<td>0700 h</td>
</tr>
<tr>
<td>15. 9 hours 50 minutes after midnight</td>
<td>0950 h</td>
</tr>
</tbody>
</table>

### Time in 12-hour clock system

<table>
<thead>
<tr>
<th>Time in 24-hour clock system</th>
<th>Time in 12-hour clock system</th>
</tr>
</thead>
<tbody>
<tr>
<td>1325 h</td>
<td>1. 1.25 pm</td>
</tr>
<tr>
<td>2355 h</td>
<td>2. 11.55 pm</td>
</tr>
<tr>
<td>2005 h</td>
<td>3. 8.05 pm</td>
</tr>
<tr>
<td>1035 h</td>
<td>4. 10.35 am</td>
</tr>
<tr>
<td>2235 h</td>
<td>5. 10.35 pm</td>
</tr>
<tr>
<td>0950 h</td>
<td>6. 9.50 am</td>
</tr>
<tr>
<td>0510 h</td>
<td>7. 5.10 am</td>
</tr>
<tr>
<td>2240 h</td>
<td>8. 10.40 pm</td>
</tr>
<tr>
<td>0130 h</td>
<td>9. 1.30 am</td>
</tr>
<tr>
<td>0940 h</td>
<td>10. 9.40 am</td>
</tr>
<tr>
<td>2325 h</td>
<td>11. 11.25 pm</td>
</tr>
<tr>
<td>1730 h</td>
<td>12. 5.30 pm</td>
</tr>
<tr>
<td>0400 h</td>
<td>13. 4.00 am</td>
</tr>
<tr>
<td>1800 h</td>
<td>14. 6.00 pm</td>
</tr>
<tr>
<td>1715 h</td>
<td>15. 5.15 pm</td>
</tr>
</tbody>
</table>

### Exercise 99

<table>
<thead>
<tr>
<th>Departure time</th>
<th>Time taken to reach</th>
<th>Arrival time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nairobi 6.00 am</td>
<td>Naivasha 1 hr 15 min</td>
<td>7.15 am</td>
</tr>
<tr>
<td>Naivasha 8.39 am</td>
<td>Nakuru 1 hr 20 min</td>
<td>9.59 am</td>
</tr>
<tr>
<td>Nakuru 10.05 am</td>
<td>Nyahururu 1 hr 15 min</td>
<td>11.20 am</td>
</tr>
<tr>
<td>Nyahururu 11.30 am</td>
<td>Nyeri 1 hr</td>
<td>12.30 pm</td>
</tr>
<tr>
<td>Nyeri 12.30 pm</td>
<td>Narumoro 55 min</td>
<td>1.25 pm</td>
</tr>
<tr>
<td>Narumoro 2.00 pm</td>
<td>Nanyuki 1 hr 20 min</td>
<td>3.20 pm</td>
</tr>
<tr>
<td>Nanyuki 3.35 pm</td>
<td>Isiolo 2 hr 15 min</td>
<td>5.50 pm</td>
</tr>
</tbody>
</table>
Exercise 100

1. 6.50 pm
2. 2250 h
3. 3.31 pm
4. 2115 h
5. 6.40 pm
6. 21 hours
7. Midday (the next day)
8. 8 am
9. 8 hours 35 minutes
10. 50 hours 15 min (50 1/4 hours)

Exercise 101

A.

<table>
<thead>
<tr>
<th>Distance</th>
<th>Time</th>
<th>Speed (km/h)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. 75 km</td>
<td>1 hr</td>
<td>75 km/hr</td>
</tr>
<tr>
<td>2. 100 km</td>
<td>2 hr</td>
<td>50 km/hr</td>
</tr>
<tr>
<td>3. 50 km</td>
<td>0.5 hr</td>
<td>100 km/hr</td>
</tr>
<tr>
<td>4. 150 km</td>
<td>3 hr</td>
<td>50 km/hr</td>
</tr>
<tr>
<td>5. 200 km</td>
<td>40 hr</td>
<td>300 km/hr</td>
</tr>
<tr>
<td>6. 300 km</td>
<td>5 hr</td>
<td>60 km/hr</td>
</tr>
<tr>
<td>7. 165 km</td>
<td>3 hr</td>
<td>55 km/hr</td>
</tr>
<tr>
<td>8. 243 km</td>
<td>4 1/2 hr</td>
<td>54 km/hr</td>
</tr>
</tbody>
</table>

B.

1. 3 hr
2. 1 hr 15 min
3. 55 min
4. 35 min
5. 39 min
6. 1 hr 30 min
7. 45 min

C.

1. 1 hr
2. 29 min
3. 1 hr 10 min
4. 40 min
5. 40 min

D.

1. 140 km/hr
2. 90 km/hr
3. 60 km/hr
4. 64 km/hr

5. 72 km/hr
6. 6 3/4 km/hr or 6.75 km/hr
7. 420 km
8. 120 km/hr
9. 7.35 am
10. 2 1/2 hr
11. 36 km
12. 350 km
13. 100 km/hr
14. 4 km/hr

Exercise 102

A.

1. 1.5 m/s
2. 6 m/s
3. 8.3 m/s
4. 60 m/s
5. 5 m/s
6. 3780 m/s
7. 100 m/s
8. 100 m/s
9. 20 m/s
10. 5 m/s

B.

1. 3.2 m/s
2. 0.625 m/s
3. 360 km/hr
4. 10.20 m/s

C.

<table>
<thead>
<tr>
<th>Speed</th>
<th>Distance covered</th>
<th>Time taken</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. 60 m/s</td>
<td>150 m</td>
<td>2.5 sec</td>
</tr>
<tr>
<td>2. 80 km/hr</td>
<td>400 km</td>
<td>5 hr</td>
</tr>
<tr>
<td>3. 80 km/hr</td>
<td>320 km</td>
<td>4 h</td>
</tr>
<tr>
<td>4. 10 m/s</td>
<td>100 m</td>
<td>10 sec</td>
</tr>
<tr>
<td>5. 25 m/s</td>
<td>90 000 m</td>
<td>60 min</td>
</tr>
<tr>
<td>6. 9 m/s</td>
<td>180 m</td>
<td>20 sec</td>
</tr>
<tr>
<td>7. 105 km/hr</td>
<td>735 km</td>
<td>420 min</td>
</tr>
<tr>
<td>8. 85 km/hr</td>
<td>340 km</td>
<td>4 h</td>
</tr>
<tr>
<td>9. 120 m/s</td>
<td>360 m</td>
<td>3 sec</td>
</tr>
<tr>
<td>10. 29.16</td>
<td>175 km</td>
<td>6 hr</td>
</tr>
<tr>
<td>11. 10 m/s</td>
<td>10 m</td>
<td>1 s</td>
</tr>
<tr>
<td>12. 54 km/hr</td>
<td>918 km</td>
<td>17 hr</td>
</tr>
</tbody>
</table>
Unit 15 Geometry

Exercise 103
A. Teacher check  
B. Teacher check  
C. Teacher check

Exercise 104
A. 1, 4  
B. Teacher check

Exercise 105
1. Acute angle  
2. Obtuse angle  
3. Right angle  
4. Obtuse angle  
5. Acute angle  
6. Reflex angle  
7. Right angle  
8. Acute angle

Exercise 106
A.  
1. \( a = 45^\circ; \ c = 45^\circ \)  
2. \( w = 75^\circ; \ x = 75^\circ \)  
3. \( p = 25^\circ; \ q = 25^\circ \)  
4. \( u = 150^\circ; \ v = 30^\circ; \ w = 150^\circ \)  
5. \( j = 30^\circ; \ h = 30^\circ \)  
6. \( x = 85^\circ; \ y = 85^\circ \)

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

C.  
1. Angle AEB is vertically opposite angle CED  
   Angle BEC is vertically opposite angle AED

2. Angle JNL is vertically opposite angle MNK  
   Angle JNK is vertically opposite angle MNL

3. Angle RUS is vertically opposite angle QUT  
   Angle RUQ is vertically opposite angle SUT

4. Angle EJM is vertically opposite angle HJG  
   Angle MJG is vertically opposite angle EJH

5. Angle LOP is vertically opposite angle MON  
   Angle MOL is vertically opposite angle NOP

6. Angle NVW is vertically opposite angle MVX  
   Angle NVM is vertically opposite angle WVX

Exercise 107
A.  
1. \( a = 150^\circ; \ b = 30^\circ; \ c = 150^\circ \)  
2. \( d = 130^\circ; \ f = 130^\circ \)  
3. \( l = 85^\circ; \ m = 95^\circ; \ n = 85^\circ \)  
4. \( t = 20^\circ; \ u = 20^\circ; \ v = 20^\circ \)  
5. \( w = 80^\circ; \ x = 100^\circ; \ y = 100^\circ \)  
6. \( l = 125^\circ; \ m = 55^\circ; \ n = 125^\circ \)
3. $c$, $b$ and $a$ are supplementary angles; $c$ and $d$ are supplementary angles;  
4. $a$, $b$, $c$, $d$ and $e$ are supplementary angles  
5. $a$, $e$, $g$ and $d$; $g$, $d$, $b$ and $f$; $d$, $b$, $f$ and $h$; $b$, $f$, $h$ and $c$; $f$, $h$, $c$ and $a$; $h$, $c$, $a$ and $e$; $c$, $a$, $e$ and $g$;  
6. $x$, $y$ and $z$  

**B.**  
1. $x = 120^\circ$; $y = 60^\circ$; $x + y = 180^\circ$  
2. $t = 100^\circ$; $u = 60^\circ$; $v = 20^\circ$; $t + u + v = 180^\circ$  
3. $a = 86^\circ$; $b = 70^\circ$; $c = 24^\circ$; $a + b + c = 180^\circ$  
4. $j = 30^\circ$; $k = 60^\circ$; $l = 25^\circ$; $m = 40^\circ$; $n = 25^\circ$; $j + k + l + m + n = 180^\circ$  

**C.**  
1. $x = 85^\circ$  
2. $y = 152^\circ$  
3. $x = 60^\circ$  
4. $x = 20^\circ$; $2x = 40^\circ$  
5. $a = 54^\circ$; $b = 126^\circ$; $c = 54^\circ$; $d = 126^\circ$; $e = 126^\circ$; $f = 54^\circ$  
6. $2x = 36^\circ$; $3x = 54^\circ$  
7. $y = 57^\circ$  
8. $y = 90^\circ$  
9. $x = 91^\circ$  

**Exercise 108**  

**A.**  
1. 60°  
2. 170°  
3. 90°  
4. 115°  
5. 73°  
6. 162°  
7. 137°  
8. 91°  
9. 1°  
10. 126°  

**B.**  
1. True  
2. False  
3. True  
4. False  
5. False  
6. False  
7. True  
8. True  
9. True  
10. True  
11. False  
12. True  

**Exercise 109**  

Teacher check  

**Exercise 110**  

Teacher check  

**Exercise 111**  

Teacher check  

**Exercise 112**  

1. (a) 58° (b) 7.7 cm  
2. (a) 33° (b) 6.5 cm  
3. (a) 9.1 (b) 30°  
4. (a) 58° (b) 4.6 cm/4.2 cm  
5. Teacher check  
6. Teacher check  
7. Teacher check  
8. Teacher check  
9. Teacher check  

**Exercise 113**  

**A.**  
1. True  
2. True  
3. False  
4. False  
5. True  
6. True  
7. False  
8. False  
9. True  
10. False  
11. True  
12. False  
13. True  
14. False  
15. True  

**Exercise 114**  

**A.**  
1. $m$ and $k$  
2. $m$  
3. $e$ and $d$  
4. 180°  
5. $k$  
6. 180°  
7. $s$ and $w$  
8. $s$  
9. $v$  
10. $t$ = 115°  
11. 180°  
12. $v$
Exercise 115

1. \( a = 60^\circ \)
2. \( b = 45^\circ \)
3. \( d = 135^\circ; e = 45^\circ \)
4. \( g = 70^\circ; f = 60^\circ \)
5. \( h = 52^\circ; i = 76^\circ; j = 52^\circ; k = 128^\circ \)
6. \( j = 60^\circ; m = 70^\circ \)
7. \( n = 15^\circ \)
8. \( n = 70^\circ; o = 70^\circ; p = 140^\circ \)
9. \( q = 25^\circ; r = 115^\circ; s = 65^\circ \)
10. \( t = 115^\circ \)
11. \( u = 60^\circ \)
12. \( v = 50^\circ; w = 65^\circ \)

Unit 16: Circles and models

Exercise 116

A. Teacher check
B. Teacher check
C. Teacher check

Exercise 117

<table>
<thead>
<tr>
<th>Radius</th>
<th>Diameter</th>
<th>Circumference</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. 1.28 m</td>
<td>56 m</td>
<td>176 m</td>
</tr>
<tr>
<td>2. 4.5 mm</td>
<td>9 mm</td>
<td>28.29 mm</td>
</tr>
<tr>
<td>3. 2.1 m</td>
<td>4.2 cm</td>
<td>13.2 cm</td>
</tr>
<tr>
<td>4. 7.5 m</td>
<td>15 m</td>
<td>47.14 m</td>
</tr>
<tr>
<td>5. 140 mm</td>
<td>280 mm</td>
<td>880 mm</td>
</tr>
<tr>
<td>6. 7.7 m</td>
<td>15.4 m</td>
<td>48.4 m</td>
</tr>
<tr>
<td>7. 14 cm</td>
<td>28 cm</td>
<td>88 cm</td>
</tr>
<tr>
<td>8. 17.5 cm</td>
<td>35 cm</td>
<td>110 cm</td>
</tr>
<tr>
<td>9. 3.5 m</td>
<td>7 m</td>
<td>22 m</td>
</tr>
<tr>
<td>10. 10.5 m</td>
<td>21 m</td>
<td>66 m</td>
</tr>
</tbody>
</table>

Exercise 118


B. Teacher check
C. Teacher check

Exercise 119

<table>
<thead>
<tr>
<th>Model</th>
<th>Name of shape</th>
<th>Number of faces</th>
<th>Number of edges</th>
<th>Number of vertices</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Matchbox</td>
<td>Cuboid</td>
<td>6</td>
<td>12</td>
<td>8</td>
</tr>
<tr>
<td>2. Packet of unga</td>
<td>Cuboid</td>
<td>6</td>
<td>12</td>
<td>8</td>
</tr>
<tr>
<td>3. Bar soap</td>
<td>Cuboid</td>
<td>6</td>
<td>12</td>
<td>8</td>
</tr>
<tr>
<td>4. Breakthrough Maths</td>
<td>Cuboid</td>
<td>6</td>
<td>12</td>
<td>8</td>
</tr>
<tr>
<td>5. Royco cubes</td>
<td>Cuboid</td>
<td>6</td>
<td>12</td>
<td>8</td>
</tr>
<tr>
<td>6. Packet of biscuits</td>
<td>Cuboid</td>
<td>6</td>
<td>12</td>
<td>8</td>
</tr>
<tr>
<td>7. A cubic carton</td>
<td>Cube</td>
<td>6</td>
<td>12</td>
<td>8</td>
</tr>
</tbody>
</table>
B.

**Exercise 120**

Teacher check

**Unit 17 Algebra**

**Exercise 121**

A.
1. $7n + 3m$ 2. $7t + k$
3. $\frac{2\frac{1}{x}}{30}$ 4. $\frac{2}{3b} + \frac{1}{4}c$
5. $21x$ 6. $10x + 20y$
7. $6e + 12f$ 8. $2y + 4p$
9. $4s + 3u$ 10. $2a - 3b$
11. $35r + 42q$ 12. $30x - 5y$
13. $10z + 10w$ 14. $16g + 8h$
15. $6 + 21z$ 16. $28x + 15z + 2y$

B.
1. 46 2. 36 3. 42
4. 6 5. 16 6. 0
7. 2 8. 22

C.
1. 29 2. 34 3. 38
4. 17 5. 63 6. 3

**Exercise 122**

A.
1. $a = 2$ 2. $x = 10$
3. $n = 13$ 4. $g = 40$
5. $y = 8$ 6. $b = 7.5$
7. $x = 1.75$ or $1\frac{3}{4}$ 8. $d = 20$
9. $p = 2$ 10. $f = 6$
11. $t = 32$ 12. $n = 35$
13. $c = 9$ 14. $b = 10$
15. $h = 20$

**Exercise 123**

A.
1. $= 2. = 3. =$
4. $< 5. > 6. <$
7. $< 8. = 9. <$
10. $< 11. < 12. <$
16. $> 17. >$
**Unit 18 Mean, tables and graphs**

**Exercise 124**

1. 47.125 marks  
2. 121  
3. 8  
4. 68 patterns  
5. 80 marks  
6. 166.9 cm  
7. 52 eggs  
8. Sh 2460  
9. 42 kg  
10. 80%

**Exercise 125**

1. (a)

<table>
<thead>
<tr>
<th>Insect</th>
<th>Tally marks</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Butterfly</td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>Millipede</td>
<td></td>
<td>5</td>
</tr>
<tr>
<td>Ant</td>
<td></td>
<td>13</td>
</tr>
<tr>
<td>Housefly</td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>Tick</td>
<td></td>
<td>5</td>
</tr>
<tr>
<td>Earthworm</td>
<td></td>
<td>5</td>
</tr>
</tbody>
</table>

(b) 40  
(c) Ants  
(d) Millipedes, ticks, earthworms  
(e) 

2. (a)

(b) 60 marks  
(c) 13 pupils  
(d) 10 pupils  
(e) 67.8 marks

3. (a)

(b) Teacher check  
(c) 400 animals  
(d) 80

4. (a) 4850 books  
(b) $\frac{16}{97}$  
(c) 150 books
Exercise 126

1. (a) 25 litres  (b) 23 litres  
   (c) 72 hours  (d) 120 hours  
   (e) 4 litres  (f) 0.208 litres  
2. (a) Teacher check  (b) July  
   (c) January  (d) 105 people  
   (e) 180 people  
3. (a) 1 cm rep 4 tomatoes  
   (b) 1 cm rep sh 20  
   (c)

<table>
<thead>
<tr>
<th>Cost</th>
<th>20</th>
<th>60</th>
<th>80</th>
<th>100</th>
<th>120</th>
<th>120</th>
<th>150</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of tomatoes</td>
<td>4</td>
<td>12</td>
<td>16</td>
<td>20</td>
<td>24</td>
<td>24</td>
<td>30</td>
</tr>
</tbody>
</table>

Exercise 127

20. (a)

<table>
<thead>
<tr>
<th>Time</th>
<th>Distance in km</th>
</tr>
</thead>
<tbody>
<tr>
<td>12.00 noon</td>
<td>0</td>
</tr>
<tr>
<td>12.15 pm</td>
<td>100</td>
</tr>
<tr>
<td>12.30 pm</td>
<td>200</td>
</tr>
<tr>
<td>12.45 pm</td>
<td>300</td>
</tr>
<tr>
<td>1.00 pm</td>
<td>400</td>
</tr>
<tr>
<td>1.30 pm</td>
<td>400</td>
</tr>
<tr>
<td>2.00 pm</td>
<td>500</td>
</tr>
<tr>
<td>2.30 pm</td>
<td>600</td>
</tr>
<tr>
<td>3.00 pm</td>
<td>700</td>
</tr>
</tbody>
</table>

(b) 400 km  
(d) 3 hours  
(f) 233.33 km/hr

2. (a) Teacher check  (b) 2 1/2 hrs  
(c) 5 km  
(d) 30 minutes  
(e) 3.33 km/h

3. (a) 1 cm rep 15 min  
(b) Time taken by the matatu to travel  
(c) 1 cm rep 30 km  
(d) Distance  
(e) 240 km  
(f) 11.30 am  
(g) 2.30 pm  
(h) 80 km/hr
Exercise 128

1. (a) \(\frac{1}{4}\)  (b) \(\frac{1}{8}\)

2. (i) 24 pupils  
   (ii) 12 pupils  
   (iii) 6 pupils  
   (iv) 6 pupils

3. (a)

4. (a)

(b)  
   (i) \(\frac{1}{4}\)  
   (ii) \(\frac{3}{8}\)  
   (iii) \(\frac{1}{8}\)  
   (iv) \(\frac{1}{4}\)

(c) Chicken

(b)  
   (i) 180  
   (ii) 90  
   (iii) 90  
   (iv) 360
## Unit 19 Scale drawing

### Exercise 129

#### A.

<table>
<thead>
<tr>
<th>Scale</th>
<th>Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. 1 cm represents 25 cm</td>
<td>1:25</td>
</tr>
<tr>
<td>2. 1 cm represents 1 m</td>
<td>1:100</td>
</tr>
<tr>
<td>3. 1 cm represents 3 m</td>
<td>1:300</td>
</tr>
<tr>
<td>4. 1 cm represents 40 m</td>
<td>1:4000</td>
</tr>
<tr>
<td>5. 1 cm represents 0.5 km</td>
<td>1:50 000</td>
</tr>
<tr>
<td>6. 1 cm represents 800 cm</td>
<td>1:800</td>
</tr>
<tr>
<td>7. 1 cm represents 1 km</td>
<td>1:100 000</td>
</tr>
<tr>
<td>8. 1 cm represents 2.5 km</td>
<td>1:250 000</td>
</tr>
<tr>
<td>9. 1 cm represents 0.06 km</td>
<td>1:6000</td>
</tr>
<tr>
<td>10. 1 cm represents 1500 m</td>
<td>1:150 000</td>
</tr>
<tr>
<td>11. 1 cm represents 1.5 m</td>
<td>1:150</td>
</tr>
<tr>
<td>12. 1 cm represents 3 km</td>
<td>1:300 000</td>
</tr>
<tr>
<td>13. 1 cm represents 13 km</td>
<td>1:1 300 000</td>
</tr>
<tr>
<td>14. 1 cm represents 200 m</td>
<td>1:20 000</td>
</tr>
<tr>
<td>15. 1 cm represents 1 000 000 cm</td>
<td>1:1 000 000</td>
</tr>
</tbody>
</table>

#### B.

<table>
<thead>
<tr>
<th>Scale</th>
<th>Drawing length</th>
<th>Actual (real) length</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. 1 cm rep 10 cm</td>
<td>2 cm</td>
<td>20 cm</td>
</tr>
<tr>
<td>2. 1 cm rep 100 cm</td>
<td>6 cm</td>
<td>600 cm</td>
</tr>
<tr>
<td>3. 1 cm rep 20 cm</td>
<td>7.5 cm</td>
<td>150 cm</td>
</tr>
<tr>
<td>4. 1 cm rep 20 m</td>
<td>0.5 cm</td>
<td>10 m</td>
</tr>
<tr>
<td>5. 1 cm rep 1000 cm</td>
<td>1.5 cm</td>
<td>1500 cm</td>
</tr>
<tr>
<td>6. 1 cm rep 2 m</td>
<td>5 cm</td>
<td>10 cm</td>
</tr>
<tr>
<td>7. 1 cm rep 2 m</td>
<td>2 cm</td>
<td>4 m</td>
</tr>
<tr>
<td>8. 1 cm rep 1 m</td>
<td>5 cm</td>
<td>5 m</td>
</tr>
<tr>
<td>9. 1 cm rep 50 m</td>
<td>5 cm</td>
<td>5 km</td>
</tr>
<tr>
<td>10. 1 cm rep 5 m</td>
<td>20 cm</td>
<td>100 m</td>
</tr>
<tr>
<td>11. 1 cm rep 10 cm</td>
<td>4 cm</td>
<td>40 cm</td>
</tr>
<tr>
<td>12. 1 cm rep 100 cm</td>
<td>3 cm</td>
<td>300 cm</td>
</tr>
<tr>
<td>13. 1 cm rep 100 m</td>
<td>4.3 cm</td>
<td>430 m</td>
</tr>
<tr>
<td>14. 1 cm rep</td>
<td>6 cm</td>
<td>360 m</td>
</tr>
</tbody>
</table>
C. Teacher check

**Exercise 130**

1. Teacher check  2. 24 cm  
3. Teacher check  4. Teacher check  
5. 48 cm²  6. 3 metres  
7. 1 cm rep 4 km  8. Teacher check  
9. 1 cm rep 20 cm  10. 6.4 km  
11. 1 cm rep 1.25 km  12. Teacher check  
13. 8500 m  14. Teacher check  
15. 13.5 cm²

---

**Breakthrough Test Paper 1**

1. 991 000  2. 3  
3. 0  4. 630 000  
5. 48 min  6. 12  
7. 800 417  8. 14d + 16f  
9. 394 km  10. 616  
11. 12.24  12. 304 512  
13. 19/20f – 8/20f  14. 460 km  
15. 1008 cm³  16. 180°  
17. G = 3   H = 15  18. 68.74 kg  
19. 24 632 \( \frac{1}{2} \) litres  20. 169/81 or 2 \( \frac{7}{81} \)  
21. \( \frac{4}{61} \)  22. 60°  
23. Sh 837  24. 1440 cm²  
25. 0.4  26. Reflex angle  
27. \( \frac{1}{2} \) or \( \frac{5}{20} \)  28. True  
29. 30 396  30. 15 cm  
31. 5850 kg  32. 4 \( \frac{1}{2} \)  
33. \( \frac{3}{4} \)  34. 80 cuboids  
35. 100  36. 360  
37. Thousandths  38. 14 m  

---

**Breakthrough Test Paper 2**

1. One million, two hundred and thirty four thousand, five hundred and sixty-seven.  
2. LXXVI  3. 268 145  
4. 6 331 555  5. Ten millions  
6. \( \frac{1}{64} \)  7. \( \frac{3}{20} \)  
8. 198 bottles  9. 21\( v \) + 23\( w \)  
10. 953 116 women  
11. 2500  12. \( \frac{121}{225} \)  
13. 35 eggs  14. 216.85  
15. Sh 199 125  16. \( \frac{3}{35} \)  
17. <  18. 75 cm²  
19. 1.044  20. 280 cm²  
21. \( \frac{13}{14} \)  22. 2430 ares  
23. 159 pupils  24. 3  
25. 57°  26. 7 km 918 m 96 cm
27. 13.2 cm  28. 17 cm
29. No one  30. 2400 h
31. 38t 154 kg 825 g  32. 40%
33. 64 000 cm³  34. 64 km/h
35. 38.56 dl  36. 75°
37. 2 785 000 m  38. 64
39. 127°  40. 7
41. 24 hr 45 min  42. 405 km
43. 18 dl  44. 450 m³
45. Football  46. 600 spectators
47. 1200 spectators  48. 3750 spectators
49. Volleyball  50. 150 spectators

--- Breakthrough Test Paper 3 ---
1. Millions  2. 820
3. 13 684 457  4. 17
5. 195 cm²  6. 315 258
7. 135°  8. 150
9. 13  10. 200
11. $\frac{4}{5}$  12. 1000 m²
13. 5.79  14. $\frac{4}{14}$
15. 245  16. 8600 ml
17. 4.79  18. $\frac{8}{27}$
19. $\frac{12}{49}$  20. Recurring decimal
21. 15 hr 0 min 48 s  22. 10 min
23. 557 718  24. 351 m
25. 126 l / 2 dl 29 ml  26. 415 l
27. 18.75  28. 9.15 am
29. 57 cuboids  30. 7.540, 5.704, 4.75, 0.475
31. 14 cm³  32. 61 kg 515 g
33. 529  34. 3780 m³
35. $=$  36. 1.548
37. $\frac{5}{8}$  38. $2h + 2f$
39. $\frac{19}{7}$  40. Isosceles triangle
41. $18\frac{11}{40}$  42. 4 cm
43. 81  44. 384 sec
45. 140  46. 18
47. Sh 205  48. Sh 535
49. Sh 526
50.

--- Breakthrough Test Paper 4 ---
1. Fifty-eight million, seven hundred and eleven thousand, four hundred and ninety-six
2. Ten thousands
3. 290 627  4. No
5. 8 424 159  6. 30 276
7. 266 cm²  8. 130
9. 26  10. 600
11. $\frac{11}{36}$  12. 66 cm
13. 2345 rem 22  14. 13
15. $\frac{2}{3}$  16. 5
17. $\frac{50}{11}$  18. 180 cm²
19. $\frac{531}{225}$  20. 324
21. 4800 cm³  22. $\frac{9}{10}$
23. 714 m²  24. 50°
25. 42  26. 192 bottles
27. \( \frac{5}{24} \)  
28. 110
29. an equilateral triangle
30. 202 m
31. 52%  
32. 35.2
33. 0.17  
34. >
35. 222 cm  
36. 17 \( \frac{1}{3} \)
37. 45°  
38. 523.5 km
39. 2704  
40. 86.15
41. 40%  
42. 0.3935
43. 1424 cm²  
44. 375
45. 82, 112  
46. 80 000
47. 25%  
48. Monday
49. Thursday and Friday
50. 170 mothers

--- Breakthrough Test Paper 5 ---

1. Fifty-four million, eight hundred and thirty-six thousand, seven hundred and twenty-nine
2. 41 856
3. 97.5 km  
4. 583 eggs
5. 8  
6. 300 cm
7. 3  
8. Sh 106.50
9. 3 hr 25 min  
10. 48 \( \frac{10}{10} \)
11. 57°  
12. Hundreds
13. 296 550  
14. 90 cm²
15. 50°  
16. 0.4
17. 15
18. 0.978, 0.88, 0.7456, 0.53, 0.5, 0.425, 0.201
19. 30%  
20. 20
21. 138°  
22. 224 cm
23. 562 m  
24. Sh 20
25. 576  
26. 1 \( \frac{5}{6} \)
27. 14.45 litres  
28. Sh 2247
29. Sh 1308  
30. Sh 2869
31. 120 cm²  
32. 160
33. 27.27%  
34. 440 animals
35. 189 cm²  
36. 25%
37. 156 km  
38. 44 650 cm³
39. 22 325 cm³ or 22.325 litres
40. 70  
41. Sh 70 000
42. 192 girls  
43. 3 hr
44. 3 hr  
45. 2 hr 25 min
46. 1 hr 35 min  
47. 80 m
48. 8 hr  
49. 750 km
50. 93.75 km/hr

--- Breakthrough Test Paper 6 ---

1. C  
2. B
3. A  
4. D
5. D  
6. B
7. C  
8. A
9. C  
10. C
11. A  
12. B
13. C  
14. A
15. A  
16. B
17. D  
18. C
19. A  
20. D
21. C  
22. C
23. C  
24. D
25. B  
26. D
27. B  
28. C
29. C  
30. C
31. B  
32. A
33. D  
34. D
35. D  
36. C
37. B  
38. A
39. B  
40. C
41. C  
42. D
43. B  
44. D
45. D  
46. C
47. D  
48. C
49. A  
50. A

--- Breakthrough Test Paper 7 ---

1. D  
2. C
3. B  
4. C
5. B  
6. C
7. C  
8. B
9. B  
10. C
11. C  
12. A
13. D  
14. D
15. B  
16. D
17. C  
18. D
19. B  
20. A
21. C  
22. A
23. B  
24. C
25. B  
26. D
27. C  
28. A

--- Breakthrough Test Paper 8 ---

--- Breakthrough Test Paper 9 ---

--- Breakthrough Test Paper 10 ---
Sura ya kwanza

Maamkizi ya adabu na heshima

Zoezi 1
1. shikamoo Babu 6. njema/ nzuri
2. marahaba mjukuu 7. njema/ nzuri
3. aleikum salaam 8. shukrani/ ahsante
4. alamsiki 9. nawe pia
5. jioni
10. ahsante, nimeapoa

Ufahamu: Nyangumi wa ajabu

Zoezi 2
1. kwa sababu ya mafuta yake mengi
2. Ukimwi
3. watafiti na madaktari
4. watoto waliofiwa na wazazi wao
5. maadili
6. wale waliooana / waliofunga ndoa
7. sime/ simi

Ngeli ya A-Wa

Zoezi 3
A) Majina katika ngeli ya A-Wa
1. kasuku/ chiriku n.k.
2. papa/ pomboo n.k.
3. siafu/ mchwa n.k.
4. simba/ ndovu n.k.
5. ng’ombe/ punda n.k.
6. seremala/ rubani n.k.
Msahihishaji atoe alama kwa majibu sahihi. Huu ni mwongozo tu.

B) Wingi wa nomino za ngeli ya A-Wa
1. makobe 11. ng’ombe
2. mabata 12. kasuku
3. manyani 13. waliku
4. marubani 14. makasisi
5. wajomba 15. makachero
6. mafundi 16. mamba
7. chatu 17. nyangumi
8. mababu 18. matarishi
9. wapwa 19. maskini
10. binamu 20. manahodha

C) Wingi katika sentensi
1. Akina mama walitutuma madukani tukanunue mikate.
2. Wavuvi hawajabahatika kupata nyavu.
3. Shangazi watatupokea vyema leo.

D) Umoja katika sentensi
1. Mjukuu wa Mzee Juma ni mzuri.
2. Bata atakayenunuliwa ni wangu.
5. Waziri amepiga kura.

Zoezi 4
A) Matumizi ya kiambishi -to- cha kukanusha
1. Kutovuta bangi hakuna athari nyingi.
2. Kutonizuru hakukunichangamsh. 
5. Kutonyanya hakuafai.
8. Kutopiga kelele hakuudhi.

B) Matumizi ya kiambishi -ki- cha masharti
1. Ukinipiga nitakupiga.
2. Jambazi akiadhibiwa tutafurahi.
4. Ukifanya kazi kwa bidii utafanikiwa.
5. Ukija afisini nitaweza kukusaidia.
6. Ukimwita nitamtuma.
7. Ukiiga utaadhibiwa.
8. Ukioga utakuwaa safi.
10. Ukiila utashiba.

C) Kukanusha sentensi zenye kiambishi -ki- cha masharti
1. Nisipopumzika sitapata nguvu.
2. Chakula kisipoiva hatutakila.
3. Wanafunzi wasipojikakamua hawatashinda.
4. Usipotangaza vizuri hutapewa tuzo.
5. Asiposikiliza kipindi hataelimika.
7. Usipotafuta vizuri hutapata.
8. Wasipoimba vizuri hawatapendwa.
9. Miti isipokatwa mazingira hayataharibika.
10. Usipozingattia maadili hutafulu.
11. Wagani wasipoftika hatutafurahi.
12. Tusipocheza vizuri hatutashinda.

Zoezi 5

A) Maumbo
a) pia d) hiram/piramidi
b) mviringo/duara e) umbomkate/hori
c) mchemraba f) mstatili

B) Vitawe
1. a) aina ya mnyama
   b) sehemu ya nyumba
2. a) msichana mrembo
   b) upembe wa kifaru
3. a) gawanya kitu kwa kifaa chenye makali
   b) chombo cha kuchotea au kunywea maji
4. a) aina ya kileo
   b) aina ya mnyama/ndovu
5. a) kipindi cha mafundisho
   b) rafiki/mtu mwenye jina sawa na mwengine

Msahihishaji atuze alama kwa jibu lolote sahihi. Rejelea kamusi.

C) Vikembe
1. kitungule 9. mwanambuzi
2. jana 10. kivinimbi
3. kihongwe 11. buu
4. kiyoyo 12. kiluwiluwi
5. kisuse 13. mwana/mtoto
6. kiluwiluwi 14. kifaranga
7. kisui 15. mwanakondoo
8. kimatu/matumatu

D) Neno linalosimamia fungu la maneno
1. Wanakondoo
2. makinda
3. viluwiluwi
4. Vinengwe/vinegwe
5. Ndama
6. Viluwiluwi
7. Mabuu
8. Tunutu/ matumatu/ maige/vimatu
9. Vitungule
10. Shibli
Sura ya pili 2

Misemo

Zoezi 6
1. kutokuwa na akili timamu
2. kupata shida/taabu
3. kuwa na huzuni
4. kuwa wa mwisho
5. kubuni hadithi
6. kusema uwongo
7. kuwaza / kufikiria
8. endesha chombo cha majini kwa kafi/ kasia
9. kukua

Ufahamu: Madhara ya uchafu

Zoezi 7
1. mweusi kama makaa
2. nyanya yake alimwahidi kuwa wangeenda uwanja wa Nyayo
3. Juma
4. chawa
5. mdudu anayetokana na uchafu, na ambaye aghalabu huvamia vidole vya miguu
6. kunguni

Ngeli ya Ki-Vi

Zoezi 8
A) 1. kitanda- vitanda 2. kiti- viti
3. kinanda- vitanda 4. kichwa- vichwa
5. kifutio- vifutio 6. kijiko- vijiko n.k.
B) 1. chakula- vyakula 2. choo- vyoo
3. chandarua- vyandarua 4. chanda-vyanda
5. chungu- vyungu 6. chombo-vyombo n.k.
Msahihishaji atuze alama kwa jibu lolote sahihi. Uliotolewa hapa ni mwongozo tu.

C) Wingi katika maneno
1. vipawa
2. vipaji
3. vinamasi
4. vijitu
5. vilango
6. vyerehani

D) Wingi katika sentensi
1. Vitambaa vyenye madoa vimetupwa mashimoni.
2. Visogo vinavyouma vitatibiwa.
3. Visugudi vyenye majeraha vinatutatiza.
4. Videvu vyenu vinapendeza.
5. Viazivivi vimeoza.
7. Vitanda vyetu vimevunjika.
8. Vipande vya mihogo havitoshaji.

E) Umoja katika sentensi
1. Kichuguu kile kitaharibiwa na mtoto.
2. Kilima cha Cherangani kinavutia.
5. Kijitu kitakachonivamia kitakion cha mtemakuni.
8. Kichuguu kimevunjwa.
10. Kichwa chake kimenyolewa.

Zoezi 9
A) Usemi wa taarifa
1. Mwalimu mkuu alionya kuwa wanafunzi waovu waovu wangeadhibiwa.
2. Mtoto alilalamika kuwa hakutaka kubeba kitabu chochote.
3. Rais aliyashauri wananchi wapige kura kwa amani.
B) Usemi halisi
1. “Kwa nini mmefeli mtihani?”
   Mwalimu aliwauliza wanafunzi.
3. “Nitakufaa kwa hali na mali,”
   aliniambia.

Zoezi 10

A) Vyombo vya usafiri
1. bodaboda 2. daraja
3. baiskeli 6. dau/ mitumbwi
4. pikipiki 7. matwana/ daladala
5. merikebu/ meli

B) Malipo mbalimbali
1. pango 5. kiokosi
2. ushuru 6. ridhaa
3. kivusho 7. faini
4. ada

Sura ya tatu 3

Tanakali za sauti

Zoezi 11
1. kwikwikwi 6. fofofo
2. kwakwakwa 7. dududu
3. ndondondo 8. dedede
4. mwa 9. lelele
5. tifu 10. pu!

Zoezi 12

Ufahamu: Mkasa wa Hassan Mayunga
1. Nairobi
2. kifo cha wazazi wake
3. mkazamjomba
4. sulubu
5. dondokwa na usaha ndondondo
6. Suleiman Yobo
7. kizimba
8. Chifu (Bw. Siseme)

Ngeli ya Li-Ya

Zoezi 13

A) Majina ya ngeli ya Li-Ya (umbo ya wingi)
Baadhi ya mifano ni:
1. daraja – madaraja
2. gari - magari
3. sikio – masikio
4. jahazi – majahazi
5. daftari – madaftari n.k.
Msahihishaji atuze alama kwa jibu lolote sahihi. Uliotolewa hapa ni mwongozo tu.

B) Umoja katika sentensi
1. Jiko lako limenipendeza.
2. Wimbi la bahari huzamisha meli.
4. Tunda lile limeiva.

B) Wingi katika sentensi
1. Majani ya manjano yameanguka.
2. Madaraja yasipojengwa mito haitavukika.
3. Malango yenye nakshi huwavutia wezi.
4. Malimau haya yana ladha chachu.

Zoezi 14

A) Kauli ya kutendeka
1. kiling’oka 4. linavalika
2. kimeboreka 5. kilivunjika
3. zilibomoka 6. wameelimika

4/21/15 9:23 AM
B) Kauli ya kutendwa
1. andikwa 4. shindwa
2. gongwa 5. fumwa
3. sakwa

Zoezi 15
A) Ala za muziki
1. njuga 4. baragumu
2. tarumbeta 5. zeze
3. marimba
B) Viungomwili
1. moyo 4. koromeo
2. chango 5. pua
3. kibofu 6. ulimi
C) Sehemu za mwili katika mchoro
A- ubongo  D- moyo
B- koo  E- ini
C- mbavu  F- wengu
G- utumbo (mkubwa)
H- chango (utumbo mdogo)
I- kibofu

D) Watu na kazi zao
1. Mtu anayefua vitu vya dhahabu.
2. Mtu anayewaita watu kuyaabiri magari.
3. Mtu anayepakua na kupakia bidhaa kwenywe chombo cha majini.
4. Mtu anayesimamia wizara.
5. Mtu anayewakilisha katika nchi ngeni.
6. Mtu anayefufahamu unawahi vilijengwa
7. upungufu wa nyumba uliosababisha kuchipuka kwa mtaa wa mabanda
8. watu wanaotegemea msaada kutoka kwa yeyote
9. biashara ya ukahaba
10. Mgema akisifiwa, tembo hulitia maji.

E) Kujaza mapengo kuhusu wafanyakazi mbalimbali
1. wakili 6. kuli
2. Hakimu / Jaji 7. nahodha
4. mwalimu 9. Mfinyanzi
5. mpishi 10. tarishi / mesenja

Sura ya nne 4

Vitendawili

Zoezi 16
1. usingizi 6. mlolongo wa siafu
2. kioo 7. mate
3. kobe 8. nywele
4. kuku na yai 9. moyo
5. samaki 10. upara

Zoezi 17

Ufahamu: Mji wa Roima
1. viwanda anuwai vilijengwa
2. upungufu wa nyumba uliosababisha kuchipuka kwa mtaa wa mabanda
3. kudumisha usafi/ kuweka taa barabarani
4. watu wanaotegemea msaada kutoka kwa yeyote
5. biashara ya ukahaba
6. Mgema akisifiwa, tembo hulitia maji.

Zoezi 18

Ngeli ya U-I
A) Nomino za ngeli ya U-I (umoja na wingi)
Msahihi shaji atuze alama kwa jibu lolote sahihi. Uliotolewa hapa ni mwongozo tu.
i) mgongo – migongo
ii) mgomba – migomba
iii) mguu – miguu
iv) mnyororo – minyororo
v) mkufu – mikufu
vi) mkono – mikono
vii) muhogo – mihogo
viii) mkunanzi – mikunanzi n.k.

B) Wingi katika sentensi
1. Mitunda ile imepandwa pahala pazuri.
2. Miwa ambayo hajjakomaa isikatwe.
3. Miezi iliyoipita tulipata zawadi.
4. Mizigo mizito ni siri kwa wenyewe.
5. Miaka hii kuna matatizo sugu.
7. Mitihani hiyo si migumu.
8. Milima ile inafuka moshi.
10. Mimea hiyo imenawiri vizuri.

C) Umoja katika sentensi
1. Mkono wenye kidonda ni huu.
2. Mwamba wenyewe una joto.
3. Msala wake ni mzuri.
4. Mzaha mwingine unaudhi.
5. Mtego usipokazwa utaharibika.

Zoezi 19

A) Matumizi ya -enye
1. mwenye 11. yenyewe
2. wenyewe 12. wenyewe
3. yenyewe 13. lenye
4. wenyewe 14. mwenye
5. yenyewe 15. lenye
6. vyenyewe 16. wenyewe
7. yenyewe 17. mwenye
8. zenye 18. wenyewe
9. wenyewe 19. lenye
10. kwenye 20. yenyewe

B) Matumizi ya -enyewe
1. mwenye 11. wenyewe
2. wenyewe 12. wenyewe
3. lenye 13. lenye
4. wenyewe 14. lenye
5. yenyewe 15. vyenyewe
6. vyenyewe 16. mwenye
7. zenye 17. wenyewe
8. wenyewe 18. yenyewe
9. wenyewe 19. wenyewe
10. kwenye 20. wenyewe

Zoezi 20

Msamiati wa mapishi na vyakula

A) Viungo vya upishi
1. pilipili tamu
2. tangawizi
3. katmiri
4. karafuu
5. pilipili tamu/ pilipili mboga

B) Vyakula mbalimbali
1. pure/ kande
2. mashendea/ ubwabwa
3. kutokoswa
4. kuepua
5. kusonga
6. mandondo
7. joko/ tanuu/ tanuri
8. mchuzi

Msamiati wa hali ya mimea

Zoezi 21

A) Hali ya mimea
1. unaota/ umeota 2. mizizi
3. tagaa 4. tunda
5. maua
6. hewa/ maji/ mbolea/ mwangaza/ uvuguvugu
7. hunyauka
8. mbolea
9. kupandikiza
10. kiangazi

B) Kuandika majina ya sehemu za mti
A- jani  D- mizi
B- tunda  E- ua
C- shina  F- tawi

Sura ya tano

Zoezi 22

Methali
1. chungu kaona kivuno
2. hakuthamini
3. kiatu chake dawa
4. haisitiri mako
to
6. 6. tumbe wengine wapo wapo
7. hapaharibiki neno
8. hapana wajenzi
9. jua anatunga sheria
10. hufa maskini
11. mwenyeji apone
12. kulala chali

Zoezi 23

Matamshi ya ch, j na sh
1. shinda 9. chetezo
2. janga 10. juha
3. chunguza 11. shamba
4. chosha/ chusha 12. juzi / jaza
5. chimba/ chimbo 13. chemka
6. shaka 14. kichuguu
7. jaribu 15. machozi
8. chokoza

Ngeli ya U-Zi

Nomino za ngeli ya U-Zi (umoja na wingi)
Msahihishaji atuze alama kwa jibu lolote sahihi. Uliotolewa hapa ni mwongozo tu.

1. ulimi – ndimi
2. uteo – teo
3. waya – nyaya
4. ukurasa – kurasa
5. uso – nyuso
6. uwanja – nyanja n.k.

B) Umoja katika sentensi
1. Ufagio ukitupwa shimoni usichukuliwe tena.
2. Ufunguo wa mpwa wangu ulipotea jana.
3. Udevu wake unavutia sana.
4. Wimbo wenyewe ulitungwa na mweledi.
5. Uta wa mjomba umeharibika.
6. Unyusi wangu umenyolewa.
7. Unyasi umeteketezwa.
8. Uteo wangu umeoshwa.
9. Utepe wa mtoto umefungwa vizuri.
10. Unyayo/ Wayo wake umetibiwa.

C) Wingi katika sentensi
1. Beti hizi zilitungwa na malenga.
2. Nyute zikiwadorora tutawatoroka.
3. Nyaya hizi zikivutwa, nguvu za umeme zitapotea.
5. Nyuso za vijana wale ni nzuri.
6. Pepo zikivuma kwa nguvu, paa zitapeperushwa.
7. Nyuzi zimenunuliwa leo.
8. Nyuti za miti hiyo ni kubwa.
9. Taya zetu zinauma.
10. Singa hizi ni ndefu.
11. Pindo za kaptura zao ni chafu.

Zoezi 25

A) Matumizi ya -ingi
1. wengi 4. mwingi
2. mingi 5. mengi
3. mengi 6. vingi

B) Matumizi ya -ingine
1. mwengine 7. mwengine
2. mwingine 8. mingine
3. nyingine 9. kingine
4. mengine 10. vingine
5. mwingine 11. mengine
6. mengine 12. nyingine

Zoezi 26

Ngeli ya U-U

A) Majina katika ngeli ya U-U (umoja na wingi)
Msahihishaji atuze alama kwa jibu lolote sahihi. Uliotolewa hapa ni mwongozo tu.
Baadhi ya majina hayo ni:
1. uji – uji
2. ujinga – ujinga
3. unga – unga
4. ukali – ukali
5. urembo – urembo
6. uchawi – uchawi n.k.

B) Umoja katika sentensi
1. Muda waliotumia waogeleaji umerekodiwa.
2. Moshi uliofuka uliwashtua wakazi wale.
3. Uchangamfu wa wanasarakasi unavutia.
4. Uvivu wa wavuvi hawa hautawafaa.
5. Uhodari wa wawindaji uliwaawezesha kushinda.
6. Ustadi wao unapendenza.
7. Utaifa unafaa kulindwa.
8. Utani wao haufai.

Zoezi 27

A) Tashbihi
1. mkemwenza 4. samaki/ kondoo
2. shubiri 5. uwanja wa ahera
3. swara/swala

B) Msamiati wa maandishi
1. makala 4. kitabu
2. magazeti 5. aya
3. jarida 6. sentensi

Sura ya sita

Hadithi (uk. 24)
Mwalimu wasomee wanafunzi hadithi wakisikiliza kisha awaaulize maswali ya kupima ulewa wao.
Zoezi 28

Matamshi ya sauti g na gh
1. ghafla 9. gutuka
2. gharama 10. garagazana
3. ghala/ ghali 11. gharika
4. goma 12. gae
5. gongana 13. gaidi
6. ghuba/ ghibu 14. ghamidha
7. ghala 15. gambusi
8. ghasia

Zoezi 29

A) Majina katika ngeli ya I – Zi (umoja na wingi)
Msaahihishaji atuze alama kwa jibu lolote sahihi. Uliotolewa hapa ni mwongozo tu.
1. kalamu – kalamu
2. penseli – penseli
3. simu – simu
4. nyumba – nyumba
5. karatasi – karatasi
6. dawa – dawa

B) Umoja katika sentensi
1. Dawa iliyopakiwa sandukuni itolewe.
2. Kalamu ambayo haiandiki itupwe.
4. Arusi ya mwezi uliopita ilivuma si kidogo.
5. Ahadi ya mwongo hakika haitimizwi.
7. Makala iliyoandikwa inapendeza.
8. Tarakilishi mpya imenunuliwa.
10. Runinga yangu imeharibika.

C) Wingi katika sentensi
1. Suruali za mababu zetu zimeraruka.
2. Rununu zimetumbukia majini.
4. Pua zao zinazidi kurefuka kila siku.
5. Faidha zitakazopatikana leo zisitumiwe.
6. Redio za kina Musa zimeibwa.
8. Spana kubwa zimepotea.
10. Fomu zimejazwa kikamilifu.

Zoezi 30

A) Matumizi ya -ote
1. wote 11. yote
2. wote 12. vyote
3. lote 13. wote
4. yote 14. wote
5. yote 15. wote
6. vyote 16. zote
7. zote 17. zote
8. wote 18. zote
9. wote 19. wote
10. wote 20. zote

B) Matumizi ya -o-ote
1. wowote 4. wowote
2. wowote 5. yoyote
3. lolote

Zoezi 31

A) Visawe
1. jirafu/ jokofu
2. taifa
3. rungoya
4. mori/ ghadhabu
5. kuraukia/ kudamkia
6. mava/ maziara
7. jambazi/ mhuni
8. msonzi
9. fanicha/ fenicha
10. kilimo/ ukulima
11. mjinga/ zumbukuku/ mbumbumbu
12. daima

B) Vimelea
1. kupe
2. mwizi / mchopozi/jambazi/mhuni
3. mbung’o
4. mbu
5. nzi
6. machafu
7. mbu

C) Vimelea katika picha
1. kiroboto
2. chawa
3. kunguni
4. kupe
5. mbung’o/ chafuo
6. mbu

Sura ya saba (7)

Majibu ya maswali ya shairi (uk. 28)
(Pima uelewa wako)
1. tarbia
2. saba (7)
3. minne (4)
4. kumi na sita (16)
5. ka, fu
6. pombe haramu
7. Mwanafunzi aeleze kwa maneno yake hadithi inayosimuliwa katika shairi.
8. kutembea kama mlevi
9. tembo

Zoezi 32

Ufahamu: Mkasa Mailimoja
1. kijiji cha hali ya chini
2. a) pumzi kumtoka mbiombio
   b) alihemahema
3. liligongwa na gari
4. mawe, majembe na mashoka
5. karandinga

Zoezi 33

A) Ngeli ya U-Ya
Msahlhishaji atuze alama kwa jibu lolote sahihi. Uliotolewa hapa ni mwongozo tu.

Baadhi ya mifano ni kama:
1. ugonjwa – magonjwa
2. unyoya – manyoya
3. uwele – mawele
4. ulezi – malezi
5. upishi – mapishi
6. ubele - mabele

B) Wingi katika sentensi
1. Mabele yenyewe ndiyo yaliyoanguka.
2. Mazalio mengine yamepatikana.
3. Magonjwa yakitibiwa wagonjwa watafurahi.
4. Mawele yoyote yanafaa.
5. Mawambo hayo yanapendeza.
7. Mapau yale ni marefu sana.
8. Mabongo/ bongo hupanuka haraka.

C) Umoja katika sentensi
1. Unyoya ambao ni mrefu uletwe huku.
2. Uwele wenye starehe uharibiwe.
3. Uwambo ule ndio wako.
4. Ulalo wenye ulimwengu.
5. Utumbo ulifanyiwa upasuaji.
6. Ubua umechomwa kabisa.
7. Uonevu unachukiza sana.
8. Ukuti umekatwa.

D) Kirejeshi ambazo
1. ambayo
2. ambao
3. ambayo

Uakifishaji

Zoezi 34
A) Kuakifisha sentensi
1. Gari la Waziri Tom lina nambari za usajili, KAL 400Z.
2. Nakuru ni mji mkubwa katika mkoa wa Bonde la Ufa.
3. Mwandishi Said Ahmed alipata tuzo gani?
4. Juvenalis Munyao ni mwalimu wa shule ya msingi ya Kanzokea.
5. Vijana, mjihadhari na mihadarati lau sivyo mtaangamia.

B) Kuakifisha kifungu
Ziwa Victoria linapatikana katika mkoa wa Nyanza, magharibi mwa Kenya.
Ningependa sana kufika mjini Kisumu ili nijionee ziwa hili.

Zoezi 35

A) Tarakimu
1. Kumi elfu na moja/ Elfu kumi, na moja
2. Elfu kumi na moja
3. Elfu sitini na tisa, mia tano arubaini na moja
4. Elfu sabini na saba, mia saba sabini na saba
5. Elfu themanini na nane, mia nane themanini na nane
6. Elfu tisini na tisa, mia tisa na moja

B) Kuandika tarakimu katika nambari
1. 250,000 6. 1,000,000
2. 350,000 7. 100,500
3. 100,000 8. 800,060
4. 44,100 9. 900,300
5. 51,500 10. 600,669

Zoezi 36

Vitate
1. a) fenicha  b) kale
2. a) gawia/gawa  b) duwaza
3. a) karipia  b) fanyia utafiti
4. a) aina ya mnyama
   b) makao ya konokono
5. a) kiumbe ambaye hajakua / ndogo kwa umri
   b) aina ya mapambo yanayotiwa kwenye mkufu
6. a) kitu kitumiwacho kuogea, kufulia au kusafishia vitu
   b) uuza wa kushindania bei/ tia bei/ tenda

Sura ya nane(8)

Mazungumzo kati ya Babu na Mjukuu (uk. 32)
Mwalimu awaelekeze wanafunzi kuigiza mazungumzo haya. Vilevile, awaulize maswali ili apime ulewa wao.

Zoezi 37

Ufahamu: Biashara shuleni Kaelimike
1. karibu na ua
2. Visa vya wizi wa pesa vilianza kutokea.
3. 960 4. udohoudoho
5. kumfanya kwa ajili ya kufanya kosa
6. ulikatazwa
7. Mateso alikuwa amemtusi Omosh.
8. i) kumfanya mata mkuu na ajili ya kufanya kosa
   ii) kupepesuka kwa polisi au tabia njema/kumwadhibu
Zoezi 38

Ngeli ya Ya-Ya

A) Majina ya ngeli ya Ya-Ya
Msahihishaji atuze alama kwa jibu lolote sahihi. Uliotolewa hapa ni mwongozo tu.
1. mazishi – mazishi
2. mazingira – mazingira
3. maradhi – maradhi
4. mafuta – mafuta
5. mali – mali
6. mate – mate n.k.

B) Umoja katika sentensi
1. Mafuta ya msichana yule yameibwa.
2. Mali yakipatikana yarejeshwe hapa hapa nyumbani.
3. Marashi yako yananukia vyema.
4. Manukato yangu nimeyahifadhi vizuri.
5. Maji yasipotiwa dawa yatamdhuru mkazi muyu.

C) Wingi katika sentensi
1. Maisha yetu yamo hatarini.
2. Maradhi yamewakondesha sana.
3. Masihara ya wendawazimu hatuyapendi.
4. Makazi yenu yameingiliwa na wanyamapori.
5. Mate ya wagonjwa yananuka.

D) Viashiria radidi
1. humu humu 5. huu huu
2. yule yule 6. ule ule
3. hicho hicho 7. hizi hizi
4. ile ile

Zoezi 39

A) Zana za vita
1. bastola 6. ngao
2. roketi 7. manowari
3. bunduki 8. sime/simi
4. jeti 9. mikuki
5. nyambizi 10. uta/upinde

B) Silaha mbalimbali
1. ala
2. podo/ pongo/ riaka/ziaka
3. deraya/ dirizi
4. bastola
5. sime/simi
6. kombeo/ kumbwewe
7. kombora

Sura ya tisa 9

Makala: Shaaban Robert
Mwalimu awasomee wanafunzi makala huku wakisikiliza kishwa awaulize maswali ili kupima ulewa wao.

Zoezi 40

Ufahamu: Bwawa la Masinga
1. saa moja na rob ya asubuhi
2. sabini na wawili
3. Matuu 5. hojaji zao
4. rafadha 6. ngwena

Zoezi 41

Ngeli ya Ku-Ku

A) Majina ya ngeli ya Ku-Ku
Msahihishaji atuze alama kwa jibu lolote sahihi. Uliotolewa hapa ni mwongozo tu.
1. kulia – kulia 4. kupiga-kupiga
2. kulala- kulala 5. kutembea – kutembea
3. kuoga – kuoga 6. kula - kula n.k.
B) Umoja katika sentensi
1. Kupika kwenyewe kutamchangamsha.
2. Kucheza kokote hunipatia afya bora.
4. Kupiga mtoto kunapingwa na mzazi nchini.
5. Kucheka kwangu kumemduwaza.

C) Wingi katika sentensi
1. Kutema mate kwetu kunachosha.
2. Kufa kwao kuliwatia wasiwasi.
3. Kulala huku hakupendesi.
5. Kuendesha wanakoendesha si kuzuri.
6. Kusuka kwao kumewaletea pesa.
8. Kuoga huchangamsha mili.

Zoezi 42
Kauli ya kutendua
1. alitegua 4. anaezua
2. kufumua 5. limemrembua
3. limefichua 6. ameanua

Zoezi 43
A) Msamiati wa mahakamani
1. korti
2. jaji/hakimu
3. hukumu
4. mshukiwa/ mtuhumiwa
5. mshtakiwa
6. kiongozi wa mashtaka
7. usahidhi
8. shahidi

B) Nomino za makundi
1. mkururo 2. waimbaji
3. mahindi 4. pakacha
5. nyuki 6. Korija
7. waasi 8. jumuiya

Sura ya kumi 10

Zoezi 44
Mafumbo
1. Hawakurejea na chochote, walikula walichowinda.
2. Angewapa wale watoto wawili wa kambo kila mmoja ndizi yake, kisha awaambie kila mmoja amgawie yule mtoto wake ndizi nusu.
3. Nguruwe hawana ngozi.
4. Alimpeleka penye maji na alipoona kivuli chake majini akadhani ni kuku mwengine na kwa hivyo akataga.

Zoezi 45
Ufahamu: Mzee Omari Babu
1. hakuwa amesoma
2. wanane
3. Fatuma
4. kununua tingatinga
5. hakuzoea kusafiri kwa gari
6. alikunywa mvinyo mkali akalewa chopi.
Zoezi 46

Ngeli ya I – I

A) Nomino za ngeli ya I-I
Msahihishaji atuze alama kwa jibu lolote sahihi. Uliotolewa hapa ni mwongozo tu.
1. miadi – miadi
2. chumvi – chumvi
3. midadi – midadi
4. mirathi – mirathi
5. mizungu – mizungu
6. mikiki – mikiki n.k.

B) Wingi katika sentensi
1. Mirimo ilifanywa na wazazi.
2. Mirathi ilirithiwa na wajukuu.
3. Mizani haitoshei kwenye beti.
5. Mikiki yao iliwatia matatani.
7. Mizungu ya manabii inaajabisha.
8. Mikogo ina athari kwa wachegaji.

C) Umoja katika sentensi
1. Mizani ile ipunguzwe.
2. Miwani yako irejeshwe ilikonunuliwa.
4. Miadi ilitolewa na chifu.
5. Milihoi ilimshambulia mtoto.
7. Mitembo imemwua mtu.
8. Mikiki imemsaidia mchezoni

Zoezi 47

A) Matumizi ya kirejeshi ndi-
1. ndilo 5. ndio
2. ndizo 6. ndio
3. ndiye 7. ndizo
4. ndicho

B) Matumizi ya kiulizi -pi
1. yupi 5. kupi
2. yapi 6. ipi/ zipi
3. zipi 7. yapi
4. kipi

Zoezi 48

A) Vifaa vya ufundi
1. timazi 6. msumeno
2. mizani 7. ukanda
3. nyundo 8. nyundo
4. randa 9. kekee/ keekee
5. parafujo/ skrubu 10. msasa

B) Kuambatanisha michoro ya vifaa vya ufundi na majina yake
1. nyundo
2. bisisi
3. misumari
4. bolti
5. jiriwa
6. msumeno
# Majibu ya majaribio ya mitihani

## Muhula wa kwanza

### Jaribio la kwanza

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>C</td>
<td>11</td>
<td>B</td>
<td>21</td>
</tr>
<tr>
<td>2</td>
<td>A</td>
<td>12</td>
<td>C</td>
<td>22</td>
</tr>
<tr>
<td>3</td>
<td>B</td>
<td>13</td>
<td>D</td>
<td>23</td>
</tr>
<tr>
<td>4</td>
<td>D</td>
<td>14</td>
<td>C</td>
<td>24</td>
</tr>
<tr>
<td>5</td>
<td>B</td>
<td>15</td>
<td>A</td>
<td>25</td>
</tr>
<tr>
<td>6</td>
<td>B</td>
<td>16</td>
<td>A</td>
<td>26</td>
</tr>
<tr>
<td>7</td>
<td>A</td>
<td>17</td>
<td>A</td>
<td>27</td>
</tr>
<tr>
<td>8</td>
<td>C</td>
<td>18</td>
<td>A</td>
<td>28</td>
</tr>
<tr>
<td>9</td>
<td>C</td>
<td>19</td>
<td>B</td>
<td>29</td>
</tr>
<tr>
<td>10</td>
<td>B</td>
<td>20</td>
<td>C</td>
<td>30</td>
</tr>
</tbody>
</table>

### Jaribio la pili

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>A</td>
<td>11</td>
<td>D</td>
<td>21</td>
</tr>
<tr>
<td>2</td>
<td>D</td>
<td>12</td>
<td>C</td>
<td>22</td>
</tr>
<tr>
<td>3</td>
<td>C</td>
<td>13</td>
<td>A</td>
<td>23</td>
</tr>
<tr>
<td>4</td>
<td>C</td>
<td>14</td>
<td>C</td>
<td>24</td>
</tr>
<tr>
<td>5</td>
<td>B</td>
<td>15</td>
<td>A</td>
<td>25</td>
</tr>
<tr>
<td>6</td>
<td>C</td>
<td>16</td>
<td>B</td>
<td>26</td>
</tr>
<tr>
<td>7</td>
<td>D</td>
<td>17</td>
<td>A</td>
<td>27</td>
</tr>
<tr>
<td>8</td>
<td>C</td>
<td>18</td>
<td>D</td>
<td>28</td>
</tr>
<tr>
<td>9</td>
<td>C</td>
<td>19</td>
<td>D</td>
<td>29</td>
</tr>
<tr>
<td>10</td>
<td>A</td>
<td>20</td>
<td>C</td>
<td>30</td>
</tr>
</tbody>
</table>

### Jaribio la tatu

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>B</td>
<td>11</td>
<td>C</td>
<td>21</td>
</tr>
<tr>
<td>2</td>
<td>A</td>
<td>12</td>
<td>A</td>
<td>22</td>
</tr>
<tr>
<td>3</td>
<td>C</td>
<td>13</td>
<td>A</td>
<td>23</td>
</tr>
<tr>
<td>4</td>
<td>D</td>
<td>14</td>
<td>B</td>
<td>24</td>
</tr>
<tr>
<td>5</td>
<td>C</td>
<td>15</td>
<td>C</td>
<td>25</td>
</tr>
<tr>
<td>6</td>
<td>B</td>
<td>16</td>
<td>B</td>
<td>26</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>10.</td>
<td>A</td>
<td>20.</td>
<td>C</td>
<td>30.</td>
</tr>
<tr>
<td>37.</td>
<td>D</td>
<td>47.</td>
<td>D</td>
<td></td>
</tr>
<tr>
<td>38.</td>
<td>C</td>
<td>48.</td>
<td>A</td>
<td></td>
</tr>
<tr>
<td>39.</td>
<td>B</td>
<td>49.</td>
<td>D</td>
<td></td>
</tr>
<tr>
<td>40.</td>
<td>A</td>
<td>50.</td>
<td>C</td>
<td></td>
</tr>
</tbody>
</table>

**Jaribio la Nne (4)**

<p>| | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>5.</td>
<td>A</td>
<td>15.</td>
<td>D</td>
<td>25.</td>
<td>A</td>
</tr>
<tr>
<td>7.</td>
<td>C</td>
<td>17.</td>
<td>D</td>
<td>27.</td>
<td>A</td>
</tr>
<tr>
<td>31.</td>
<td>B</td>
<td>41.</td>
<td>D</td>
<td></td>
<td></td>
</tr>
<tr>
<td>32.</td>
<td>A</td>
<td>42.</td>
<td>B</td>
<td></td>
<td></td>
</tr>
<tr>
<td>33.</td>
<td>C</td>
<td>43.</td>
<td>C</td>
<td></td>
<td></td>
</tr>
<tr>
<td>34.</td>
<td>A</td>
<td>44.</td>
<td>A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>35.</td>
<td>A</td>
<td>45.</td>
<td>46.</td>
<td>47.</td>
<td>48.</td>
</tr>
</tbody>
</table>

**Jaribio la tano (5)**

<p>| | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>31.</td>
<td>A</td>
<td>41.</td>
<td>B</td>
<td></td>
<td></td>
</tr>
<tr>
<td>32.</td>
<td>C</td>
<td>42.</td>
<td>C</td>
<td></td>
<td></td>
</tr>
<tr>
<td>33.</td>
<td>D</td>
<td>43.</td>
<td>A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>34.</td>
<td>A</td>
<td>44.</td>
<td>C</td>
<td></td>
<td></td>
</tr>
<tr>
<td>35.</td>
<td>D</td>
<td>45.</td>
<td>D</td>
<td></td>
<td></td>
</tr>
<tr>
<td>36.</td>
<td>B</td>
<td>46.</td>
<td>A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>37.</td>
<td>D</td>
<td>47.</td>
<td>D</td>
<td></td>
<td></td>
</tr>
<tr>
<td>38.</td>
<td>D</td>
<td>48.</td>
<td>A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>39.</td>
<td>A</td>
<td>49.</td>
<td>D</td>
<td></td>
<td></td>
</tr>
<tr>
<td>40.</td>
<td>A</td>
<td>50.</td>
<td>C</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Muhula wa pili**

**Jaribio la sita (6)**

<p>| | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>5.</td>
<td>A</td>
<td>15.</td>
<td>A</td>
<td>25.</td>
<td>D</td>
</tr>
<tr>
<td>31.</td>
<td>B</td>
<td>41.</td>
<td>B</td>
<td></td>
<td></td>
</tr>
<tr>
<td>32.</td>
<td>A</td>
<td>42.</td>
<td>B</td>
<td></td>
<td></td>
</tr>
<tr>
<td>33.</td>
<td>D</td>
<td>43.</td>
<td>D</td>
<td></td>
<td></td>
</tr>
<tr>
<td>34.</td>
<td>A</td>
<td>44.</td>
<td>A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>35.</td>
<td>B</td>
<td>45.</td>
<td>A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>36.</td>
<td>A</td>
<td>46.</td>
<td>A</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Jaribio la saba**


**Jaribio la nane**


**Jaribio la tisa**

2. C  12. A  22. B  32. D  42. A

Jaribio la kumi


Muhula wa tatu

Jaribio la kumi na moja


Jaribio la kumi na mbili

2. D 12. B 22. D 32. C 42. A

Jaribio la kumi na tatu (13)


Jaribio la kumi na nne (14)


Jaribio la kumi na tano (15)

Unit 1: Human body

B. Unit review

Part 1: Self – check quiz

Parts of the reproductive system

1. Process by which living things give rise to young ones of their kind.
2. M - Ovary
   N - Oviduct/fallopian tube
   P - Uterus/womb
   Q - Vagina
3. (i) Womb ii) Oviduct iii) Birth canal
4. A
5. X - Testis
   Y - Urethra
   Z - Penis
6. D
7. Testis/Testes
8. The practice can spread HIV/AIDS.

Functions of some parts of the reproductive system

12. A 13. A

Changes during adolescence

18. Because at puberty hairs which trap dirt and sweat grow in the pubic regions and armpits. Also in girls, menstruation begin and if the blood is not cleaned, may produce bad smell. Wet dreams in boys may also make them smell if they do not keep proper hygiene.

Part 2: True or false?

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

2. Crossword

Across
1. Ovum 3. Armpit

Down
1. Oviduct 5. Sperm
6. Penis 8. Vagina
7. Testes

C. Flashback

1. Skin
2. A – Ear  B – Nose  C- Tongue
3. (a) M - Premolars
   N - Canine
   P- Molar
   Q- Incisor
   (b) M – Grinding and chewing
   N - Tearing
   P – Grinding and chewing
   Q – Biting and cutting

4. ‘Dropping off’ of the milk teeth to give way to a new set called permanent teeth.
5. (i) Deciduous/milk (ii) Permanent
6. (i) Thinking/sad (ii) Keep quiet (iii) Happy
7. Oxygen, carbon dioxide.
8. (a) P - Trachea
   Q - Bronchus
   R - Alveoli (airsacs)
   S - Diaphragm
   T – Lung
   (b) P – Allows air in and out of lungs.
   Q – Directs and pushes air into each of the lungs.
   R – Place or site where exchange of gases take place.
S – Allows the expansion and contraction of lungs by moving down and up respectively.

T – The organ for gaseous exchange.

9. (i) Teeth
(ii) Begins digestion of proteins; kills germs from the mouth.
(iii) Small intestines
(iv) Passage of food from mouth to stomach.
(v) Absorption of water (vi) Rectum

10. wisdom

11. Before – Oesophagus
After – Small intestine or duodeenum

12. tongue

13. (a) (i) Pancrease
(ii) Liver
(b) Pancrease – produces digestive juice called pancreatic juice.
Liver – Produces bile which helps in digestion of fats.

14. X – Rectum
Y – Small intestines
Z – Appendix

15. One would pass faeces continuously or all the time.

16. Tearing meat – canines
Biting banana - incisors

Unit 2 : Health education

B. Unit review

Part 1- Self-check quiz

Common communicable diseases

1. B
2. A disease that are spread easily from one person to another
6. (i) Covering the surface of stagnant water with a thin layer of oil – pollutes water and kills aquatic animals.
(ii) Clearing and cutting long grass and bushes – can lead to soil erosion.
(iii) Spraying the mosquitoes with chemicals – pollutes the air.

7. A - Tuberculosis B - Tuberculosis
8. (i) Tuberculosis (ii) Malaria
9. A – Tuberculosis B - Tuberculosis
C- Malaria

10. C 11. C

Immunisation schedule for infants

12. (a) Vaccination/Immunisation
(b) Vaccines
13. B
14. (a) (i) BCG
(ii) Oral
(iii) Diphtheria, whooping cough (pertussis), tetanus.
(iv) 6 weeks, 10 weeks, 14 weeks and booster at age 4 years.
(v) Vitamin A (vi) 9 months
(b) Typhoid, mumps, rubella, Influenza, yellow fever, meningitis, leprosy, cholera or any other communicable disease

Importance of HIV testing

15. (i) If you are HIV negative, it enables you to take precautions to avoid being exposed to the virus.
(ii) If you are HIV positive. To know how to live positively and avoid re-infection and infecting others.
(iii) Can enable you plan for the future, for example when and who to marry.
(iv) Helps you to overcome fear of being HIV positive yet you are negative.

16. A 17. C
18. Voluntary Counseling and Testing Centre (V CT)
19. (i) To get data on HIV prevalence in pregnant women.
(ii) To prevent infecting the baby either at birth or through breast feeding incase the mother is HIV positive.
(iii) To help the parents plan for how to take care of the baby given the mother won’t breastfeed it.

20. A

21. (i) Take a balanced diet always with lots of fruits and body building foods.
(ii) Take ARVs as prescribed by the doctor.
(iii) Take plenty of fluids to recover the water lost as a result of diarrhoea and vomiting.
(iv) Live positively, that is avoid being stigmatized or depressed because of their status.
(v) Avoid re-infection as much as possible.

22. (a) Individual (i) Family
(b) Nation (j) Family
(c) Family (k) Nation
(d) Individual (l) Nation
(e) Family (m) Nation
(f) Family (n) Nation
(g) Individual (o) Nation
(h) Nation (p) Nation

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

Part 3: Jog your mind
1  -b  2  -h  3  -j  4  -i
5  -e  6  -c  7  -f  8  -d
9  -e  10  -g

2. Diphtheria, typhoid, rubella, mumps, polio, yellow fever, pertussis, measles tuberculosis, cholera, vitamin A, tetanus, hepatitis.

C. Flashback
1. (i) Human immuno – deficiency virus
(ii) Acquired Immune Deficiency Syndrome
2. Comb, hairbrush.
3. A collection of signs and symptoms, which together indicate there is a disease or an infection/many signs and symptoms appearing together.
4. (i) – (c) (iv) – (e)
(ii) - (d) (v) - (a)
(iii) - (b)
5. (i) Refuse can be a good breeding ground for mosquitoes, rats, flies, etc which transmit diseases.
(ii) Broken bottles, glass, tins, etc can hurt us if present in the environment.
(iii) Animal droppings, kitchen wastes, etc can produce bad smell if not disposed of properly.

6. (i) Sharing toothbrushes, razor blades and other skin piercing instruments/ sharing non sterilized instruments.
(ii) Undergoing blood transfusion without first screening the donor blood for HIV.
(iii) Having unprotected sex or having sex with many partners.
(iv) Drug abuse/using drugs
(v) Cultural practices like traditional circumcision.
(vi) Handling fresh blood from open wounds and cuts without putting on gloves.
7. B and C or any of these.
8. Mop/ cleaning rug, toilet brush/ scrubber, broom, bucket/basin.
9. (i) Brushing teeth after every meal.  
(ii) Flossing teeth regularly.   
(iii) Not opening bottles or cracking nuts using our teeth.  
(iv) Not sharing toothbrushes or toothpicks.  
(v) Visiting a dentist once every six months.  
(vi) Eating a balanced diet with plenty of vitamins and minerals.  
(vii) Not eating sugary foods such as sweets, biscuits, etc.
10. Alice
11. (i) Bad smell (ii) Cavities (iii) Bleeding gums (iv) Tooth decay
12. Mark appropriately for a tooth with a small hole – cavity and a big hole – tooth decay.
13. i), iii), v)
14. (i) Read the instructions on the container before use.  
(ii) Do not take expired drugs.  
(iii) Use the medicine as prescribed.  
(iv) Do not share medicine with friends, brothers or sisters.  
(v) Do not drink directly from the medicine bottle.  
(vi) Shake liquid medicine well before taking.  
(v) Take full dose.
15. Fuels such as kerosene; soap, insecticides such as doom, cockroach killers, etc; fertilizers, antiseptics, detergents like omo, toss, etc, cosmetics and paints.
16. Can lead to poisoning or contamination.
17. HIV virus
18. (i) Persistent cough  
(ii) Sores in the mouth  
(iii) Opportunistic infections like tuberculosis.  
(iv) Skin diseases like rashes.  
(v) Frequent diarrhoea  
(vi) Loss of body weight and general body weakness.
19. A – Medicine not kept away from children.  
B – Foodstuff stored together with chemicals.  
C – Spraying chemicals against the wind.
20. A – Mother to child during birth  
B – Sharing toothbrushes  
C – Breastfeeding
21. Stage 2 – Asymptomatic/incubation  
Stage 4 – Full-blown AIDS
22. i), ii), vi)

Unit 3: Plants

B. Unit review

Part 1: Self – check quiz

Parts of a flower
1. A – Anther, B – Petal, C – Filament  
D – Sepal, E – Stigma, F – Style  
G – ovary.
2. Pistil
3. A
4. A
N – Joins stigma to ovary/route of pollen grains to the ovary.  
P – Contains ovules/becomes fruit after fertilisation.  
Q – Female sex cells of the plant.

Pollination
6. (i) A – has feathery stigma while the stigma of B is not feathery.  
(ii) B – has large petals while in A, petals are small.
(iii) In B anthers hang outside the flower while in A, they are inside the flower.
7. (i) – Insects (bee)  
   (ii) – Birds (animals)  
8. (i) – Self pollination  
   (ii) – Cross pollination  
9. **Insect pollinated flowers**  
   (i) Have brightly coloured and scented petals.  
   (ii) Are larger in size.  
   (iii) Sweet sugary nectar present.  
   (iv) Have large anthers which produce sticky pollen grains.  
   (v) Have sticky stigma to trap pollen grains.  
**Wind pollinated flowers**  
   (i) Have dull petals.  
   (ii) Are usually small in size.  
   (iii) Have neither scent nor nectar.  
   (iv) Have smooth and light pollen grains.  
   (v) Have flowers with feathery stigma.  

**Fertilisation**  
10. C  
11. The plant most probably will not have fruits that season because fertilisation will not occur.  
12. W – Style  
   X – Pollen tube  
   Y – Ovule  
   Z – Ovary  

**Parts of a seed**  
13.  

<table>
<thead>
<tr>
<th>Monocotyledons</th>
<th>Dicotyledons</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maize</td>
<td>Beans</td>
</tr>
<tr>
<td>Millet</td>
<td>Peas</td>
</tr>
<tr>
<td>Grass</td>
<td>Tomatoes</td>
</tr>
<tr>
<td>Rice</td>
<td>Carrots</td>
</tr>
<tr>
<td>Black jack</td>
<td>Groundnuts</td>
</tr>
<tr>
<td>Wheat</td>
<td>Kales</td>
</tr>
</tbody>
</table>

14. (a) Q – Endosperm  
   R – Cotyledon  
   S – Plumule  
   T – Radicle  
(b) Q – Stores food for use by germinating seedling.  
   R – Absorbs nutrients stored in endosperm.  
   S – Develops into the shoot.  
   T – Develops into the root  
15. X – Plumule  
   Y – Radicle  

**Conditions necessary for germination**  
16. B  
17. Air or oxygen will not enter the seed, which is one of the conditions necessary for germination to occur.  
18. B  
19. (a) Right temperature missing; excess water present, no oxygen hence seed may not, germinate.  
(b) Germination will not occur because there is no moisture.  
(c) Germination may not occur, there is a lot of water with no warmth and oxygen.  
20. (a) A – Maize or any other monocot  
   B - Bean or any other dicot  
(b) A – Hypogeal  
   B – Epigeal  
(c) Foliage leaves  

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

**Part 3: Jog your mind**  
1. 1 – (i)  
   2 – (j)  
   3 – (g)  
   4 – (f)  
   5 – (d)  
   6 – (c)  
   7 – (a)  
   8 – (e)  
   9 – (h)  
   10 – (b)  
2. **Crossword**  

**Across**  
1. Calyx  
2. Endosperm  
3. Fertilisation  
4. Hypogeal
X – Oxalis
Y – Black jack

7. (i) Part of weed remains underground. This can sprout again.
(ii) Some weeds are poisonous.
(iii) Requires use of a lot of energy if the ground is hard.

8. Chlorophyll

   Non-flowering plants – reproduction is through other means other than through production of flowers.

10. (i) Absorbs water and mineral salts from the soil.
    (ii) Stores food in some plants.

11. A – Uprooting
    B – Digging out/weeding

12.
13. (i) They deny the plant the necessary nutrients.  
(ii) Overcrowd the piece of land where crops are grown competing with them for sunlight.  
(iii) Poor quality yields are produced.  
(iv) Spread diseases and pests to main crops.

14. Cash

15. M – Flower  
   P – Stem  
   N – Leaf  
   Q – Root

Unit 4: Weather and the solar system

B. Unit review

Part 1: Self – check quiz

Solar system
1. Of the sun
2. A - though you can mark C right if the child specifies that Pluto has been excluded from the list of planets.
3. X – Mars  
   Z - Neptune  
   Y – Saturn
4. A
5. There is no oxygen to support life in the other planets.
6. C 7. 365 ¼ 8. Sun

Part 2: True or false?
1. False 4. True 7. False
2. True 5. False 8. True

Part 3: Jog your mind
1. 1 – (e) 6 – (g)  
2 – (c) 7 – (b)  
3 – (h) 8 – (i)  
4 – (f) 9 – (a)  
5 – (d)

2. Check if the following planets are circled: Earth, Mercury, Venus, Mars, Jupiter, Saturn, Neptune, Pluto and Uranus in the puzzle.

C. Flashback
1. (a) (b) (c) (d)

2. Sky at night – moon, stars, clouds.  
   Sky in the day – sun, clouds, moon (sometimes)
3. A – Cumulus  
   B – Nimbus  
   C - Cirrus
4. (i) Rain gauge  
   (ii) Measuring the strength and showing the direction of wind.
   (iii)
   (iv) Measuring temperature of a place.
5. (i) When to plant  
   (ii) When to wash clothes  
   (iii) When to harvest our crops
6. nimbus
7. make it easy to read the level of water.
8. Alvins
9. South to north
10. Lowest temperature and highest temperature of the day.
Unit 5: Animals

B. Unit review

Part 1: Self – check quiz

Types of animal feeds

1. (i) Pasture
   (ii) Fodder crops
   (iii) Commercial feeds/concentrates
   (iv) Stored feeds like hay and silage

2. (i) Calf pencils / pellets
   (ii) Proteins
   (iii) Layers
   (iv) Proteins
   (v) Creep pellets

3. Concentrates

4. A – Hay  B - Pasture

5. B

6. A – Napier grass / hay / fodder / silage
   B – Bone meal

Methods of grazing

7. A  8. C

9. A – Paddocking  B – Strip grazing

10. Advantages
    (i) Cheap to maintain.
    (ii) Has rest periods.
    (iii) Animals feed on fresh pasture.
    (iv) Allows harvesting of pasture for future use.
    (v) Helps to control livestock diseases and pests.

Disadvantages

(i) A large piece of land is required hence not suitable for large scale farmers.
(ii) It is expensive to start.

11. Zero grazing

12. (i) Livestock cannot get diseases from others as movement is limited.
(ii) Little space is required hence can be practiced in a small piece of land.
(iii) Feeds are used maximally (no wastage of feeds).
(iv) It is easy to collect dung to prepare manure for crop use.

13. Herding

14. - Diseases like foot and mouth and parasites are easily spread.
- Increases chances of soil erosion.

15. Advantages
    (i) A lot of labour is not required.
    (ii) It is cheap as fences are not required.
    (iii) Livestock feed on a variety of pasture compared to one type of pasture in other methods.

Disadvantages

(i) Diseases and parasites are easily spread.
(ii) Cattle getting lost, destroying crops.
(iii) Involves a lot of travelling over long distances hence tiring to both animals and herdsmen.
(iv) Causes soil erosion

Constituents of a balanced diet

16. (i) Proteins
    (ii) Carbohydrates
    (iii) Vitamins
    (iv) Mineral salts
    (v) Water
    (vi) Fats & oils

17. (i) Provide energy to the body
    (ii) Protein
    (iii) Protection against diseases
    (iv) Minerals
    (v) Bone and teeth formation / control of body functions
    (iv) Water
Part 2: True or false?
1. False 6. False
2. True 7. True
3. True 8. True
5. False 10. True

Part 3: Jog your mind
1. 1 – f) 5 – h)
2 – e) 6 – d)
3 – g) 7 – b)
4 – a) 8 – c)
2. Crossword
Across
1. Protein
2. Supplements
3. Tethering
Down
1. Paddocking
4. Succulent
5. Mineral
6. Water

C. Flashback
1. Domestic
2. A - Running  D - Walking
   B - Swimming  E - Slithering
   C - Flying  F - Wading
3. (a) Stinging
   (b) Digging into soil
   (c) Hiding in the shell
4. Shelter
5. vertebrates, invertebrates
6. Housefly, bee, flea, tick, earthworm, millipede, locust, centipede, spider, grasshopper, etc.
7. A - Remove wastes
   B - Movement
8. Pig
9. (i) Reproduction  (ii) Death
   (iii) Growth (these three in any order given).
10. (i) Fish
    (ii) Spend part of their life on land and part in water.
    (iii) Lay eggs
    (iv) Breath through gills when young but through lungs at adult stage (Mark correct any other characteristic of amphibians given)
    (v) Snakes, lizards, gecko, crocodile or any other reptile stated.
    (vi) Body covered with feathers
    (vii) Scales on legs
    (viii) Streamlined body, hollow bones, mouth modified into beak or any other characteristic of birds.
    (ix) Mammals
    (x) Breath through lungs, or any other characteristic of mammals not mentioned in the pupil’s book.
11. Layers – eggs
    Dairy cattle – milk
    Sheep – mutton/wool
    Goats – mutton/milk
    Pigs – bacon/pork
12. A – Birds  B - Mammals
13. (i) Cold-blooded
    (ii) Warm-blooded
14. a) Birds
   - Birds have feathers
   - Streamlined body
   - Lay eggs
   - Have hollow bones
b) Mammals
   - Skin with fur
   - Body not streamlined
   - Most give birth to young ones
   - Bones are solid, packed with bone marrow.
15. Confirm drawings as butterfly and tick.
16. a) Reptiles
   - Live either in water or on land.
   - Body covered with scales.
   - Internal fertilisation.
   - Breathe through lungs.

b) Amphibians
   - Live partly on land and partly in water.
   - Have moist skin
   - Fertilisation occur externally
   - Breath through gills while young, then later when adults use the lungs, mouth cavity or through the skin.

17. (i) Streamlined body
     (ii) Body covered with scales
     (iii) Fins for movement and steering
     (iv) Presence of lateral line

18. (a) Animals with body temperature that change depending on the temperature of the surrounding.
     (b) Animals whose body temperature is always constant irrespective of the temperature of the surrounding.

19. (i) have scales     (ii) have tails
     (v) slithering or crawling movement

Unit 6: Water

B. Unit review

Part 1: Self-check quiz

Water-borne diseases
1. (i) Pit latrines dug near boreholes, wells, etc.
     (ii) Sewage left to run into water sources.
     (iii) Run-off from rainwater into water sources.
     (iv) Soil erosion
     (v) Oil spillage in oceans, seas and lakes.
     (vi) Bathing, washing of clothes and cars in rivers and lakes.
     (vii) Farming activities near water bodies.
     (viii) Excess use of fertilizers and pesticides.
     (ix) Wastes from factories left to run into water sources.
     (x) Fumes from factories forming acid rain.
     (xi) Waste water from soaps and detergents, etc.

2. None of the water was safe for drinking unless boiled or treated using chemicals. Clear water does not mean it is safe. Tiny germs which cannot be seen using naked eyes may be present in the water.

3. Diseases spread through contaminated water

4. (i) Cholera     (iii) Bilharzia
     (ii) Typhoid

5. (i) Bilharzia     (ii) Cholera
     (iii) Typhoid

6. (i) Abdominal pains, vomiting whitish substance.
     (ii) Violet mucus-like diarrhoea (rice water), dry skin, sunken eyes.
     (iii) Dehydration as a result of diarrhoea and vomiting.
     (iv) Typhoid
     (v) Swimming or walking through stagnant water without putting on gumboots.

7. (i) Bilharzia
     (ii) Malaria


9. (i) Boil or treat drinking water and store in clean, tightly covered containers.
(ii) Always cover stored food.
(iii) Observe proper hygiene.
(iv) Fence water sources, build latrines and toilets away from water sources.
(v) Isolate cholera and typhoid patients and treat them.
(vi) Cover holes in pit latrines.
(vii) Wash fruits and vegetables before eating.
(viii) Wear protective clothing when handling stagnant water.
(ix) Avoid bathing in rivers, dams, lakes and ponds.
(x) Wash utensils thoroughly before using them.
(xi) Proper sewage disposal

15. Gumboots, gloves

Part 2: True or false?
1. True 6. True
2. True 7. False
3. False 8. True
5. True 10. False

Part 3: Jog your mind
1. c, d 5. c
2. c, d, g 6. d, g
3. b, c, d 7. b, d
4. g 8. c, d

2. Crossword

Across
1. Bacteria
2. Contaminate
3. Dehydration
4. Bilharzia
5. Gloves

Down
6. Cholera
7. Boiling
8. Germs
9. Transmission
10. Diarrhoea

C. Flashback
1. (i) Lake
   (ii) Borehole/well
   (iii) Rain
   (iv) River
2. B
3. (i) Boiling
   (ii) Adding chemicals
   (iii) Distillation
4. (a) Industry
   (b) Industry
   (c) Home, farm.
   (d) Home, farm, industry.
   (e) Home, farm, industry.
   (f) Farm, recreation.
   (g) Transport
   (h) Home
   (i) Industry
   (j) Recreation
5. A - Tank
   B - Pot
   C - Bucket
   D - Bottle
6. (i) Recreation
   (ii) Farming
7. Chlorination
8. A - Pipes
   B - Tankers
9. Mixing chemicals to spray crops.
10. Add 2.5 g (half teaspoonful) of table salt and about 50 g (5 teaspoonfuls) of sugar into 1 litre of water. Stir thoroughly to dissolve the salt and sugar to form a uniform solution.
Unit 7: Soil

B. Unit review

Part 1: Self-check quiz

Meaning and agents of soil erosion

1. The removal and carrying away of the top fertile soil by mainly rain water or wind.
2. (i) Water (ii) Wind
3. (i) Cutting down trees.
   (ii) Grazing cattle or herding.
   (iii) Cultivating along steep slopes.
   (iv) How tillage is done for example, digging deeply, direction of ploughing a shamba, etc.
   (v) Crop rotation – different plants hold soil particles together differently due to the difference in the type of roots.
4. (i) Splash (ii) Rill
   (iii) Sheet
5. D
6. C
7. Wind
8. Gulley
9. Spatter or raindrop
10. D

Part 2: True or false?

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

Part 3: Jog your mind

Across

1. Retention
2. Splash
3. Terrace
4. Texture
5. Man
6. Wind
7. Wind
8. Air
9. Spatter or raindrop
10. D

Down

1. Retention
2. Splash
3. Terrace
4. Texture
5. Man
6. Wind
7. Erosion
8. Air
9. Spatter or raindrop
10. D

C. Flashback

1. (i) Modelling  ii) Farming
   (iii) Building/construction
2. Texture and drainage or water-retention capacity.
3. (i) Clay  ii) Sand  iii) Loam
4. C
5. Mineral particles, water , air.
6. (i) The rising up of water in soil.
   (ii) Ability of water to pass through soil downwards.
   (iii) Water holding capacity of soil.
7. (i) Water droplets appear on the lid.
   (ii) Humus or organic matter.
   (iii) Putting a lump of soil in a container with water.
8. X – Drainage  Y – Capillarity
9. A – Humus  B – Clay
   C – Sand  D – Large stones
10. A

Unit 8 Foods and nutrition

B. Unit review

Part 1: Self – check quiz

Traditional and modern methods of food preservation

1. (i) Smoking
   (ii) Drying
   (iii) Freezing/smoking
   (iv) Refrigeration
   (v) Refrigeration
   (vi) Canning
2.

<table>
<thead>
<tr>
<th>Modern methods</th>
<th>Traditional methods</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freezing</td>
<td>Smoking</td>
</tr>
<tr>
<td>Pasteurisation</td>
<td>Drying</td>
</tr>
<tr>
<td>Canning</td>
<td>Use of honey</td>
</tr>
<tr>
<td>Bottling, etc</td>
<td>Salting, etc</td>
</tr>
</tbody>
</table>
3. B
4. Refrigeration
5. Drying, smoking, refrigeration; depending on the locality.
6. B
7. (i) To avoid wastage of food.
   (ii) To store excess food for future use.
   (iii) To keep food fresh.
   (iv) To allow transportation of food without them going bad.
8. A

Part 3: Jog your mind
Check the following are circled in the puzzle.
1. Salting
2. Refrigeration
3. Pasteurisation
4. Freezing
5. Canning
6. Bottling
7. Drying
8. Smoking

C. Flashback
1. (i) Foods eaten raw should be washed.
   (ii) Washing hands before eating.
   (iii) Proper cooking.
   (iv) Peeling off tubers before washing.
   (v) Washing hands after visiting toilets or latrines.
2. (i) Body building
   (ii) Energy giving
   (iii) Protective

9. (i) Fruit juices  (ii) Milk
   (iii) Boiled/stewed beans
   (iv) Meat or any other relevant food given.
10. A

Part 2: True o false?
1. False  4. False
2. True  5. True
3. True

<table>
<thead>
<tr>
<th>Food group</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Body building</td>
<td>Beef, beans, eggs, chicken.</td>
</tr>
<tr>
<td>Energy giving</td>
<td>Maize, potatoes, rice, cassava.</td>
</tr>
<tr>
<td>Protective</td>
<td>Kales, apple, mango, cabbage.</td>
</tr>
</tbody>
</table>
5. (i) Helps in easy passages of faeces. (ii) Assists in digestion of food. (iii) Cools the body. (iv) Water forms part of blood. (v) Helps in removal of wastes from the body through urine and sweat.


9. (i) Kwashiorkor (ii) Marasmus (iii) Anaemia or scurvy, pellagra, night blindness.

10. Lack of proteins 11. B

12. (i) Assists in easy passage of faeces. (ii) Prevents constipation.

13. They protect the body from diseases.

14. Lack of iron or lack of enough blood in the body.

**Unit 9: Energy**

**B. Unit review**

**Part 1: Self-check quiz**

**How light travels**

1. C
2. Travels in a straight line.
3. A
4. Light travels in a straight line/ light does not go round corners.

**Transparent, translucent and opaque materials**

5. Obstructed or opaque objects stop the path of light or light does not go through opaque objects.

6. C


**Reflection of light**

11. (i) All or some of the light may bounce back. (ii) All or some of the light may be absorbed by the object. (iii) All or some of the light may pass through the object.

12. (i) (ii)

13. FOOD

14. (i) Inverted (turned upside down). (ii) The image is the same distance from the mirror as the object. (iii) The image is the same size as the object. (iv) The image is virtual.

15. A 16. A

**Refraction of light**

17. The bending of light as it travels from one medium to another.

18. i)
Formation of a rainbow

24. Red, orange, yellow, green, blue, indigo, violet.
25. (i) On a sunny day, fill your mouth with clean water. Stand with your back against the sun, blow the water from your mouth forcefully and observe as the drops of water get discharged from the mouth to form a fountain and a rainbow.
   (ii) Arrange the items as shown below

(iii) Put the clear drinking glass on the path of sun’s rays, put the white paper and observe what happens.

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

Part 3: Jog your mind
Answers to questions
1. Prism 6. Transparent
2. Dispersion 7. Beam
4. Ray 9. Irregular
5. ROYGBIV
Pyramid
A - RAY
B - BEAM
C - PRISM
D - SHADOW
E - ROYGBIV
F - SPECTRUM
G - IRREGULAR
H - DISPERSION
I - TRANSPARENT

C. Flashback
1. A - Hurricane lamp
   B - Torch
   C - Firefly
2. (i) Seeing
   (ii) Photography
   (iii) Source electricity (e.g. solar panels)
   (iv) For communication e.g., in traffic.
   (v) Necessary in plant growth (photosynthesis)
   (vi) Source of warmth (sunlight)
3. Vibration
4. loud, soft
5. (a) Loud sounds that are unpleasant and irritating to all living things/ noise pollution/excessive amount of noise.
   (b) Aeroplanes flying, loud music, quarrying, vehicles, etc.
6. Highest – (iv)
   Lowest – (i)
7. Animals, drums, balls, whistles, vehicles, hitting objects, blowing air into pipes, plucking wires or strings, etc.
8. (i) Loud  (ii) Soft  
9. Tighten the strings further.  
10. (i) – c) (iv) – b)  
     (ii) – d)  (v) – a)  
     (iii) – e)  
11. A – Radiation  
      B – Convection  
      C – Conduction  
      Bad conductors – piece of wood, glass rod, rubber shoes, pencil, grass.  
13. Transfer of heat from one part of a solid to another.  
14. B  
15. Convection in liquids  
16. radiate heat  
17. Length, thickness.  
18. (i) Making electric cables like copper wire.  
     (ii) Making cooking utensils.  
     (iii) Making thermometers for example mercury in a mercury thermometer.  
19. (i) Making handles of cooking utensils.  
     (ii) Covering boilers and hot water tanks so that they can retain heat.  
     (iii) Making warm clothing that help to retain heat around our bodies.  

Unit 10: Properties of matter  
B. Unit review  
Part 1: Self-check quiz  
Composition of air  
1. (i) Nitrogen  (ii) Oxygen  
   (iii) Carbon dioxide  
   (iv) Rare or inert gases  
2. B  
3. Photosynthesis  
4. Carbon dioxide – 0.03%, Oxygen – 21%, Nitrogen – 78%, Inert gases – 0.97%  
5. carbon dioxide, oxygen; oxygen, carbon dioxide.  
6. carbon dioxide, oxygen  

Uses of air  
7. (i) Supports burning, germination, respiration.  
     (ii) Plants use it to make proteins and also can be used for cooling purposes.  
     (iii) Used to extinguish fires, plants use it to make food, is a preservative.  
     (iv) Lighting like in traffic lights, disco lights, neon bulbs, etc.  
8. D  
9. A  
10. There is a component of air which supports burning. The component is oxygen.  
11. Argon (inert gases)  

Part 2: True or false?  
2. False  5. False  8. False  

Part 3: Jog your mind  
1-(c)  3-(d)  5-(a)  
2-(e)  4-(b)  

C. Flashback  
1.  

<table>
<thead>
<tr>
<th>Floats</th>
<th>Sinks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rubber</td>
<td>Coin</td>
</tr>
<tr>
<td>Ruler</td>
<td>Stone</td>
</tr>
<tr>
<td>Feather</td>
<td>Marble</td>
</tr>
<tr>
<td>Paper</td>
<td>Metal ball</td>
</tr>
<tr>
<td>Cork</td>
<td></td>
</tr>
</tbody>
</table>
2. Shape
3. (i) Solid  
   (ii) Liquid  
   (iii) Gas  
4. B  
5. C  
6. A  
7. Pressure in liquids increases with depth.  
8. evaporation, freezing.  
9. (i) Becoming smaller or reducing in size.  
   (ii) Becoming larger or increasing in size.  
10. (i) No definite shape.  
    (ii) Expand most when heated  
    (iii) Have definite volume.  

11.  

12. (a) Thermometer °C or °F  
    (b) °C or °F  

Unit 11: Making work easier

B. Unit review
Part 1: Self-check quiz
Movement  
1. A  
2. remain stationary  
3. D  
4. (i) Tractor engine  
   (ii) The donkey  
5. – When it starts moving, passengers move backwards.  

   – When the vehicle stops, the passengers continue moving forward.  
6. C  
7. Fastening seatbelts  

Force  
1. Push or pull on a body.  
2. (i) Pull or push  
   (ii) Friction  
   (iii) Gravity  
3. C  
4. (i) Gravity  
   (ii) Friction  
5. Machines  
6. (i) to stop the bicycle (to apply brakes)  
   (ii) To pull the cart  
7. B  
8. A  

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

Part 3: Jog your mind  
1. (i) - (c)  
   (ii) - (e)  
   (iii) - (d)  
   (iv) - (f)  
   (v) - (a)  
   (vi) - (b)  

2. Crossword  
Across  
1. Friction  
2. Stationary  
3. Smooth  
4. Gravity  
5. Force  
6. Tension  
7. Newton  
8. Motion  

Down  

C. Flashback  
1. C
2. Effort needed or changing the direction of force.

3. (a) – (x)  (f) – (ix)  
(b) – (vi)  (g) - (iii)  
(c) – (viii)  (h) – (i)  
(d) – (iv)  (i) - (v)  
(e) – (vii)  (j) – (ii)  

4. (i) To make them last longer.  
(ii) To make them more efficient.

5. (i) Claw hammer, jembe.  
(ii) The head of the jembe should be tightly fitted on the handle/sharpening.  
(iii) Wheelbarrow, handcart, donkey, cart.  
(iv) Sharpening/cleaning after use/fitting handles tightly.

6. A – Crowbar  B – Fishing road

7. A  8. A

9. **Materials needed:** Two shoe-polish tins of same size, strings or wire, nails, a piece of wood (30 – 40 cm long and 2 – 3 cm thick), stand or support with base.

**Procedure:**
– Make a hole at the middle of the long piece of wood.  
– Fix the arm onto the stand  
– Suspend the tins using strings or wires at equal distances.  
– Fix the stand onto the flat base.

---

### Model Test Papers

---

#### Test paper one

<p>| | | | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>C</td>
<td>2</td>
<td>C</td>
<td>3</td>
<td>B</td>
<td>4</td>
<td>B</td>
</tr>
<tr>
<td>5</td>
<td>C</td>
<td>6</td>
<td>C</td>
<td>7</td>
<td>C</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>A</td>
<td>9</td>
<td>B</td>
<td>10</td>
<td>B</td>
<td>11</td>
<td>A</td>
</tr>
<tr>
<td>12</td>
<td>C</td>
<td>13</td>
<td>B</td>
<td>14</td>
<td>C</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>C</td>
<td>16</td>
<td>C</td>
<td>17</td>
<td>D</td>
<td>18</td>
<td>B</td>
</tr>
<tr>
<td>19</td>
<td>C</td>
<td>20</td>
<td>A</td>
<td>21</td>
<td>B</td>
<td></td>
<td></td>
</tr>
<tr>
<td>22</td>
<td>D</td>
<td>23</td>
<td>B</td>
<td>24</td>
<td>C</td>
<td>25</td>
<td>C</td>
</tr>
<tr>
<td>26</td>
<td>D</td>
<td>27</td>
<td>B</td>
<td>28</td>
<td>A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>29</td>
<td>C</td>
<td>30</td>
<td>A</td>
<td>31</td>
<td>A</td>
<td>32</td>
<td>B</td>
</tr>
<tr>
<td>33</td>
<td>B</td>
<td>34</td>
<td>A</td>
<td>35</td>
<td>A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>36</td>
<td>B</td>
<td>37</td>
<td>B</td>
<td>38</td>
<td>A</td>
<td>39</td>
<td>B</td>
</tr>
<tr>
<td>40</td>
<td>A</td>
<td>41</td>
<td>B</td>
<td>42</td>
<td>A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>43</td>
<td>A</td>
<td>44</td>
<td>B</td>
<td>45</td>
<td>D</td>
<td>46</td>
<td>B</td>
</tr>
<tr>
<td>47</td>
<td>A</td>
<td>48</td>
<td>D</td>
<td>49</td>
<td>D</td>
<td></td>
<td></td>
</tr>
<tr>
<td>50</td>
<td>B</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

#### Test paper two

<p>| | | | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>B</td>
<td>2</td>
<td>B</td>
<td>3</td>
<td>C</td>
<td>4</td>
<td>D</td>
</tr>
<tr>
<td>5</td>
<td>C</td>
<td>6</td>
<td>D</td>
<td>7</td>
<td>D</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>A</td>
<td>9</td>
<td>D</td>
<td>10</td>
<td>A</td>
<td>11</td>
<td>D</td>
</tr>
<tr>
<td>12</td>
<td>D</td>
<td>13</td>
<td>A</td>
<td>14</td>
<td>D</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>B</td>
<td>16</td>
<td>C</td>
<td>17</td>
<td>B</td>
<td>18</td>
<td>A</td>
</tr>
<tr>
<td>19</td>
<td>D</td>
<td>20</td>
<td>B</td>
<td>21</td>
<td>B</td>
<td></td>
<td></td>
</tr>
<tr>
<td>22</td>
<td>B</td>
<td>23</td>
<td>B</td>
<td>24</td>
<td>C</td>
<td>25</td>
<td>D</td>
</tr>
<tr>
<td>26</td>
<td>D</td>
<td>27</td>
<td>B</td>
<td>28</td>
<td>C</td>
<td></td>
<td></td>
</tr>
<tr>
<td>29</td>
<td>C</td>
<td>30</td>
<td>C</td>
<td>31</td>
<td>B</td>
<td>32</td>
<td>A</td>
</tr>
<tr>
<td>33</td>
<td>C</td>
<td>34</td>
<td>D</td>
<td>35</td>
<td>A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>36</td>
<td>D</td>
<td>37</td>
<td>A</td>
<td>38</td>
<td>A</td>
<td>39</td>
<td>A</td>
</tr>
<tr>
<td>40</td>
<td>A</td>
<td>41</td>
<td>C</td>
<td>42</td>
<td>B</td>
<td></td>
<td></td>
</tr>
<tr>
<td>43</td>
<td>D</td>
<td>44</td>
<td>D</td>
<td>45</td>
<td>C</td>
<td>46</td>
<td>C</td>
</tr>
<tr>
<td>47</td>
<td>B</td>
<td>48</td>
<td>C</td>
<td>49</td>
<td>A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>50</td>
<td>B</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---
Test paper three

50. A

Test paper four

50. C

Test paper five

50. B

Test paper six

50. C
Test paper seven

50. C

Test paper eight

50. C

Test paper nine

50. B

Test paper ten

50. A
EASTERN AFRICA

Do you Remember?
1. Importance of physical features

a) Rivers (Open)
• Rivers are sources of water for domestic and farm uses
• Water from some rivers is used in industries e.g. Kerio river in processing of fluor spar
• Used in the generation of electricity (H.E.P) e.g. R. Tana
• Rivers provide water for irrigation e.g. R. Perkerra in Baringo
• Some rivers are used for water transport
• Fishing is carried out in some rivers e.g. on R. Tana
• Water falls such as Chania Falls, Fourteen Falls and Ndururumo Falls attract tourists
• Some rivers are used for water transport

b) Plains (Open)
• They are suitable for farming e.g. Kano plains
• They are suitable for grazing livestock
• Most of Kenya’s game parks are located in the plains. Game parks attract tourists.
• They are homes for different types of wild animals
• Irrigation farming on the drier parts of the country is done on plains
• Human beings settle on plains which do not experience flooding

c) Forests (Open)
• Forests protect our soil from being carried away by running water and wind
• They reduce water lose from the ground through evaporation
• Forests help in the formation of rain
• Forests provide firewood, timber and posts for building and fencing
• They make the land look beautiful
• Trees in forests act as windbreakers
• Some plants in forests are sources of herbal medicine

d) Mountains (Open)
• Many mountains are sources of rivers, which are important to us
• Many of them are covered by forests which provide us with wood and timber
• Some mountains were used as places of worship/shrines in the past
• They attract tourists
• Mountain slopes are used for settlement because of fertile soils
• Some mountains have minerals, which contribute to the economic growth of an area

2. (Open) Providing good shelter from harsh weather, clothing them in good clothes and feeding them well

3. a) Weather is the condition of the atmosphere of a place at a particular time
b) Climate is the average weather conditions of a place over a long period of time (30-35 years)
c) Climate change is the change in the prevailing weather patterns of a place /increase or decrease of the measurement of weather elements over a long period of time
4. (Open) Fluctuations in the world market prices for agricultural goods and minerals, unfavourable balance of trade with major trading partners, competition from goods from developed countries

5. (Open) Loyal, just, obedient, law-abiding, kind, honest, hard-working

6. (Open) Negotiation, litigation, mediation, arbitration, dialogue

7. (Open) It causes pollution, makes the landscape ugly

8. (Open) Negative practices such as homosexuality and prostitution, drug trafficking and drug abuse, erosion of the traditional culture

9. a) Abagusii  b) Nandi  c) Akamba  d) Agiriama

10. a) Direct/Participatory

   The people discuss and take part in decision-making on matters affecting them

b) Indirect/Representative

   The people elect representatives to make decisions for them

c) Nominational

   People who are elected by the people are allowed to pick/nominate additional representatives for the people

d) Delegative

   People at the grassroots level elect others to represent them at the next level

e) Liberal

   It borrows the good qualities from all the other types of democracy and fights to satisfy the rights of all the categories of citizens

11. (Open)

   a) The Flag – It symbolises Kenya’s independence.
   b) Coat of arms – It is the logo of our country and government
   c) National Anthem – It is a national song and prayer which expresses the hopes and wishes of Kenyans
   d) Public Seal - It is an official government stamp used on government documents.

12. (Open) Accept map of Kenya showing the correct relief regions. Refer to Moran Primary school Atlas for Social studies and class course book.
UNIT 1: PHYSICAL ENVIRONMENT

A. Location
i) Countries of Eastern Africa
1. Ethiopia, Eritrea, Somali, Djibouti
2. Sudan
3. B (Eritrea)
4. D (Djibouti)
5. A (Uganda - Kampala)
6. A – Sudan
   B – Uganda G – Somalia
   C – Tanzania H – Eritrea
   D – Kenya I – Burundi
   E – Ethiopia J – South Sudan
   F – Rwanda K – Djibouti

ii) Position and sizes of the countries of Eastern Africa
1. Kenya, Somalia, Uganda
2. Cancer and Capricorn
3. Indian Ocean, Gulf of Eden, Red Sea
4. Tanzania, Rwanda, Burundi
5. Ethiopia, South Sudan, Sudan, Eritrea, Djibouti
6. 23° North, 12° South
7. 22° East and 51° East
8. C (6,325,386Km²)
9.

<table>
<thead>
<tr>
<th>Country</th>
<th>Approximate size (Km²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kenya</td>
<td>582,646</td>
</tr>
<tr>
<td>Uganda</td>
<td>241,038</td>
</tr>
<tr>
<td>Rwanda</td>
<td>26,338</td>
</tr>
<tr>
<td>Burundi</td>
<td>28,490</td>
</tr>
<tr>
<td>Tanzania</td>
<td>945,100</td>
</tr>
<tr>
<td>Somalia</td>
<td>626,541</td>
</tr>
<tr>
<td>Ethiopia</td>
<td>1,221,900</td>
</tr>
<tr>
<td>Djibouti</td>
<td>23,200</td>
</tr>
<tr>
<td>Eritrea</td>
<td>124,320</td>
</tr>
<tr>
<td>Sudan</td>
<td>1,886,068</td>
</tr>
<tr>
<td>South Sudan</td>
<td>619,745</td>
</tr>
</tbody>
</table>

10. C (Malawi)  11. A (South Sudan)
12. A (Tanzania)  13. B (East)
14. A (Sudan)
15. Uganda, Rwanda, Burundi, South Sudan, Ethiopia
16. D (Djibouti)

iii) Definition of longitude and latitude
1. A (latitudes)
2. C (longitudes)
3. D (equator)
4. Greenwich Meridian/Prime Meridian
5. Greenwich meridian, International Date line

iv) Use of longitudes and latitudes to locate places
1. Tropic of Cancer, $23\frac{1}{2}$° N, Tropic of Capricorn $23\frac{1}{2}$° S
2. The northern hemisphere, southern hemisphere

Creative corner

1. Names and measurements of lines of latitudes in the diagram

<table>
<thead>
<tr>
<th>Name</th>
<th>Measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) North Pole</td>
<td>90° N</td>
</tr>
<tr>
<td>b) Arctic Circle</td>
<td>66$\frac{1}{2}$° N</td>
</tr>
<tr>
<td>c) Tropic of Cancer</td>
<td>$23\frac{1}{2}$° N</td>
</tr>
<tr>
<td>d) The Equator</td>
<td>0°</td>
</tr>
<tr>
<td>e) Tropic of Capricorn</td>
<td>$23\frac{1}{2}$° S</td>
</tr>
<tr>
<td>f) Antarctic Circle</td>
<td>66$\frac{1}{2}$° S</td>
</tr>
<tr>
<td>g) South Pole</td>
<td>90° S</td>
</tr>
</tbody>
</table>
2. Differences between latitudes and longitudes

**Latitudes**
- Run from east to west
- Are 180 in total, with 90 on both sides of the Equator
- Affect climate
- Are named south or north

**Longitudes**
- Run from north to south
- Are 360 in total, with 180 on both sides of the Greenwich Meridian
- Affect time
- Are named east or west

v) Map interpretation

1. A map is a drawing representing the earth or part of the earth on a flat surface.
2. Shape, size
3. Height, altitude
4. Title, frame, key, scale, compass direction
5. B (title)
6. Key
7. a) Swamp  b) River  
    c) Forest  d) Settlement/huts  
    e) Bridge/river and bridge  
    f) Railway line  
    g) Tarmac road/all weather road  
    h) Boundary  i) Church
8. Altitude
9. Church
10. (Open) Rivers, mountains, forests growing of some crops like tea, pyrethrum
11. a) Hospital  b) Chief’s camp  
    c) Post office  d) Dispensary  
    e) Market  f) School
12. A scale is the relationship between the distance on the map and the actual distance on the ground
13. Distance
14. Enlarged or reduced
15. Linear scale, representative fraction scale, statement scale
16. Representative fraction
17. Linear
18. Statement
19. String, paper
20. Relief, vegetation, drainage features
21. (Open) Rivers, lakes, oceans, dams
22. Green
23. Brown/yellow
24. North
25. Direction
26. a) West-North-West  
    b) South-South-East  
    c) North-East
27. a) NW (North-West)  
    b) ENE (East-North-East)  
    c) SSE (South-South-East)  
    d) SSW (South-South-West)  
    e) SW (South-West)  
    f) WNW (West-North-West)

Creative corner
1. South West  
2. Farming  
3. (Open) River, forests, bridges, road  
4. 5.3 km  
5. Islam

B. Physical features

i) Major physicals features in Eastern Africa

1. Physical features are natural landforms on the surface of the earth  
2. A mountain is a raised part of the land that is higher than a hill. It is the highest relief feature.
3. Mountain Country in which it is found

<table>
<thead>
<tr>
<th>Mountain</th>
<th>Country in which it is found</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mt Loolmalasin</td>
<td>Tanzania</td>
</tr>
<tr>
<td>Ruwenzori mountains</td>
<td>Uganda</td>
</tr>
<tr>
<td>Mt. Kenya</td>
<td>Kenya</td>
</tr>
<tr>
<td>Mt. Kilimanjaro</td>
<td>Tanzania</td>
</tr>
<tr>
<td>Mt. Elgon</td>
<td>Kenya / Uganda</td>
</tr>
<tr>
<td>Mt. Ras Dashan</td>
<td>Ethiopia</td>
</tr>
<tr>
<td>Mt. Karisimbi</td>
<td>Rwanda</td>
</tr>
<tr>
<td>Mt. Meru</td>
<td>Tanzania</td>
</tr>
<tr>
<td>Mt. Kinyet</td>
<td>South Sudan</td>
</tr>
<tr>
<td>Mt. Gimbala</td>
<td>Sudan</td>
</tr>
</tbody>
</table>

4. Mt. Kilimanjaro
5. A plateau is a large area of fairly high land that is flat on the top.
6. (Open) Fipa plateau (Tanzania), Yatta plateau (Kenya), Teiga plateau (Sudan), Uasin Gishu plateau (Kenya), Jebel Abyad plateau (Sudan), Laikipia plateau (Kenya), Soroti plateau (Uganda)
7. A valley is a low lying land between hills or mountains
8. (Open) The Great Rift Valley, Shebeli Valley (Somalia), Lambwe Valley (Kenya), Danakil Valley (Ethiopia and Eritrea), Nile Valley (Sudan), Suguta Valley (Kenya), Pangani Valley (Tanzania), Kerio Valley (Kenya), Rufiji Valley (Uganda)
9. The Great Rift Valley
10. Red Sea
11. The Eastern branch, The Western branch, The Ethiopian Rift Valley
12. Plains are low-lying level areas of the land
13. (Open) Athi plains (Kenya), Serengeti plains (Tanzania), Bilesa plains (Kenya and Somalia), Luwero plains (Uganda), Sarar plains (Somalia), Lotikipi plains (Kenya), Nakasongola plains (Uganda), Maasai plains (Tanzania), Haded plains (Somalia)
14. (Open) Used for both crop farming and livestock keeping, promotes irrigation farming on drier lands, good for human settlements on areas that do not experience flooding
15. Permanent
16. Seasonal
17. Nile
18. Rivers that drain into the Mediterranean Sea – R. Nile
b) Rivers that drain into the Indian Ocean – R. Tana, R. Ruvuma, R. Rufiji, R. Athi, R. Juba, R. Shebele, R. Pangani

River Country where found

<table>
<thead>
<tr>
<th>River</th>
<th>Country where found</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tana</td>
<td>Kenya</td>
</tr>
<tr>
<td>Juba</td>
<td>Somalia</td>
</tr>
<tr>
<td>Awash</td>
<td>Ethiopia</td>
</tr>
<tr>
<td>Ruvuma</td>
<td>Tanzania</td>
</tr>
<tr>
<td>Sue</td>
<td>South Sudan</td>
</tr>
<tr>
<td>Kagera</td>
<td>Uganda</td>
</tr>
<tr>
<td>Rufiji</td>
<td>Tanzania</td>
</tr>
<tr>
<td>Katonga</td>
<td>Uganda</td>
</tr>
<tr>
<td>Athi</td>
<td>Kenya</td>
</tr>
<tr>
<td>Omo</td>
<td>Ethiopia</td>
</tr>
<tr>
<td>Shebele</td>
<td>Somalia</td>
</tr>
<tr>
<td>Nile</td>
<td>Sudan</td>
</tr>
</tbody>
</table>

19. a) Rivers that drain into the Mediterranean Sea – R. Nile
b) Rivers that drain into the Indian Ocean – R. Tana, R. Ruvuma, R. Rufiji, R. Athi, R. Juba, R. Shebele, R. Pangani
ii) Relief regions of Eastern Africa

1. Relief refers to things that occur naturally on the surface of the earth.

2. The Plateaus, Rift Valley, Highlands, Coastal lowlands, Lake basin

3. Mountains

4. 2000m

5. Ethiopian highlands, Kenyan highlands, Tanzanian highlands

6. Crop farming

7. Rivers

8. A plateau is a large area of fairly high land that is flat on the surface.

9. 400m - 2000m

10. Dry

11. 1000m

12. Inselbergs

13. 1000m

14. (Open)

<table>
<thead>
<tr>
<th>Salty water lakes</th>
<th>Fresh water lakes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nakuru</td>
<td>Victoria, Rukwa,</td>
</tr>
<tr>
<td>Magadi</td>
<td>Kyoga, Chala,</td>
</tr>
<tr>
<td>Bogoria</td>
<td>Naivasha, Turkana,</td>
</tr>
<tr>
<td>Stefanie</td>
<td>Baringo, Malawi,</td>
</tr>
<tr>
<td>Manyara</td>
<td>Tana , Tanganyika,</td>
</tr>
<tr>
<td>Elementaita</td>
<td>Bisini, Edward,</td>
</tr>
<tr>
<td>Natron</td>
<td>Jipe, Albert</td>
</tr>
</tbody>
</table>

30. A

31. A

32. D

33. Stagnant water, reeds

34. Rivers

35. (Open) R. Ewaso Nyiro North (Lorian), R. Yala (Yala swamp), Lake Turkana (Lotikipi), R. Nile (Sudd)

36. A hill is a raised piece of land

37. Ranges

38. (Open) Shimba hills (Kenya), Kigezi hills (Uganda), Pugu hills (Tanzania), Loita hills (Kenya), Taita hills (Kenya), Mlala hills (Tanzania), Labwor hills (Uganda)

39. (Open) Aberdare, Mathews, Lorius

Creative corner

(Open) Accept correctly drawn and labelled map
iii) Formation of major physical features

Formation of mountains (block)
1. Horst
2. Downwards/upwards

Formation of volcanoes
1. Molten
2. Magma
3. Volcanic eruption
4. Lava is the molten rocks that has flowed to the surface of the earth after an eruption
5. Vent
6. Crater
7. Active volcanoes, Dormat volcanoes, Extinct volcanoes

Creative corner
1. A – Faults lines/cracks
   B – Horst/Block mountain
   C – Escarpment
   D – Compressional forces
2. Volcanic
3. A. Crater     B. Vent (central)
   C. Fissure side vent     D. Volcanic ash, dust, steam

Formation of the Rift Valley
1. Faulting
2. Faults/cracks
3. Rift valley
4. Escarpments
5. Tensional, compression

Creative corner
(Open) Confirm that the pupils have drawn the correct diagrams showing the formation of the Rift Valley by both Tensional Forces and Compression Forces. Refer to Standard 6 course book.

Formation of lakes
1. Human activities, Faulting, deposition, erosion, volcanic activity, down warping
2. Movement of large blocks of ice down the slopes of a mountain
3. When a dam is built across a river the dam fills up with water forming a lake.
4. Soil deposited may increase inside a meander such that water is forced to create a new straight path. Leaving a cut off meander which forms an oxbow lake.
5. Lake Kanyaboli, Gambi, Utange
6. D
7. C

C. Climate

i) Weather instruments
1. Climate is the average weather conditions of a given place for a long period of time usually (30-35 years).
2. Atmospheric pressure is the weight exerted by the atmosphere on earth’s surface. It is also called air pressure.
3. Mercury barometer, Aneroid barometer
4. 

<table>
<thead>
<tr>
<th>Weather measuring instruments</th>
<th>Elements of weather</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Rain gauge</td>
<td>Amount of rainfall received</td>
</tr>
<tr>
<td>b) Barometer</td>
<td>Atmospheric pressure</td>
</tr>
<tr>
<td>c) Wind vane</td>
<td>Direction of wind</td>
</tr>
<tr>
<td>d) Thermometer</td>
<td>Temperature</td>
</tr>
<tr>
<td>e) Windsock</td>
<td>Strength of wind</td>
</tr>
<tr>
<td>f) Anemometer</td>
<td>Speed of wind</td>
</tr>
<tr>
<td>5. millibars</td>
<td></td>
</tr>
</tbody>
</table>
ii) Construction of a windvane
1. windvane
2. blowing to
3. direction

iii) Factors influencing climate
a) Latitude – temperatures are high in places near the Equator and drop as one moves away from the Equator. High temperatures cause convectional rainfall.

b) Altitude – temperatures reduce with an increase in altitude. Highland areas are generally cold while lowland areas like at the coast are warm. Warm and cold air in mountain areas result to the formation of relief rainfall. Lower areas receive less rainfall while high areas receive very high rainfall.

c) Winds – warm winds raise the temperature of a place and when they are carrying moisture, they bring rainfall. Cold winds lower the temperature of a place and bring dry conditions in a place. The North-East trade winds are dry winds hence cause dry conditions.

d) Nearness to large water bodies – water bodies affect the temperature and rainfall received in a place. Areas near large water bodies receive a lot of convectional rainfall which falls late in the afternoon. Rainfall is usually accompanied by lightning and thunder. Temperature is affected by sea breeze (occurs during the day) and land breeze (occurs at night). During the day cool air from the sea lowers the temperature on the land. At night, cool air from the land lowers the temperature in the sea.

e) Nature of the coastline – when the coastline lies parallel to the prevailing winds, the area does not receive rainfall hence remains dry e.g. the coast of Somalia. When the wind blows directly into the coastline, the area receives a lot of rainfall e.g. the coast of Kenya and Tanzania

f) Relief - When moist air meets a mountain, it cools and condenses to form clouds. When clouds are too heavy, they lead to formation of rain. This type of rainfall is called relief rainfall, which falls on the windward side of the mountain. The winds then move to the other side of the mountain. They are now dry as they have no moisture. This results to the leeward side of the mountain receiving little or no rainfall.

iv) Characteristics of climatic regions of Eastern Africa
• Modified Equitorial Climate (Lake Region)
1. Uganda, South Sudan, Lake Basin of Kenya and Tanzania
2. Hot, wet
3. 1000mm and 2000mm
4. Convectional rainfall
5. Lightning, thunder
6. 20 ºC–25 ºC
• Modified Equitorial Climatic region (Coast)
1. Hot, wet
2. South-East trade winds, North-East trade winds
3. 800mm, 1500mm
4. 27 ºC, 30 ºC
5. 3 ºC
6. a) Coast of Kenya
b) Coast of Tanzania

- Modified tropical climatic region (Highlands)
  1. (Open) Mt. Kenya region, slopes of Mt. Elgon, Ethiopian highlands, Aberdare ranges, southern highlands of Tanzania, Mt. Kilimanjaro region
  2. Cool, wet
  3. 1000mm, 2000mm
  4. Relief
  5. Windward
  6. Rain shadow
  7. 16 °C, 23 °C
  8. 7°C
  9. Windward side, leeward side
  10. (Open) Mt. Kilimanjaro, Ruwenzori mountains, Mt. Kenya
  11. Meru (Kenya), Addis Ababa (Ethiopia), Tukuyu (Tanzania), Fort Portal (Uganda), Nyeri (Kenya)

- Semi-arid/semi-desert climate
  1. 250mm, 750 mm
  2. Hot, dry
  3. 28 °C
  4. 5 °C
  5. (Open) Central Sudan, south-eastern Ethiopia, northern and north-eastern Kenya, north-eastern Somalia, central Tanzania, north-eastern Uganda

- Hot desert/arid climate
  1. Hot, dry
  2. 0mm, 250mm
  3. Dry
  4. 28 °C, 32 °C
  5. 10 °C
  6. North-East
  7. Hot, cold
  8. (Open) Northern Sudan, southern Ethiopia, and northern Somalia, northern Kenya.

Creative corner

(Open) Accept correctly drawn map. Refer to the Standard 6 course book.

D. Vegetation

i) Types of vegetation
  1. (Open) Forests, grasslands, swamps, scrub, bushes, thickets
  2. Natural or planted
  3. Planted, natural
  4. Mangrove forests, savannah grassland, tropical rainforest, swamp mountain, semi-desert vegetation

ii) Description of Vegetation in Eastern Africa

Mangrove forests
  1. Salty
  2. (Open) Kenya, Tanzania, Somalia
  3. Tana, Rufiji, Juba, Ruvuma

Tropical rain forests
  1. Equatorial rain forests
  2. Equator
  3. (Open) Trees are evergreen; trees are huge and tall; trees form an umbrella like layer at the top known as a canopy; most of the trees grow close together making it difficult to get into the forest to harvest trees
  4. Canopy
  5. (Open) Rosewood, mvule, mahogany, teak, Meru Oak, Camphor
  6. Kakamega, Malaba (Kenya), Tanga (Tanzania)

Savannah grasslands and woodlands
  1. Grass, trees
  2. Tropical
  3. (Open) Acacia, baobab
  4. (Open) central district of Uganda, Nyika plateau of Kenya, Southern and western parts of Tanzania, central and north-western Uganda
5. Trees, grass
6. (Open) Most trees are deciduous; trees are shorter than those in the rainforests; widely spaced
7. No. Trees do not form a canopy
8. (Open) Miombo woodlands in Tanzania, Shimba Hills forest in Kenya
9. (Open) Shimba Hills in Kenya, northern Uganda, central Tanzania, river valleys of South Sudan
10. Miombo

Swamp vegetation
1. Marshes
2. Drainage
3. Water
4. Papyrus reeds
5. Mangrove
6. (Open) Lorian – Kenya, Sudd - South Sudan
7. (Open) Bahr- el-Ghazal region of South Sudan, Lake Kyoga region of Uganda, at the mouth of River Tana, at the mouth of R. Ewaso Nyiro (South), at the mouth of R. Éwaso Nyiro (North), Along river valleys and lake shores in Kenya

Semi desert vegetation
1. Thorny, grass
2. Drought
3. Leaves, stems
4. Bare
5. (Open) Cactus, euphorbia
6. (Open) north and north-eastern Kenya, eastern Eritrea, north-eastern Uganda, central and northern Sudan, eastern Somalia, Djibouti, eastern and southern Ethiopia, northern Tanzania

Desert vegetation
1. Temperatures, very little/unreliable
2. Scattered
3. Cactus
4. Stems, leaves
5. (Open) northern Kenya, southern Ethiopia, northern Sudan, parts of Somalia

Mountain vegetation
1. Windward
2. Altitude
3. Forests
4. Bamboo
5. Heath and moorland
6. Snow
7. A – Bare rock, snow and ice
   B – Health and moorland
   C – Rain forest
   D – Savanna grassland

Creative corner
1. False
2. True
3. True
4. True
5. True
6. False
7. True
8. False
9. True
10. False

iii) Factors influencing vegetation Distribution in Eastern Africa

Climate
1. Rain forest
2. Rainfall
3. Temperatures
4. Semi-desert/semi-arid, desert/arid

Altitude
1. Temperature
2. Increases
3. Low

Soils
1. Fertile
2. Sandy
3. Volcanic/loamy

Drainage
1. Swamp
2. Mangrove

Human activities
1. Clearing vegetation to create room for settlement/cultivation, saw-milling, deforestation, afforestation, overgrazing, poor farming methods
2. Farming, settlement
3. (Open) To build roads and railway lines, to get wood fuel, to get timber for building, to get raw materials for industries e.g. paper industries, to create room for mining
4. Deforestation 5. Afforestation
6. Re-afforestation

Government policy
1. Forest reserves 2. Grasslands
3. Settle

Know More
1. Yes 2. 11
3. Kenya, Uganda, Tanzania, Eritrea, Djibouti, Burundi, Sudan, Somalia, Rwanda, South Sudan, Ethiopia
4. Kenya, Uganda, Tanzania
5. Tanzania, Kenya, Somalia
6. Uganda, Kenya, Tanzania
7. South-East

EVALUATION PAPER 1
31. B 32. D 33. C
34. A 35. C 36. D
37. D 38. A 39. A
40. A

UNIT 2: PEOPLE AND POPULATION

A. Classification of communities in Eastern Africa into main language groups

i) The Bantu
1. Bantu, Nilotes, Cushites, Semites
2. Bantu
3. Europeans, Indians
4. Somalia, Eritrea, Djibouti, Ethiopia, Sudan, South Sudan
5. Farming, cattle, sheep, goats
6. Highlands 7. B
8. A

Creative corner

<table>
<thead>
<tr>
<th>Kenya</th>
<th>Uganda</th>
<th>Tanzania</th>
<th>Rwanda</th>
<th>Burundi</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abaluhya</td>
<td>Baganda</td>
<td>Wasukuma</td>
<td>Hutu</td>
<td>Hutu</td>
</tr>
<tr>
<td>Abagusii</td>
<td>Batoro</td>
<td>Yao</td>
<td>Tutsi</td>
<td></td>
</tr>
<tr>
<td>Wadawida</td>
<td>Banyankole</td>
<td>Nyakusa</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ameru</td>
<td>Banyoro</td>
<td>Wahehe</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Akamba</td>
<td>Bakiga</td>
<td>Wapare</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Taveta</td>
<td>Basoga</td>
<td>Wachagga</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agikuyu</td>
<td>Bagisu</td>
<td>Wamakonde</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mijikenda</td>
<td></td>
<td>Wanyamwezi</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aembu</td>
<td></td>
<td>Wangoni</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pokomo</td>
<td></td>
<td>Wazaramo</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Abakuria</td>
<td></td>
<td>Wagogo</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ambeere</td>
<td></td>
<td>Ha</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Abasuba</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
ii) The Nilotes
1. Fishing, pastoralism
2. River-Lake Nilotes, Plains Nilotes, Highlands Nilotes
3. Kenya, Uganda, Tanzania, South Sudan
4. a) Fishing along rivers and lakes

b) Cultivation, livestock keeping

\[ \text{Pastoralism} \]

5. Cattle, goats, sheep, donkeys
6. Joka-Jok, Joka-Omolo, Joka-Owiny
7. B 8. The Luo
9. D

Creative Corner

<table>
<thead>
<tr>
<th></th>
<th>Uganda</th>
<th>Tanzania</th>
<th>South Sudan</th>
<th>Kenya</th>
</tr>
</thead>
<tbody>
<tr>
<td>Highlands Nilotes</td>
<td>Sebei, Suk</td>
<td>Dadog</td>
<td>None</td>
<td>Sabaot,</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Marakwet,</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Nandi, Pokot,</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Kipsigis,</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Tugen,</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Keiyo</td>
</tr>
<tr>
<td>Plains Nilotes</td>
<td>Iteso, Lugbara, Karamajong, Jie, Kumam, Madi</td>
<td>Maasai</td>
<td>None</td>
<td>Maasai, Iteso, Njems, Elmolo, Samburu, Turkana</td>
</tr>
<tr>
<td>River-Lake Nilotes</td>
<td>Alur, Acholi, Langi, Jopadhola, Lugbara</td>
<td>Luo</td>
<td>Nuer, Shilluk, Anuak, Dinka</td>
<td>Luo</td>
</tr>
</tbody>
</table>

iii) The Cushites
1. Eastern
2. Tanzania
3. Eastern, Southern
4. Pastoralism
5. Cattle, camels, goats
6. Uganda, Rwanda, Burundi
7.

<table>
<thead>
<tr>
<th>Somalia</th>
<th>Kenya</th>
<th>Ethiopia</th>
<th>Tanzania</th>
<th>Djibouti</th>
<th>Sudan</th>
<th>Eritrea</th>
</tr>
</thead>
<tbody>
<tr>
<td>Somali Ogaden</td>
<td>Galla</td>
<td>Oromo, Borana, Ogaden</td>
<td>Iraqw, Sandawe</td>
<td>Issa, Afar</td>
<td>Beja, Fur</td>
<td>Danakil</td>
</tr>
<tr>
<td>Sab Hawiyah</td>
<td>Somali</td>
<td>Sidamo, Galla</td>
<td>Mbugu, Burungi</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Borana</td>
<td>Somali, Beja</td>
<td>Hawa, Makagadi</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Rendile</td>
<td>Khamir</td>
<td>Aramanik</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Oromo</td>
<td></td>
<td>Hamza</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Dahalo</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Orma</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sanye</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
iv) The Semites
1. Sudan, Eritrea, Ethiopia
2. (Open) Amhara, Tigre, Baqarra, Arabs, Falasha
5. Traders 6. C (Semites)
7. A (Affar)

B. Origin and migration of the main language groups in Eastern Africa

i) The Bantu
1. Congo forest
2. (Open) In search of fertile land, population pressure, disease outbreaks and epidemics, internal quarrels, external attacks, drought and famine

Route between L. Tanganyika and L. Kivu
1. Central, northern
2. Nyamwezi, Hehe, Ha, Sukuma
3. Pare, Chagga 4. Kyulu hills

Route between L. Tanganyika and L. Malawi
1. (Open) Hehe, Gogo, Zaramo, Yao, Makonde, Luguru, Nyakusa
2. Hehe, Gogo, Luguru, Zaramo
3. Yao, Nyakusa, Makonde

Route between Lake Malawi and the Indian Ocean
1. Ngoni 2. Shaka the Zulu
3. Southern

Route between L. Albert and L. Edward
1. Abaluhya, Abagusii, Abakuria, Abasuba, Baganda, Batoro, Basoga, Banyankole
2. Uganda, Western
3. Abaluhya, Abagusii, Abakuria, Abasuba

ii) The Nilotes

Highlands Nilotes
1. South Sudan 2. Ethiopia
3. Turkana
4. Kenya, Uganda, Tanzania
5. Elgon

Plains Nilotes
1. Ethiopia 2. Uganda
3. Turkana 4. Maasai

River – Lake Nilotes
1. Nile 2. Sudan
5. Victoria

iii) The Cushites
1. Arabia
2. Ethiopia 3. Ethiopia
4. Kenya, Somalia, Tanzania, Djibouti, Eritrea, Sudan
5. (A) Dry

iv) The Semites
1. Middle East/Arabia
2. Red Sea 3. Indian Ocean
4. (Open) Population pressure, search for water and pasture, internal disputes

Creative corner
A – Nilotes B – Cushites
C – Bantus D – Bantus
C. Reasons for migration of main language groups in to Eastern Africa

1. (a) The Bantu
   To search for land, to avoid war and conflicts, to avoid attack by diseases, to discover new land.
(b) The River–Lake Nilotes – to avoid attacks by hostile neighbours, to search for pasture, to look for expansive grazing lands.
(c) The Highland Nilotes – to look for expansive land, to look for good land without floods, to run away from hostile neighbours.
(d) Cushites – to search for water and pastures for livestock, to look for more grazing land, to avoid disagreements among clan members.

D. Settlement of language groups

1. Lake Victoria, Luo land
2. Luo
3. 

<table>
<thead>
<tr>
<th>Name</th>
<th>Where they settled</th>
</tr>
</thead>
<tbody>
<tr>
<td>Turkana</td>
<td>Lake Turkana</td>
</tr>
<tr>
<td>Pokot</td>
<td>South of Lake Turkana</td>
</tr>
<tr>
<td>Maasai</td>
<td>Southern parts of Rift valley from Nakuru</td>
</tr>
</tbody>
</table>

4. Ethiopia, Somalia, Eritrea and North Eastern Kenya
5. Southern, Central, Eastern and Western Tanzania. Western, Central and Eastern Kenya, Northern Tanzania and Kenyan coast, Uganda

E. Effects of migration and settlement

1. (a) Area of origin-sufficient pasture, less spread of diseases during an outbreak, more resources due to population decrease.
   Settlement areas-interrmarriage which promoted good relationships, borrowed cultures enriched their cultures, trading which improved the economy

2. (a) Area of origin- families split, trading activities reduced as people were few
   Settlement areas-caused population pressure, fights arose over water and pasture leading to displacement of people from their original home area.

F. Population distribution in Eastern Africa

1. Population distribution is the way in which the population is spread over a given area at a particular time
2. (Open) Major towns and cities, the Lake Victoria Basin of Kenya and Uganda, the Highlands east and west of the Rift Valley, Rwanda, Burundi, Khartoum in Sudan
3. (Open) Somalia, Djibouti, Eritrea
4. Population distribution in Eastern Africa is not even. Population is dense in highland areas and areas around water bodies while sparse population is evident in the drier parts of the region.
5. D
Creative corner
Ensure the map of Eastern Africa is clear and correctly indicates the population distribution patterns in the region. Refer to the Standard 6 course book.

G. Factors influencing population distribution in Eastern Africa
1. (Open)
   a) Climate - areas experiencing high temperatures are generally dry and discourage settlement of people hence they are sparsely populated. Areas which receive high rainfall are densely populated.
   b) Soils - fertile soils attract a lot of people resulting in high population densities while infertile soils discourage human settlement.
   c) Relief - human settlements are concentrated on gentle slopes. Places with rough terrain, steep areas have very few human settlements.
   d) Diseases - areas that are not prone to diseases attract human settlement hence are densely populated while areas that are prone to diseases are sparsely populated.
2. (Open) Good medical facilities, transport and communication facilities, presence of minerals, industries, vegetation, drainage, government policy

Know More
1. Population is the total number of people living in an area
2. (Open) Rainfall, vegetation, transport and communication, soils, relief, temperatures, industrial growth, presence of minerals, presence/absence of pests and diseases
3. (Open) Jomo Kenyatta, Tom Mboya, Daniel Moi, Dedan Kimathi, Oginga Odinga, Mwai Kibaki, Wangari Maathai
4. (Open) National census, registrar of births, deaths and marriages, immigration documents, surveys
5. (Open) It enables the Government to plan for its citizens; it gives information on the structure of the population in terms of age and gender; it enables the Government to estimate how much revenue it may get from the people in terms of taxes, it enables the Government to plan its food reserves for the citizens

EVALUATION PAPER 2
1. A  2. B  3. C
31. A  32. B  33. D
34. B  35. C  36. D
37. B  38. A  39. A
40. C

UNIT 3: SOCIAL RELATIONS AND CULTURAL ACTIVITIES
A. The Family
i) Types of families
1. A group of people who are related by blood, marriage or through adoption.
2. Nuclear, extended
3. Father, mother, children
4. Death of one parent, divorce
5. (Open) Cousins, nieces, nephews, grandparents, aunts, uncles
6. Relatives

ii) Needs of family members

Basic and secondary needs
1. Things people require inorder to make life easier and more comfortable
   Needs are things that human beings require in order to live comfortably.
2. Basic needs, secondary needs
3. Food, shelter, clothing, water

ii) Responsibilities of family members
1. (Open)

<table>
<thead>
<tr>
<th>Boys</th>
<th>Girls</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Obey and respect their parents</td>
<td>• Obey and respect their parents</td>
</tr>
<tr>
<td>• Herding livestock</td>
<td>• Fetching water and looking for firewood</td>
</tr>
<tr>
<td>• Go to hunt with their fathers</td>
<td>• Cooking for the family</td>
</tr>
<tr>
<td>• Protect the family when they became</td>
<td>• Looking after small children and babies</td>
</tr>
<tr>
<td>warriors</td>
<td>• Helping their mothers to dig the shamba</td>
</tr>
<tr>
<td>• Help their fathers in their activities</td>
<td>and plant food crops</td>
</tr>
</tbody>
</table>

2. (Open)

<table>
<thead>
<tr>
<th>Family members</th>
<th>Roles</th>
<th>Responsibilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parents</td>
<td>• Talk to, guide and advise their children</td>
<td>• Instill discipline in children</td>
</tr>
<tr>
<td></td>
<td>• Make decisions on matters</td>
<td>• Provide the basic needs</td>
</tr>
<tr>
<td></td>
<td>concerning the welfare of the family</td>
<td>• Provide security and protection</td>
</tr>
<tr>
<td></td>
<td>• Love their children</td>
<td>to the children</td>
</tr>
<tr>
<td>Children</td>
<td>• Love and support their parents</td>
<td>• Educating the children</td>
</tr>
<tr>
<td></td>
<td>• Assist parents in carrying out family</td>
<td>• Ensure children are taught</td>
</tr>
<tr>
<td></td>
<td>duties</td>
<td>community and religious values</td>
</tr>
<tr>
<td></td>
<td>• Being a source of joy to their parents</td>
<td>• Help their parents to do</td>
</tr>
<tr>
<td></td>
<td></td>
<td>domestic work</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Obey their parents</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Respecting parents</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Take care of family property</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Go to school to be educated</td>
</tr>
</tbody>
</table>
Creative corner

(Open) Accept correct responsibilities for men and women in the traditional African society.

<table>
<thead>
<tr>
<th>Responsibilities of men in the traditional African society</th>
<th>Responsibilities of women in the traditional African society</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Provide security (through warriors)</td>
<td>• Dig, plant, weed and ensure harvesting of crops is done on time</td>
</tr>
<tr>
<td>• Learn about and offer herbal medicine</td>
<td>• Doing household work</td>
</tr>
<tr>
<td>• Go for hunting and fishing in order to provide food for the family</td>
<td>• Look for firewood</td>
</tr>
<tr>
<td>• In most communities, they build shelters/houses and fenced them for protection</td>
<td>• Fetch water</td>
</tr>
<tr>
<td>• Clearing land for cultivation</td>
<td>• Cook for the family</td>
</tr>
<tr>
<td>• Identify the place where the family would settle</td>
<td>• Clean the house, compound and family things</td>
</tr>
<tr>
<td>• Search for water and pasture for livestock</td>
<td>• Milking animals</td>
</tr>
<tr>
<td></td>
<td>• Looking after young children, the old and the sick</td>
</tr>
</tbody>
</table>

B. The school

i) Meaning of the school motto
1. School
2. Its a word, phrase or statement that describes the goal, aims that a school intends pupils to achieve by the time they leave school.
3. It guides learners in school to develop good characters which they should keep even in their adult life.

ii) School routine
1. School routine 2. (Open) Five
3. Morning 4. (Open) Two
5. Timetable 6. National Anthem
7. (Open) Life skills club, debate, environmental, drama, First Aid, Scouting, Girl guides and Brownies

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

iii) Importance of school routine
• Helps teachers and pupils to know what activity comes next
• Helps teachers and pupils plan their work in advance.
• Ensures there is order in the school
• Helps pupils to be organised
• Enables pupils and teachers to keep track of school events and activities

2. C

Creative corner

(Open) Accept the correct school routine

C. The clan system

i) Formation of clans
1. Forefather/ancestor
2. Families
3. Fore fathers
4. Male
5. Related
6. Marriage
7. Blood, marriage

ii) Functions of clans
(Open)
- Provides a sense of belonging and social security to the members
- Clan elders advice and educate the youth
- The clan ensures that the members are well behaved and morally upright
- Clan elders ensure its members are safe and secure from any external attacks
- Clan elders settle disputes among clan members
- Clan members helped one another in times of trouble and calamities
- The clan provides for the needs of its members e.g. labour
- Clans uphold the taboos and customs of the people
- A clan unites its members and ensures people live peacefully together

Know More
1. (Open) A school is a place where people/children go to be educated, a place where children are taught how to read and write
2. Public, private
3. Missionaries
4. (Open) Classrooms, toilets, offices, staffroom, flag post, flowers, trees, play ground, kitchen, dining hall
5. Teachers, pupils, workers
6. (Open) Religious leaders, head teacher, parents, teachers
7. (Open) Headteacher, teacher on duty, prefects
8. Government, members of the community
9. Government
10. School committee
11. Blood, marriage, adoption
12. (Open) Trade, marriages, funeral ceremonies, drama and music festivals
13. (Open) Games and sports, initiation ceremonies, bull fighting ceremonies

UNIT 4: RESOURCES AND ECONOMIC ACTIVITIES

A. Agriculture

i) Conditions that favour crop farming in Eastern Africa

Coffee growing in Kenya and Ethiopia

1. Resources
2. Natural resources, human resources
3. Economic activities
4. Agriculture is the cultivation/ growing of crops and keeping animals.
5. Arabica, Robusta
6. (Open) Kenya - Eastern Highlands of Kenya, Kisii, Kiambu, Thika,
Maragua, Machakos, Murang’a, slopes of Mt. Elgon
*Ethiopia - Kaffa province, Harar*
(Eastern highlands of Ethiopia)

7. (Open)
a) *Arabica*
- Rainfall of between 800-1500mm and above
- Fertile, deep well-drained volcanic soils
- Areas free from frost
- Temperatures between 19 °C - 23 °C
- Altitude of between 1500-2300m above sea level
b) *Robusta*
- Well distributed rainfall of between 1000mm-1800mm
- Fertile, deep well-drained soils
- Temperature of between 20 °C and 26 °C

8. Robusta
9. Arabica
10. Berries
11. Harvesting (picking)
12. Arabica
13. Arabica
14. Missionaries
15. Sunlight, winds
16. Kiambu, Nyeri, Embu, Murang’a, Meru
17. (Open) Machakos, Kisii, Kitui, Mt. Elgon, South Nyanza
18. Siaya, Bungoma, Taita Taveta, Bondo, Busia, Subukia
19. Arabica, Robusta
20. Ruiru II
21. Arabica
22. Kaffa Province, Harar
23. Large, small
24. A

Maize growing in Kenya and Tanzania
1. Cash, food
2. Portuguese

3. (Open) Kenya, Tanzania, Ethiopia
4. Land preparation, sowing/planting, harvesting
5. (Open)
- Warm temperatures of between 18 °C – 27 °C
- Fertile and well-drained soils
- Rainfall of between 700mm – 2500mm per year
- Dry spell during the harvesting period
6. Six
7. Ripen/dry, harvest
8. Flour
9. Silos
10. Murang’a, Kiambu, Kirinyaga
11. Katumani
12. Dry
13. (Open) Uasin Gishu, Nakuru, Trans-Nzoia, Bungoma, Kitale, Nandi, Transmara, Lugari
14. National Cereals and Produce Board (NCPB)
15. Large scale, small scale
16. (Open) Bukoba, Morogoro, Songea, Rungwe, Mara, Iringa, Lushoto
17. (Open) Moshi, Mbeya, Iringa, Tanga
18. (Open) Drought, inadequate storage facilities, poor roads

Banana growing in Kenya and Uganda
1. Asia
2. Food, sale
3. Kenya, Uganda, Somalia
4. Uganda
5. Cooked, fruit
6. (Open)
- Warm temperatures between 21 °C - 26 °C
- Well distributed, high annual rainfall of between 900mm - 1500mm
- Deep, fertile and well-drained soils
- Plants with fruit should be supported with props
• Should be protected from strong winds
7. Shoots/suckers
8. (Open) Nyamira, Meru, Kirinyaga Murang’a, Embu, Vihiga, Bungoma, Kakamega
9. Kisii, Migori
10. Victoria, Mt. Elgon, Mt. Ruwenzori and Kigezi hills
11. (Open) Buganda, Tororo, Ankole, Busoga, Toro, Bunyoro

Sisal growing in Kenya and Tanzania
1. Portuguese 2. Sisal fibres
3. Suckers
4. (Open) Ropes, bags, mats, sacks
5. A third 6. 1800m
7. Drought 8. 24°C
9. 750mm 10. Fertile
11. Leaves 12. Machines
15. Processing
16. Kilifi, Taita-Taveta
17. (Open) Voi, Mogotio in Koibatek, Ruiru, Juja in Thika, Makuyu in Maragua
20. Tanzania 21. Railway line
22. (Open) Morogoro, Kilosa, Tanga, Korongwe
23. Pare, Usambarra

Sugarcane growing in Kenya and Sudan
1. Sugar, Sweets, Cakes, Biscuits
2. Fruit
3. Perennial 4. 21°C, 27°C
5. 2000mm 6. Irrigation
7. Deep, fertile, well-drained
8. Gently sloping
10. Indians 11. Miwani, Ramisi
12. Large, small
13. Western, Nyanza and Coastal
14. (Open) Nzoia Sugar Company, Mumias Sugar Company, South-Nyanza (SONY) Sugar Company, Chemilil Sugar Company, Muhoroni Sugar Company, Miwani Sugar Company
15. Out-growers
16.

<table>
<thead>
<tr>
<th>Nyanza Region</th>
<th>Western Region</th>
<th>Coastal Region</th>
<th>Rift Valley Region</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kisumu, Gucha, Migori, Awendo, Nyando, Miwani, Muhoroni, Chemelil</td>
<td>Bungoma Busia Butere - Mumias Kakamega</td>
<td>Ramisi area in Kwale</td>
<td>Songor, Kibirigo, Ainamoi area</td>
</tr>
</tbody>
</table>

17. Kenana 18. Irrigation
19. Large 20. Machines
21. Planting, harvesting
22. Blue Nile, Atbara
23. (Open)

• Sugarcane produced in Sudan matures faster than the variety grown in Kenya
• The variety of sugarcane produced in Sudan has a higher sugar content than that produced in Kenya
ii) Contribution of cash crop farming to the economy

1. (Open)
   • Earns the government foreign exchange when exported
   • It encourages the development of transport and communication systems
   • cash crop farming creates job opportunities for many people
   • It improves the living standards of farmers since it earns them income
   • It encourages industrialisation
   • Cash crop farming has resulted to the development of social amenities and other facilities like electricity, water supplies, schools, hospitals

2. (Open)
   • Industries that process the cash crop can be established eg, tea factories in Kericho. This is because there is enough raw materials in the farming area
   • Other industries that support cash crop farming may also develop, eg banks to help the farmers save their money, agro-chemical industries to supply farm chemicals, machinery manufacturing industries to provide farm tools, etc
   • Farmers can raise enough capital from the sale of their crops and establish their own factories

iii) Areas where beef farming is practised in Kenya and Tanzania

1. Beef farming is the keeping of large numbers of animals for beef production
2. Ranches
3. Paddocks
4. Fodder
5. (Open) Hereford, Aberdeen Angus, Zebu, Borana, Charolais, Ankole
6. Low, high, sparsely
7. Arid, semi-arid
8. Pastoral
9. (Open) Laikipia, Athi River, Machakos, Kajiado, Nakuru, Uasin Gishu, Nyeri, Kwale, Maragua
10. (Open) Sahiwal, Zebu, Borana, Ankole
12. (Open) Sukuma, Hehe, Wazaramo, Gogo
13. Ranches
14. Zebu, Borana, Ankole
15. (Open) Morogoro, Mpwapwa, Kongwa, Kilosa, Iringa, Mwanza, Singida
16. (Open) Kuwait, Kenya, Zambia, Saudi Arabia, Iran
17. Tanzania Meat Commission

iv) Contribution of beef farming to the economy of Kenya and Tanzania

(Open)
   • Provides meat for food
   • Source of income for beef farmers
   • Earns the country foreign exchange
   • Creates employment opportunities in ranches and beef processing firms
   • Growth of towns which have slaughtering houses, beef processing and packing centres
   • Provide raw materials for other related industries e.g. hides, skins and bones processing industries
   • Cattle wastes are used as manure hence improve soil fertility

v) Problems facing beef farming in Kenya and Tanzania

• Shortage of water and pasture especially during dry season
• Inadequate slaughter houses
• Outbreak of animal diseases e.g., foot and mouth and attack by pests like ticks
• Inadequate capital to start off and expand the beef farms
• Poor means of transport makes it difficult to transport animals to the market
• Insufficient pasture and water reduces the quality of animals hence lowering prices

B. Fishing

i) Inland fishing areas in Kenya, Uganda and Tanzania

1. Fishing is the catching of fish by fishermen
2. Fingerlings
3. Inland, sea/marine
4. Fresh
5. Rivers, lakes, dams
6. Tilapia, trout, mudfish, Nile perch, dagaa, catfish, salmon
7. Marine/sea
8. Fishing lines, baskets, traps, hooks

<table>
<thead>
<tr>
<th>Rivers</th>
<th>Lakes</th>
<th>Rivers</th>
<th>Lakes</th>
<th>Rivers</th>
<th>Lakes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tana</td>
<td>Victoria</td>
<td>Nile</td>
<td>Victoria</td>
<td>Ruviji</td>
<td>Victoria</td>
</tr>
<tr>
<td>Nzoia</td>
<td>Turkana</td>
<td>Kagera</td>
<td>Edward</td>
<td>Ruvuma</td>
<td>Tanganyika</td>
</tr>
<tr>
<td>Yala</td>
<td>Kanyaboli</td>
<td>Mbale</td>
<td>Kyoga</td>
<td>Pangani</td>
<td>Rukwa</td>
</tr>
<tr>
<td>Sondu</td>
<td>Jipe</td>
<td>Kivu</td>
<td>Kivu</td>
<td>Ruaha</td>
<td>Malawi</td>
</tr>
<tr>
<td>Miriu</td>
<td>Baringo</td>
<td>Albert</td>
<td>Bunyonyi</td>
<td>Mara</td>
<td></td>
</tr>
<tr>
<td>Kuja</td>
<td>Naivasha</td>
<td>Sio</td>
<td>Nakivali</td>
<td>Wami</td>
<td></td>
</tr>
<tr>
<td>Migori</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

10. Lake Victoria
11. Food, sold
12. (Open)

<table>
<thead>
<tr>
<th>Lakes</th>
<th>Ports</th>
<th>Lakes</th>
<th>Ports</th>
<th>Lakes</th>
<th>Ports</th>
</tr>
</thead>
<tbody>
<tr>
<td>Victoria</td>
<td>Kisumu, Asembo, Kendu Bay, Usenge, Sio Port, Port Victoria</td>
<td>Albert</td>
<td>Pakwach, Ntoroko, Butiaba</td>
<td>Tanganyika</td>
<td>Kigoma, Kasanga, Ujiji</td>
</tr>
<tr>
<td>Turkana</td>
<td>Kalakol</td>
<td>Victoria</td>
<td>Jinja, Mjanji, Masaka, Entebbe, Port Bell</td>
<td>Malawi</td>
<td>Mbamba Bay, Kyela, Manda</td>
</tr>
<tr>
<td>Baringo</td>
<td>Marigat</td>
<td>Edward</td>
<td>Katunguru, Katwe</td>
<td>Victoria</td>
<td>Bukoba, Mara, Muleba, Mwanza,</td>
</tr>
</tbody>
</table>
ii) Marine/ sea fishing grounds in Kenya and Tanzania
1. Salty 2. Seas, oceans
5. (Open) Kingfish, parrotfish, mullet, tuna, lobsters, crabs, shellfish
6. (Open) Boats and nets, fish traps, gill nets, hook and long lines, trawl nets and trawlers, ships and drift nets
7. Refrigerators
9. (Open) Hook and line, trawling, net drifting, purse seining

iii) Types of fish caught
1. Tilapia, trout, mudfish, catfish, Nile perch, dagaa, salmon.
2. King fish, parrot fish, mullet, tuna, lobsters, crabs, shellfish
3. D (Shark)

iv) Problems facing inland fishing in Kenya, Uganda and Tanzania
1. Hyacinth 2. Over fishing
3. Pollution 4. Transport
5. Preservation 6. Traditional
7. Market

v) Problems facing sea fishing in Kenya and Tanzania
1. a) Lack of finances - fishermen are unable to buy modern fishing and storage equipment e.g. motorised boats and refrigerators to store fish.
   Fishermen get a very small catch using the traditional fishing tools and lack of refrigerators for fish preservation makes most of the fish to go bad before it reaches the market.

b) Small market size - results into most of the fish going bad since the demand for fish is small. Fishermen and people who trade in fish therefore end up making losses.

c) Over-fishing - indiscriminate harvesting of both mature and young fish reduces the amount of fish in water since young fish are not allowed to grow and reproduce others. This is dangerous because the fish might get finished.

d) Pollution - pollution of water poisons and kills fish. It also kills water plants that are normally eaten by fish.

Creative corner
a) Net Drifting  b) Purse- seining
c) Trawling  d) Hook and line

C. Trade

i) Forms of trade in Eastern Africa
1. Market 2. Suppliers
3. Demand 4. Barter trade
5. Goods, services
6. Internal, external
7. Domestic, International/foreign
8. Wholesaler, retailer
9. Communities
10. Wholesale 11. Retail
12. Cheaper buying prices
13. (Open) Shopkeepers, hawkers
14. International trade
15. Exports  16. Imports

ii) **Imports and exports of countries in Eastern Africa**

1. (Open) Coffee, tea, flowers, tobacco, pyrethrum, vegetables, sisal
2. (Open) Fertilisers, medicines, footwear, electronics, machinery, vehicles, textiles, petroleum

3. (Open) Britain, Saudi Arabia, Iran, Germany, India, France, Japan, China, Netherlands, USA, Pakistan, Italy, South Korea

4. (Open)

<table>
<thead>
<tr>
<th>Country</th>
<th>Imports</th>
<th>Exports</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Kenya</td>
<td>Electronic goods, vehicles, paper, machinery, petroleum, textiles, wheat</td>
<td>Coffee, tea, pyrethrum, soda ash, horticultural produce, flowers, cement, fluorspar</td>
</tr>
<tr>
<td>b) Uganda</td>
<td>Electronic goods, vehicles, paper, machinery, petroleum, metals, industrial raw materials</td>
<td>Copper, hides and skin, fish, cotton, coffee, textiles</td>
</tr>
<tr>
<td>c) Tanzania</td>
<td>Electronics, vehicles, industrial machinery, petroleum, industrial raw materials</td>
<td>Cashew nuts, cotton, cloves, tobacco, diamonds, canned beef, sisal, coffee, tea</td>
</tr>
<tr>
<td>d) Ethiopia</td>
<td>Industrial machinery, metals, electronics, metal products, petroleum, vehicles</td>
<td>Horticultural produce, oil seeds, cattle, hides, coffee</td>
</tr>
<tr>
<td>e) Djibouti</td>
<td>Petroleum, industrial machinery, vehicles, electronics</td>
<td>Phosphates, cattle, salt, hides</td>
</tr>
<tr>
<td>f) Sudan</td>
<td>Iron and steel, vehicles, electronic goods, industrial machinery</td>
<td>Sorghum, cotton, livestock sugar, petroleum, groundnuts</td>
</tr>
<tr>
<td>g) Somalia</td>
<td>Vehicles, textiles, petroleum, machinery, electronic goods</td>
<td>Livestock products, bananas, hides</td>
</tr>
<tr>
<td>h) Eritrea</td>
<td>Petroleum, machinery, vehicles, electronic goods</td>
<td>Livestock products, salt</td>
</tr>
<tr>
<td>i) Rwanda</td>
<td>Vehicles, electronic goods, petroleum, machinery</td>
<td>Tea, coffee</td>
</tr>
<tr>
<td>j) Burundi</td>
<td>Petroleum, vehicles, machinery, electronic goods</td>
<td>Coffee, tea</td>
</tr>
</tbody>
</table>
iii) Factors influencing trade in Eastern Africa

1. Custom duty is the tax paid by people on imported goods.

2. (Open)
   a) **Finances** - traders need money / capital to buy goods which they will sell to their customers. Money is also needed for transportation of the goods.
   b) **Demand for the goods** - traders buy and stock only those goods which are needed by the people. People will only buy that which they need.
   c) **Transport and communication** - good means of transport and communication enable traders to provide goods in the market on time. Customers are also able to buy goods on time.
   d) **Security** - when there is security, traders are able to do business without fear of being robbed, killed or their goods being stolen.
   e) **Form of taxation** - Anyone who buys goods from another country must pay tax known as custom duty. High taxes make imports more expensive. This hinders trade among the countries of Eastern Africa since some countries will not buy goods from other countries if the taxes are too high.
   f) **Political stability** - wars and clashes discourage trade since traders fear being killed or losing their goods. Political stability creates favourable atmosphere for trade.
   g) **Availability of goods for sale** – for trade to take place, the goods needed by the people have to be available in the market when needed. There can be no trade without the goods/services being exchanged.
   h) **Government policy** - a government can help in the development and promotion of trade by signing agreements with other countries for the goods needed by the people.

iv) Benefits of trade in Eastern Africa

1. (Open)
   • Trade creates employment opportunities
   • It expands agricultural and industrial activities
   • Trade makes it possible for the people in a country to get what they need but is not produced in their country
   • It encourages the improvement of transport and communication systems
   • Through trade activities, ideas and information are shared between trading partners
   • It promotes regional co-operation/cooperation among the trading partners
   • It encourages international understanding and relations
   • It promotes growth of towns
   • Trade encourages development of industries
   • It is a major source of income to many people hence raising the standards of living of the people

2. (Open) Reasons why Kenya trades with other nations
   • To boost agricultural and industrial development
   • To attract foreign investment
• To earn foreign exchange from the goods and services it produces
• To encourage production of goods and services
• To promote and strengthen regional cooperation
• To acquire necessary goods and services which are not produced in the country
• To expand the market of the goods produced in the country

v) Problems facing trade in Eastern Africa

a) Poverty - lack of money has made it difficult for many people in the region to purchase goods or services hence making the market for the goods smaller.
b) Competition - competition from better and cheaper goods produced in developed countries affects trade within the region.
c) Production of similar agricultural goods - production of similar agricultural goods limits the demand for those goods within the region hence reducing the chances of inter-state trade.
d) Insecurity - civil wars taking place in some countries like South Sudan and Somalia limit the chances of these countries trading with other countries in the region due to insecurity.
e) Political instability - this discourages investors from setting up companies and trading within the country.
f) Poor transport systems - this affects the flow of trade and trade goods among partners. Poor transport systems makes transportation expensive hence increasing the cost of doing business.
g) Trade barriers and high taxes - some governments have put restrictions on items to be imported or exported and the quantity to be traded (quota system). This restricts/limits the variety and quantity of goods available for trade, thus affecting trade.

D. Transport and communication

i) Forms of transport used in Eastern Africa

1. Transport is the movement of people and goods from one place to another
2. (Open) Human beings/porters, pack animals, canoes, rafts
3. Canoes, rafts, boats

Development of forms of transport

1. Land, water, air
2. Roads, railways, pipeline
3. (Open) Oceans, seas, lakes, rivers
4. Airport, airstrip
5. Water, air

Land transport

Roads

1. Dry-weather roads, all-weather roads
2. Mackinon
3. Tractors, bicycles, cars, buses, lorries, vans (matatus)
4. Murram/dry-weather roads, tarmac/all-weather roads
5. Tarmac, murram
6. Trans-African Highway
7. Great North Road
8. (Open) Constructing more roads in the countries within the region to open up all parts in the region, improving the condition of existing roads/tarmacking more dry-weather roads into all-weather roads
9. a) The Great North Road (passes through Cape Town, Iringa, Dodoma, Arusha, Namanga, Nairobi, Isiolo, Moyale, Addis Ababa, Khartoum Cairo
b) The Trans-African Highway (passes through Burundi, Rwanda, Mombasa, Gulu and Lagos)

**Railways**

1. Colonialists
2. Trains, wagons
3. Somalia
4. (Open)
   - To open up the landlocked Uganda for development
   - To make administration of the colonies easier for the colonial government
   - To promote trading activities in the British colonies in Eastern Africa
   - To raise revenue for administration of the British territories in Eastern Africa from regional trade
   - To open up and promote farming activities in the ‘white highlands’.

**Who am I?**

1. The Kenya-Uganda Railway
2. The Tazara Railway
3. The Kenya-Uganda Railway
4. A terminus is a point where a railway line comes to an end e.g. at Nanyuki, Butere

**Water transport**

1. Boats, ferries, ships, steamers
2. Marine waterways, inland waterways
3. Victoria, Tanganyika, Malawi
4. Kisumu
5. Tanganyika, Malawi
6. Kigoma, Ujiji
7. Rwanda, Burundi, Uganda, Ethiopia, South Sudan
8. Kilindini

**Air transport**

1. (Open) Passengers, perishable agricultural goods like flowers, valuable minerals/precious stones like gold and gemstones, horticultural products like vegetables and fruits, medicines, letters and light parcels
2. 1945
3. (Open) Towns with international airports in the region
   - Kenya - Nairobi, Mombasa, Eldoret
   - Tanzania - Dar-es-salaam, Zanzibar, Kilimanjaro
   - Ethiopia - Addis Ababa, Dire Dawa
   - Sudan - Port Sudan, Khartoum
   - Somalia - Mogadishu
   - Uganda - Entebbe
   - Rwanda - Kigali
   - Eritrea - Asmara
   - Djibouti - Djibouti
   - Burundi - Bujumbura
   - South Sudan - Juba

**Pipeline transport**

1. (Open) Water, oil
2. (Open) Nairobi, Nakuru, Eldoret, Kisumu
3. Dar-es-Salaam
4. Port Sudan
Creative corner

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Form of transport</th>
</tr>
</thead>
<tbody>
<tr>
<td>• It is fast, reliable and reduces oil accidents by tankers</td>
<td>Pipeline</td>
</tr>
<tr>
<td>• It is slow, cheap and reliable for transporting heavy containers within and outside the region</td>
<td>Water</td>
</tr>
<tr>
<td>• The most developed transport network in the region</td>
<td>Road</td>
</tr>
<tr>
<td>• It is slow, cheap and used to transport people in trains and cargo in wagons</td>
<td>Railway</td>
</tr>
<tr>
<td>• It is fast, expensive and used to transport people, perishable goods and very valuable items</td>
<td>Air</td>
</tr>
</tbody>
</table>

ii) Problems facing transport in Eastern Africa

1. (Open)
   • Existing roads and railways have not been maintained well due to poor management
   • Roads, airports and railways are costly to construct
   • The existing railways are insufficient to handle the increasing volume of exports and imports
   • Weeds like the water hyacinth interfere with water transport
   • The terrain/nature of the land makes it difficult and expensive to build roads and railways
   • Congestion at major sea ports
   • Frequent road and rail accidents
   • Insecurity and civil wars in some countries have hindered the development of means of transport within the region

iii) Means of communication in Eastern Africa

1. Communication is the passing of messages or information from one
   person or place to another
2. (Open) Drumming, blowing of horns, shouting, wailing and screaming, use of fire signals, smoke signals, messengers
3. (Open) They were slow, the messages being sent could easily be misinterpreted, the wrong messages could be conveyed, did not deliver messages to areas that were at great distances apart
4. C
5. C
6. Its not yet common and it requires electricity and most areas dont have.
   There are other faster means of communication
7. Radio Taifa (Kiswahili), KBC English Service (English), Radio Citizen (Kiswahili), Radio Maisha (Kiswahili), Q FM (Kiswahili), Easy FM (English) Hot 96 FM (English) Getto Radio (Sheng), Radio Jambo (Kiswahili), Inooro (Kikuyu), Egesa (Ekegusii), Muga FM (Meru), Sayare (English and Kiswahili), Hope FM (English), etc.
8. Newspapers, magazines, Journals
iv) Problems facing communication in Eastern Africa

a) Inadequate finances – lack of enough money makes it hard for many people to buy the modern communication facilities like computers and TVs.

b) Changes in technology – technology keeps changing from time to time and people are forced to buy new equipment every other time. This has made it hard and expensive for the people to keep up with the changing technologies.

c) Poor road network – poor road network has made some areas inaccessible causing delays in delivery of information. For example, dry weather roads are muddy during the rainy season hence vehicles carrying newspapers cannot get into areas served by these roads.

d) Lack of electricity – some areas do not have electricity. This makes it difficult to use some modern means of communication like radios, TVs and the internet.

e) Insecurity – theft/vandalism of telephone cables/wires, wars and clashes hinder communication and make it impossible to establish communication systems. They also increase the maintenance costs of the systems already in place.

f) Illiteracy – some people in many parts of the region are not able to read and write. This makes it difficult to use modern communication systems which relay messages in written or print form like newspapers, courier and postal services since very few people will use them.

v) Benefits of improved transport and communication systems in Eastern Africa

(Open) Industrial growth, promotion of trade, creation of employment opportunities, faster transmission of information from one place to another, promotion of tourism, development of agriculture

E. Industries

i) Major industries in Eastern Africa

1. Raw materials, goods
2. A place where raw materials are turned into finished products for use by human beings/the activities performed to produce finished products from raw materials

Industrial Development in the region

1. a) Weaving and basketry
   b) Iron work
   c) Pottery
   d) Boat making
2. Europeans
3. Agricultural
4. (Open)

<table>
<thead>
<tr>
<th>Agricultural food processing industries</th>
<th>Country where found</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Maize and wheat milling</td>
<td>Kenya, Tanzania, Uganda</td>
</tr>
<tr>
<td>b) Coffee, tea and soft drink processing</td>
<td>Uganda, Ethiopia, Kenya, Tanzania</td>
</tr>
<tr>
<td>c) Meat, milk and processing of other livestock products</td>
<td>Sudan, Somalia, Tanzania, Kenya</td>
</tr>
<tr>
<td>d) Sugarcane processing</td>
<td>Kenya, Tanzania, Uganda, Sudan</td>
</tr>
<tr>
<td>e) Vegetable and fruit processing</td>
<td>Tanzania, Kenya, Uganda</td>
</tr>
</tbody>
</table>
5. (Open)
Textile industries, pyrethrum processing, tobacco processing, cotton processing, sisal processing, soap making, leather works, paper processing

<table>
<thead>
<tr>
<th>Non Agricultural food processing industries</th>
<th>Country where found</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Petroleum and oil refineries</td>
<td>Kenya, Tanzania, Sudan</td>
</tr>
<tr>
<td>b) Cement manufacture</td>
<td>Tanzania, Kenya, Sudan, Ethiopia, Somalia</td>
</tr>
<tr>
<td>c) Iron and steel milling</td>
<td>Uganda, Tanzania, Kenya</td>
</tr>
<tr>
<td>d) Glass manufacture</td>
<td>Kenya, Tanzania, Uganda, Ethiopia</td>
</tr>
<tr>
<td>e) Concrete manufacture</td>
<td>Tanzania, Kenya, Uganda, Rwanda, Somalia, Sudan, Ethiopia, Eritrea</td>
</tr>
<tr>
<td>f) Chemicals manufacturing</td>
<td></td>
</tr>
</tbody>
</table>

6. (Open)

7. (Open) Banking, insurance, publishing and printing, hotel, educational institutions, telecommunications, transport, repair of electronics and vehicles

ii) Importance of industries in Eastern Africa

(Open)

1. • Creation of employment opportunities
• Promotion of agricultural production
• Encourages the development of social facilities like schools, hospitals
• Industries encourage the improvement of infrastructure like roads and telephone facilities
• Once exported, industrial goods earn the country foreign exchange
• Industries encourage self-sufficiency hence reducing reliance on imports from other countries
• Maximum use of locally available resources as inputs in the industries

• It boosts trade through increased variety of goods being sold
• International trade in industrial goods creates good international relations

iii) Problems facing industries in Eastern Africa

1. a) Use of old machines and technology – this slows down production and makes it more expensive.
   b) High taxation rates - high taxation rates by governments make it costly for industries to increase their production. Investors are also forced to increase the prices of their industrial products making the goods very expensive.
   c) Lack of adequate funds – many investors lack capital to set up and expand their industries. Machinery needed in the industries is also very expensive. Money is also needed to pay wages for the workers.
d) **Workers’ strikes** - strikes by workers interrupt activities in the industries resulting in production of low quality goods. Industries also lose a lot of money when workers stop working. Some industries are also damaged by striking workers.

e) **Inadequate power supply** – unreliable power supply causes frequent interruptions and blackouts that end up damaging machines thereby affecting production. The high oil prices increase the cost of production hence making the goods very expensive.

f) **Civil wars** - civil wars and political unrest hinder industrial production, resulting in destruction of industries and discouraging industrial growth e.g. in Somalia and Sudan.

g) **Poor transport and communication systems** - this makes it expensive for industries to transport raw materials to the industries. Poor telecommunication systems also make it difficult for industries to market their goods.

h) **Stiff competition from cheaper imported goods** – many people prefer buying cheaper imported goods than locally produced goods. This results in a small internal market for locally produced goods which in turn limits industrial growth and makes some industries to close down/collapse. Local textile industries face stiff competition from imported garments/mitumba. This problem partly led to the closing down of Kisumu Cotton Mills (KICOMI), Rift Valley Textiles (Rivatex) and Mount Kenya Textiles in Kenya.

---

**iv) Impact of industries on the environment**

1. 
   a) **Air pollution** – this is through emission of smoke and poisonous gases like carbon dioxide to the atmosphere. These gases have a bad smell and some of them are harmful to human health.

b) **Water pollution** – some industries release the poisonous industrial wastes with chemicals into water bodies like rivers and lakes. This water can cause diseases to people if they drink it. It can also lead to death of animals, organisms and plants found in the water.

c) **Land pollution** - some industries dispose of solid wastes like paper, tins, glass, wood, metal and pieces of rocks carelessly. Such materials spoil the beauty of the surrounding areas.

d) **Destruction of the landscape** - industries which use raw materials from the underground such as limestone, copper and diamond dig big excavation holes and pits on the land surface. This destroys the beauty of the landscape.

e) **Deforestation** – industries which use wood or tree logs such as saw mills and paper industries cut down trees to get logs and wood. This results in destruction of forests.

f) **Change in climate** – if the trees that have been cleared are not replaced, the temperature and rainfall received in the area will be affected. Less rainfall will be received while the temperatures will increase causing dry conditions.
F. Wildlife and tourism

i) Major game parks and reserve in Eastern Africa

A - Selous Game Reserve  
B - Tsavo National Park  
C - Ruwenzori Mountains National Park  
D - Simien National Park  
E - Serengeti National Park  
F - Dinder National Park  
G - Sibiloi National Park  
H - Masai Mara Game Reserve  
I - Boni National Reserve  
J - Bwindi National Park  
K - Rungwa Game Reserve  
L - Yangudi National Park  
M - Lake Stefanie Game Reserve  
N - Southern National Park

ii) Meaning of wildlife conservation

1. Wildlife conservation is the protection and careful use of wildlife as well as taking care of it for future generations.
2. • So that we can continue earning foreign exchange through tourism  
• So that we may conserve the wildlife for future generations

iii) Wildlife conservation measures

1. (Open) 
• Protection of endangered and injured animal species in animal orphanages and sanctuaries e.g. Lake Nakuru National Park is a sanctuary for the protection of the White Rhino  
• Educating the public on the importance and benefits of wildlife to the country  
• Developing the Ministries of Forests, Wildlife and Tourism to protect wildlife
2. • Banning the sale of wild animal products and game trophies like elephant tusks and ivory  
• Training personnel who help to take care of wildlife and arrest poachers e.g. forest warders and game rangers  
• Developing organizations like the Kenya Wildlife Service to protect and manage game parks and game reserves  
• Enacting laws and legislation against poaching and pollution of natural resources  
• Erecting electric fences around national parks to keep off trespassers and poachers

iv) Main tourist attractions in Eastern Africa

1. A tourist is a person who travels to places of interest for leisure and adventure  
2. Tourism is the act of travelling to places of interest for leisure  
3. Domestic tourism, international/foreign tourism  
4. (Open)
   a) Climate – the warm climate in the region attracts many foreign tourists since the climate in their countries is very cold.  
   b) Scenery – physical features like the Great Rift Valley, volcanic lakes, water falls, high snow-capped mountains, hot springs and geysers attract many tourists.
c) **Wildlife** – wild animals, birds, insects, fishes and the natural vegetation in the region attract many tourists, especially the ‘Big Five’ animals.

d) **Sandy beaches** – sandy beaches found along the coastline are good for sunbathing and sports.

e) **Historic and prehistoric sites** – tourists also come to see historical sites in the region such as Koobi Fora, Harer Triangle, Rusinga Island, Apis Rock, Olorgesailie, Kariandusi, Olduvai Gorge, Fasili Ghebbi, Lalibela, Isimila, Gedi Ruins, Axum

f) **Monuments** – tourists visit places with historical monuments to learn about the history of the people in the region e.g. Fort Jesus, Vasco da Gama pillar, Kabaka’s palace, Zanzibar Stone Town, slave market in Zanzibar, Menelik Musoleum, Trinity Cathedral, Menelik Palace, Kasubi tombs, Palaces of the Sultans in Zanzibar, Jubilee Palace

g) **Cultural heritage** – the rich and diverse cultural background of the people in the region also attracts tourists. Tourists mainly come to see the traditional music and dances, types of houses, clothing, artifacts and traditional foods.

h) **Marine life** – marine parks and coastal activities like sport fishing and surfing also attract tourists to the coastal region.

5. (Open)
   - Mountains with snow caps like Mt. Kenya, Mt Kilimanjaro
   - The Great Rift Valley and its resultant features like the Hell’s Gate near Naivasha

   - The great lakes like Bogoria that has geysers and hot springs.
   - Hotsprings at Olkaria around L. Naivasha are used to generate electricity at Olkaria, L. Nakuru has flamingos

   - Waterfalls like the Owen Falls, Thomson Falls, Pangani Falls and the Fourteen Falls

   - Craters including the Ngorongoro Crater and the Menengai Crater

v) **Benefits of tourism in Eastern Africa**

1. (Open)
   - Source of foreign exchange
   - Creation of employment opportunities
   - Source of income to people who sell local handicrafts like stone and wood carvings, woven baskets and bags like kiondo, jewellery, ornaments and mats

   - Development of transport and communication networks

   - It encourages the growth and development of local/traditional industries

   - Promotion of agriculture

   - It improves and strengthens international relations and understanding

   - Source of government revenue through taxes paid by tourists

   - Exchange of cultural practices and values

vi) **Problems facing tourism in Eastern Africa**

a) **Political instability** – political disruptions, conflicts and
disagreements make the region unsafe forcing many tourists to cancel their trips to tourist centres e.g. in Kenya between January – April 2008.
b) Poaching – killing of wild animals will stop tourists from visiting our countries since they will have nothing to see when they visit our game parks.
c) High taxes – taxes imposed on tourists are very high making it very expensive for them to visit our countries. These taxes include airport tax, catering levy, Visa fees, accommodation levy and entry fees into wildlife conservation areas like national parks.
d) Poor road network – poorly maintained roads make some game parks inaccessible especially during the rainy season. This also increases the charges for travelling to tourist sites.
e) Terrorism and wars – terrorism attacks, civil wars and clashes result to insecurity which discourages tourists from visiting tourist sites in a country. Kenya was a victim of terrorism in September 2013 at the west gate mall.

G. Urbanisation

i) Location of selected towns in Eastern Africa
1. Towns, urban centres
2. Market
3. Rural-urban

Mombasa
1. Old town/old Mombasa town
2. a) Kipevu Causeway
   b) Makupa Causeway
   c) Nyali Bridge
3. Trading
4. Kenya-Uganda

5. Hinterland

Kampala
1. Uganda
2. Mengo
3. Missionaries

Jinja
1. Victoria
2. Owen Falls Dam
3. Hydro-electric power

Dar-es-Salaam
1. Tanzania
2. Indian Ocean
3. 1972

Dodoma
1. Trading
2. Tanzania
3. To reduce congestion and over-crowding in Dar-es-Salaam

Arusha
1. Meru
2. Tanzania
3. East African community
4. The East African Court of Justice (EACJ)

Addis Ababa
1. Emperor Menelik II
2. Ethiopia
3. Ethiopian Highlands

ii) Functions of selected towns in Eastern Africa
1. a) Mombasa
   • Industrial centre
   • Tourist centre
   • Cultural centre
   • Administrative centre
   • Transport and communication centre
   • Education centre
   • Main sea port in Kenya
   • Residential centre
b) Jinja
- **Industrial centre** - it has industries e.g. tobacco curing, textile industries, food processing, copper smelting
- **Lake port** - located on Lake Victoria and handles most of Uganda’s export trade through the lake
- **Transport and Communication centre** - the Kenya-Uganda railway and most roads from Kenya and Uganda pass through it
- **Agricultural collecting centre** - it handles agricultural produce from the fertile eastern and northern parts of the country
- **Tourist centre** - the Owen Falls are a tourist attraction

c) Kampala
- **Administrative centre** - it is the headquarters of all government ministries and the capital city of Uganda.
- **Educational centre** - many schools, colleges and Makerere University are located in the town.
- **Religious centre** - during the reigns of the Kabakas, religions such as Protestants, Catholics and Muslims build their headquarters on the hills found in Kampala, each headquarter on its own hill. These headquarters are still on those hills to date.
- **Transport and Communication centre** - it is found at the junction of the road and railway network to southern and western Uganda. It is connected to Mombasa, Kasese and Tororo by railway and to Jinja, Entebbe and Gulu by road.

- **Industrial centre** - it is the second largest industrial centre in Uganda with many light industries like brewing, soap manufacturing, distilling, food processing, textile manufacture and tobacco processing.
- **Commercial centre** - it is the main centre for trade and commerce in Uganda with various businesses, financial institutions like banks and insurance companies.
- **Residential centre** – Many people work and live in Kampala. The highest population is found on the eastern part of the city.

d) Addis Ababa
- **Transport and communication centre** - with a well-established road, railway and air network and various radio stations.
- **Administrative centre** - capital city of Ethiopia and the headquarters of the African Union
- **Industrial centre** - has manufacturing and processing industries like textile manufacturing, tobacco processing, food processing, chemical manufacture
- **Major collection and distribution centre for agricultural products produced in the rich neighbourhood**
- **Educational centre** - has many schools, colleges and a university, the University of Addis Ababa
- **Recreational centre** - has various recreational facilities like theatres, hotels, cinema halls and a stadium
- **Residential centre** - has many people who live and work in the town
• **Tourist centre** - the historic monuments, palaces, cathedrals, churches and museums attract tourists to the country
• **A cultural centre** - the diverse cultures of the Ethiopians are represented in Addis Ababa

**Functions of Dar-es-Salaam**

1. • It is a Port town
   • Commercial centre
   • Industrial centre
   • Transport, communication centre
   • Educational centre
   • Residential centre
2. C

iii) **Problems facing urban centres in Eastern Africa**

1. Congestion
2. Traffic congestion
3. Unemployment
4. Poor housing conditions
5. Crime
6. Pollution

iv) **Efforts being made to solve problems in urban centres**

(Open)
• Discouraging rural-urban migration by provision of social services like electricity, health centres/hospitals, piped water and good roads
• Decentralization of industries to create and increase job opportunities in rural areas
• Rehabilitation of street children
• Improvement of slum areas and upgrading living conditions of the people
• The use of traffic lights and traffic police to help control traffic congestion in towns
• Creating conducive business environment for private and foreign investors who come to set up industries in the towns hence creating more job opportunities
• Encouraging self employment through small scale industries like the Jua Kali industry in Kenya

**Creative corner**

1. ☒ 2. ☒ 3. ☒
4. ☒ 5. ☒ 6. ☒
7. ☒ 8. ☒ 9. ☒
10. ☒

**Know More**

1. Resources
2. Economic activities
3. (Open) Minerals, soils, forests, animals, water, fish, man power, expertise, roads, industries, sunlight, air, wind, land
4. (Open)

<table>
<thead>
<tr>
<th>Type of Mineral</th>
<th>Country where it is mined</th>
</tr>
</thead>
<tbody>
<tr>
<td>Copper</td>
<td>Kilembe in Uganda</td>
</tr>
<tr>
<td>Diamond</td>
<td>Mwadui in Tanzania</td>
</tr>
<tr>
<td>Soda Ash</td>
<td>L. Magadi in Kenya</td>
</tr>
<tr>
<td>Diatomite</td>
<td>Kariandusi in Kenya</td>
</tr>
<tr>
<td>Fluorspar</td>
<td>Kerio Valley in Kenya</td>
</tr>
<tr>
<td>Limestone</td>
<td>Athi River and Bamburi in Kenya</td>
</tr>
</tbody>
</table>

5. (Open) Agriculture, fishing, trade, mining, transport and communication, forestry, tourism
6. (Open)
   Renewable resources – sunlight/solar energy, wind, water, air
   Non-renewable resources – forests, minerals, soils, animals, sand, fish, land, electricity

EVALUATION PAPER 4
29. C 30. C

UNIT 5: POLITICAL DEVELOPMENTS AND SYSTEMS

A. Traditional forms of government

i) Traditional forms of government

The Buganda
1. (Open) Chiefdoms, Kingdoms, council of elders, empires,
2. B
3. (Open) Trade, farming, mining
4. A (Dynasty)
5. B (Kintu) 6. Bantu
7. Kabaka 8. Lukiiko
9. The Chief Justice
10. Hereditary
11. Ssaza/County
12. (Open)
   • He was the overall ruler and head of administration in the kingdom (administrative function).
   • He settled major disputes and helped maintain law and order in the kingdom (judicial role).
   • He was the commander-in-chief of the armed forces and had the power to declare war or make peace (military role).
   • The Baganda believed that Kabaka was a link between God and them. They were therefore united and loyal to the Kabaka (religious role).
13. (Open)
   • It started as a small state which was easy to rule and control, making it very stable.
   • The Kabaka appointed his own chiefs. The chiefs were loyal and directly answerable to him.
   • The Kabaka was very powerful and he conquered neighbouring states using his army.
   • The kingdom was surrounded by weak neighbours since the Bunyoro-Kitara kingdom, the only powerful kingdom at that time, had collapsed.
   • A large section of Lake Victoria in Uganda, a major source of fish, was under the control of the Baganda through the navy.
   • The Baganda traded with neighbouring communities and the Arabs and Swahili traders from the east coast of Africa. They bought firearms which they used to conquer neighbouring communities.
   • The kingdom had enough food supply due to reliable rainfall and fertile soils.

14. Centralised
**Organisation of the Buganda Kingdom**

1. Bataka
2. a) Katikiro- Prime Minister  
   b) Omulamuzi-Chief Justice  
   c) Omuwanika-Treasurer
3. To make laws, to discuss the budget, to discuss matters affecting the Kabaka
4.

<table>
<thead>
<tr>
<th>Unit</th>
<th>Name</th>
<th>Unit head</th>
</tr>
</thead>
<tbody>
<tr>
<td>Counties</td>
<td>Ssaza</td>
<td>Ssaza chiefs</td>
</tr>
<tr>
<td>Sub-counties</td>
<td>Muluka or Gombolola</td>
<td>Gombolola chiefs</td>
</tr>
<tr>
<td>Sub-Divisions</td>
<td>Kitongele or vitingele</td>
<td>Batongele</td>
</tr>
<tr>
<td>Villages</td>
<td>Villages</td>
<td>Miruka Chiefs</td>
</tr>
<tr>
<td>Clans</td>
<td>Clans</td>
<td>Bataka</td>
</tr>
</tbody>
</table>

5.  
- He was the head of government  
- He settled major disputes in the kingdom  
- He provided a link between the people and God  
- He was the commander in chief of the armed forces

**Creative corner**

A. Katikiro  
B. Ssaza chiefs  
C. Batongole  
D. Bataka

**The Nyamwezi**

1. People from the moon  
2. Tanzania  
3. Bantu  
4. Long distance  
5. Decentralised form of government

6. Ntemi  
7. Chiefdom  
8. (Open)  
- They had strong leaders like Mirambo and Nyungu ya Mawe.  
- They occupied fertile land to the south of Lake Victoria hence grew enough food.  
- They caught a lot of fish from Lake Victoria.  
- They were united and protected the trade routes against the control of the Ngoni.  
- They were wealthy long distance traders who traded with the Arabs at the coast.

9. Liunguli

10. a) Mtwaile – organised the army in the chiefdom (army officer)  
    b) Kikoma – made sure that everyone in the chiefdom received important information (information officer)  
    c) Mganwe – carried out religious functions and rituals (ritual officer)  
    d) Minule – made sure that people who had been conquered and traders who passed through the chiefdom paid taxes (tax officer)  
    e) Mteto – headed the secret services and ensured he got information about the enemies of their chiefdom (secret service officer)

11. Wanyamphala  
12. Head of a village  
13. Mirambo, Nyungu ya Mawe  
14. Ruga ruga  
15. D  
16. Unbreakable pot / pot of stone  
17. Nyungu ya Mawe had a centralized government and appointed people to rule in his place in each new territory and provinces while Mirambo did not prepare other leaders.
18. (Open) accept all relevant answers
   • He chaired religious ceremonies
   • He made judgement on cases of murder
   • He administered the chiefdom
   • He was the commander – in-chief
   • He settled disputes among his people.
   • He controlled trade between the Arab traders and his people

19. C (wanyamaphala)

ii) Role of traditional governments in society

1. Create strong ties of loyalty
   • ensured ancestral land is properly shared
2. D

B. Early visitors to Eastern Africa

i) Early visitors to Eastern Africa

Explorers

1. Early visitors to Eastern Africa and their country of origin

<table>
<thead>
<tr>
<th>Explorer</th>
<th>Country of origin</th>
<th>Country visited</th>
<th>Reasons for tour</th>
</tr>
</thead>
<tbody>
<tr>
<td>John Speke</td>
<td>England</td>
<td>Tanzania, Zanzibar</td>
<td>To find large lakes in interior of Africa</td>
</tr>
<tr>
<td>H. M. Stanley</td>
<td>Britain</td>
<td>Zanzibar, Congo, Tanganyika</td>
<td>Search for David Livingstone Exploration of Africa</td>
</tr>
<tr>
<td>Vasco da Gama</td>
<td>Portugal</td>
<td>Mozambique, Kenya, South Africa</td>
<td>To find a sea route to India and open trading posts</td>
</tr>
</tbody>
</table>

2. D (Henry Stanley)
3. C (Henry Stanley)
4. A (Vasco Da Gama)
5. C (Monsoon Winds)
6. D (Vasco Da Gama)

ii) Reasons for the coming of early visitors

1. (Open)

Explorers

- To find the source of the River Nile
- To discover the various lakes and mountains in Eastern Africa
- To establish trade routes
Missionaries

- To spread Christianity
- To stop slave trade
- To introduce the western type of education and way of life
- To control the spread of Islam
- To prepare Africans for the coming of the colonialists

Traders

- To find new markets for their products
- To look for raw materials for their industries
- To take over trade routes controlled by the Arabs
- To search for spices and foodstuffs
- Arab traders wanted to spread Islam

iii) Results of the coming of the early visitors

1. Positive effects
   - The intermarriage between Arabs, Persians and the local people led to the emergence of the Swahili people and culture
   - Many permanent settlements were established at the Coast. Some old coastal settlements include Gedi, Pate, Lamu, Mogadishu and Malindi
   - Mission hospitals were also built to offer medical services. This improved people’s health
   - The early visitors introduced new crops such as maize, coffee and tea
   - Slave trade came to an end
   - They started the first schools and hospitals in the region
   - Africans were taught skills like carpentry, agriculture and masonry
   - Introduction of new forms of dressing

2. Swahili people

Negative effects

- The weaving industries that were in Mogadishu, Lamu and Malindi declined because of the cheap cloth imported from India
- The spread of Christianity led to the decline of African traditional religious practices and customs, some of which were good
- Religious conflicts occurred in some areas in Eastern Africa. In Buganda, for example, Christians and Muslims caused conflicts as each group tried to influence the Kabaka
- Explorers exposed the wealth of Eastern Africa to the rest of the World. This later led to the scramble for Africa and its eventual colonisation by the Europeans
- Trade along the coast resulted in the killing of many wild animals like rhinos and elephants in order to get their horns and ivory, etc
- Slave trade resulted division of families
- Cultivation of food was largely affected since strong family members were taken as slaves
- Mistreatment of slaves, loss of life and property through raids by traders
- African population in the affected areas was reduced
- Death and suffering during slave trade
- New weapons like guns encouraged communities to fight each other
C. Establishment of colonial rule

i) Scrambling for and partitioning of Eastern Africa

Scramble
1. Scramble
2. Britain, Germany, Italy, France
3. Britain, Germany
4. Italy, Britain
5. Imperial British East Africa Company (IBEAC), Germany East Africa (GEAC)
6. Karl Peters

Partition
7. Partition
8. Spheres of influence
9. Sultan of Zanzibar
10. British, German
11. a) The northern part was given to Britain and was called British Somaliland
   b) The central part (present day Djibouti) was given to France and was called French Somaliland
   c) The western part (present day Eritrea and part of present day Somalia) was given to Italy and was called Italian Somaliland
12. Ethiopia
13. Rights

ii) Reasons for the scramble
• To get raw material for their industries
• To establish market for their manufactured goods
• To get places to establish and protect their trading centres and companies in East Africa
• To get land where European people would be settled since the population in these countries was high
• The British wanted to control and protect the source of River Nile (Uganda)
• The Europeans wanted to show their political power and control
• To protect Missionaries and bring slave trade to an end
colonialists. The colonial government appointed its own leaders over the local people. 

*Indirect rule* is a system of government where the local political leaders continued ruling and were not supervised by colonial political officers. The colonialists used other companies like IBEAC and GEAC to administer their respective colonies.

2. (Open)
   - To protect the British interests in Eastern Africa
   - To sign treaties on behalf of the British Government
   - To collect taxes
   - To maintain law and order

3. 1895

4. Mombasa

5. (Open) To collect taxes, to recruit workers for settler farms and public works, maintain law and order, develop water points and cattle dips

6. Chief

7. PC - Province
   DC - District
   DO - Division
   Chief - Location
   Sub-chief - Sub-location
   Headman - Village

8. • African’s were not allowed to grow cash crops
   • Africans were forced to provide free labour to settler farmers
   • Africans lost their fertile lands to the white settlers
   • Africans were given poor services in health, housing and education
   • The rise of African nationalism in Kenya

**Creative corner**

A – Governor

B – District Commissioner (DC)
C – District Officer (DO)
D – Sub-Chief / Assistant Chief

**ii) The German colonial administration in Tanganyika**

1. 1888
2. 1890, German East Africa
3. (Open)
   - Introduction of taxation on trade goods
   - Appointment of Arab Akidas to rule them
   - The local people were forced to provide free labour in the Germans’ plantations
   - The Germans were harsh and cruel to the local people
   - Africans were forced to pay taxes
   - Africans were forced to plant cotton which did not do well hence earning the local people little profit

4. Dar-es-Salaam
5. Rwanda, Urundi, Bukoba
6. Akidas
7. Governor
8. Akidas, Jumbes
9. Maji Maji Rebellion / Maji Maji Uprising
10. 1918
11. League of Nations
12. Britain
13. Belgium

**iii) Effects of colonial rule in Eastern Africa**

1. (Open)

*Positive effects*

- Introduction of modern education
- Cash crops like tea, coffee and pyrethrum were introduced
• Slave trade was abolished
• They brought modern transport and communication facilities, e.g., radio, postal services, railways, tarmac roads, etc
• Led to the development of industries
• They introduced modern healthcare facilities like hospitals
• Introduction of better farming methods
• Christianity was introduced

2. (Open)

**Negative effects**

• Africans lost their land
• The western culture and Christianity led to the decline of African culture
• Africans were forced to work on Europeans’ farms
• Many Africans lost their lives in war, e.g., Maumau, Majimaji, the battles in Ethiopia, World War I and II
• African cultures were done away with
• African traditional rulers had no more power over the people

**E. African response to colonial rule**

**i) African response to colonial rule**

**Resistance**

*Kabaka Mwanga*

1. Kabaka Mutesa I, Buganda
2. He realized that the Christian missionaries were becoming too strong to be controlled and thought his people would be less loyal to him once they became Christians.

3. 1891 4. 1894
5. Tanganyika 6. Seychelles
7. Bishop Hannington

**Hehe rebellion**

1. Chief Mkwawa.
2. 1891 – 1898
3. (Open)

• It temporarily weakened the German army
• Thousands of soldiers lost their lives
• It led to famine as crops were destroyed during the rebellion
• Forced labour was stopped for sometime as the cruelty of the Germans was revealed to the world
• Chief Mkwawa died

**Collaboration**

*Kabaka Mutesa I*

1. Baganda, Arabs, Swahili traders
2. Kampala 3. British
4. 1884 5. (Open)

• He was seeking protection of his kingdom from the Egyptians
• He welcomed the Christian missionaries to help him weaken the Muslim influence
• He needed people who would help him check the expansion of the kingdom of Bunyoro
• He believed the presence of missionaries would increase the fame and prestige of his kingdom

6. D (Koitalel Arap Samoei)
7. Acholi, Busoga
Laibon Lenana
1. Maasai
2. A
3. (Open)
   • He wanted to be assisted by the British to fight his enemies especially the Nandi
   • Wanted to be assisted to become the Maasai leader after his father’s death
   • He admired the strength of the guns used by the British after he witnessed three of them kill over 100 Maasai’s during a fight between the Swahili traders and the Maasai
4. C
5. (Open)
   • The Maasai lost their ancestral land and were confined to the drier areas.
   • Lenana was made a paramount chief.
   • The Maasai were divided into rival groups, those who supported Lenana and those who opposed him.
   • The British helped to rid maasai land of rinderpest disease.
   • The Maasai lost their independence and became subjects to the British.
   • The Maasai benefited by being given confiscated cattle from other communities by the British.

F. Struggle for independence in Tanganyika

i) Struggle for independence in Tanganyika
1. Tanganyika, Zanzibar
2. United Nations Organisation (UNO)
3. Second World War

a) The Tanganyika Territory African Civil Servants Associates
b) Civil servants/ workers
4. Tanganyika African Association (TAA)
5. (Open) better jobs for educated Africans, an increase in the number of African representatives in the LegCo, better salaries for workers
6. Julius Nyerere
7. 1953
8. Tanganyika African National Union (TANU)
9. a) Julius Nyerere
    b) Oscar Kambona
10. (Open)
    • To fight for the independence of Tanganyika
    • To protest against the colonialists’ injustices to the Africans
    • To unite the people of Tanganyika
11. United Tanganyika Party (UTP)
12. It collapsed after losing the LegCo elections in 1958
13. President
14. 1955
15. September, 1960
16. The Republic of Tanzania

G. Contributions of prominent leaders

i) Contributions of prominent leaders in Eastern Africa

Haile Selassie
1. 1891
2. Ras Tafari Makonnen
3. Emperor Menelik II
4. His daughter Zaiduti
5. A regent is a person who rules on behalf of another person who is sick or is still young.
6. Italians
7. Britain 8. Second World
11. He was ruthless and allowed little freedom within Parliament
12. (Open)
   • He introduced a new constitution
   • He built more schools along the western lines to add on those built by missionaries
   • He organized his central government into ministries
   • He trained his army in France and equipped them with modern weapons
   • He brought Americans into the country to advise on national development issues
13. (Open)
   • He abolished slave trade in the country
   • He helped resist Italian invasion into Ethiopia and helped maintain Ethiopia’s independence
   • He was a founder member of the Organisation of African Unity (OAU) in May 1963

**Julius Nyerere**

1. 1922 2. Makerere
3. Edinburgh
4. Tanganyika African Association (TAA)
5. TAA
6. Tanganyika African National Union (TANU)
7. LegCo
8. Jomo Kenyatta (Kenya), Kwame Nkurumah (Ghana)
9. (Open)
   • Limited communication systems which made communication difficult

• Poor transport network and inadequate means of transport made travelling within the country difficult
• Negative attitude by the people towards the government made organization and recruitment of people into TANU difficult
• Inadequate finances made his political activities and efforts in organizing and preparing the people for independence difficult
• The colonial government was resistant in giving Tanzania independence
10. (Open)
   • He united Tanganyika and Zanzibar, in agreement with President Abeid Karume, to form the United Republic of Tanzania
   • He united TANU and the Afro-Shirazi Party (ASP) of Zanzibar to form the Chama Cha Mapinduzi (CCM)
   • He introduced the principles of Socialism and Ujamaa villages in Tanzania where people lived together, worked together on communal land and shared resources equally
   • He supported freedom movements in countries that were still under colonial rule e.g. Mozambique, Namibia, Zimbabwe, Angola, South Africa
   • He introduced the policy of self-reliance where the people had to work hard to feed themselves
   • He made Kiswahili the national and official language in Tanzania hence uniting the people of Tanzania
• He was one of the founder members of the Organization of Africa Unity (OAU), now known as the African Union (AU)
• He campaigned for world peace and reduction in the manufacture of dangerous weapons. He played the role of mediator in peace talks and chaired the peace talks in Burundi
• Together with the leaders of Uganda and Kenya, Nyerere established the East African Community (EAC) aimed at improving trade, education and social services in the region
• He improved formal education at primary and secondary school levels in Tanzania

11. 1985, Ali Hassan Mwinyi
12. 1999

Creative corner

<table>
<thead>
<tr>
<th>Haile Selassie</th>
<th>Julius Nyerere</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Protected Ethiopia against colonialists</td>
<td>• United Tanzanians</td>
</tr>
<tr>
<td>• Was Ethiopia’s Prime Minister</td>
<td>• Made Kiswahili both official and national language</td>
</tr>
<tr>
<td>• Protected Ethiopia against Italian invasion</td>
<td>• Was Tanzania’s first president</td>
</tr>
<tr>
<td>• Abolished slave trade</td>
<td>• Developed schools and roads</td>
</tr>
<tr>
<td>• Established schools and roads</td>
<td>• Introduced Ujamaa in Tanzania</td>
</tr>
</tbody>
</table>

H. Regional co-operation

i) Regional organisations

*East African Community (EAC)*

1. Regional co-operation is the act of countries in a given region working together so as to achieve common objectives.
2. The East African Community (EAC), The Inter-Governmental Authority on Development (IGAD), The Common Market for Eastern and Southern Africa (COMESA)
3. 1967
4. a) Kenya   b) Uganda  c) Tanzania
5. Arusha (Tanzania)
6. a) 1977
7. (Open)
   • East African Railways Corporation
   • East African Harbours
   • East African Airways
   • East African Posts and Telecommunications
   • East African Development Bank
   • East African Examinations Council
   • East African Court of Appeal
   • East African Literature Bureau
8. (Open)
   • Production of similar goods reduces the market size of the
products from the member states
• The EAC is more concerned with political co-operation hence failing to provide social services to the people
• The secretariat lacks adequate funds to run the activities of the organisation
• Lack of a common currency makes trading activities difficult due to differences in the strengths of the currencies of the different member countries
• Differences in political systems makes it difficult for the leaders to come up with uniform/similar needs of the people
• Lack of well developed road and railway networks within the region makes it hard to transport people and goods within the region
• Some member states have not reduced the taxes to the levels agreed
• Mistrust among leaders

9. 1999
10. To create a wider, common market for goods produced in the region and facilitate free movement across the borders of the three countries.

**Inter-Governmental Authority on Development (IGAD)**

1. 1986
2. Sudan, Ethiopia, Djibouti, Somalia, Uganda, Kenya, Eritrea
3. Djibouti
4. To check the expansion of deserts in the region and to solve the problems caused by drought and desertification in the region
5. Inter-Governmental Authority on Drought and Development (IGADD)
6. Kenya, Uganda

**ii) Objectives of regional organisations**

1. (Open)
   a) **EAC**
   • To promote economic development in the region
   • To make use of natural resources while protecting the environment
   • To strengthen economical, political, social, educational, health, science and technology in the region
   • To enhance security in the region
   • To enhance the movement of people, goods and services within the region
   • To promote women participation in development projects
   • To encourage the private sector to participate in development
   b) **IGAD**
   • To develop and improve transport and communication systems in the region
   • Ensure there is food security for the people in the region
   • To protect and conserve the environment
   • To promote inter-regional trade
   • Eradicate poverty among the people
   • Rehabilitate and take care of displaced people and refugees
   • Promote and strengthen co-operation in research development and application in science and technology
   • To create policies on trade, communication, natural resources, agriculture and customs
To encourage free movement of goods, services and people within the region

(iii) Member countries of regional organisations
1. a) EAC-Burundi, Kenya, Tanzania, Rwanda, Uganda
   b) IGAD-Djibouti, Ethiopia, Kenya, Somalia, Sudan, Eritrea, Uganda

Creative corner
(Open) Refer to Moran Primary School Atlas for the maps showing the member states of EAC and IGAD.
NB: Rwanda and Burundi are currently members of the EAC.

iv) Problems facing regional organisations
1. (Open)
   a) EAC
      • Lack of finances to carry out the organisation’s development projects
      • Lack of trust among member countries. Some countries fear that certain members may benefit more than others
      • Lack of a common language in the region hinders communication among member states
      • Poor transport network among member states hinders the transportation of goods and services in the region
      • Production of similar products makes it difficult for member states to trade
      • Lack of a common currency makes it impossible for member states to have standard exchange rates

   b) IGAD
      • Political instability in the region due to civil wars taking place in some countries e.g. Sudan and Somalia
      • Inadequate funds to carry out the organization’s activities
      • Religious differences between the Muslims and Christians makes it hard for the people to agree on common interests e.g. in Sudan and South Sudan
      • The people are ignorant on the importance of conserving the environment
      • Lack of key health care services and HIV and AIDS have caused the death of very many people
      • Inadequate resources to facilitate economic development in the region
      • Low literacy levels due to inadequate educational facilities and teachers
      • Political differences among member states delay the implementation of programs e.g. the disagreement between Ethiopia and Eritrea

Know More
1. Political systems
2. Buganda, Abawanga
3. Emperors, Kings
4. Chiefdoms
5. Council of elders

EVALUATION PAPER 5
UNIT 6: CITIZENSHIP

A. Meaning of patriotism
1. B (Citizenship)
2. B (Love for one’s country)
3. Patriot
4. (Open) Loyalty, obedience, respect for others and their property, justice, kindness, patriotism, hardworking
5. Registration
6. A (Registration)
7. Justice
8. It is the state where a person is a citizen of two countries at the same time.

B. Ways of demonstrating patriotism
1. Obeying laws of a country, reporting issues that affect the country negatively, speaking positively about one’s country, taking part in development activities as holding leadership positions voluntarily, respecting and supporting those in leadership, avoid tribalism, promote human rights, protecting the environment.
2. C (Open the bag as requested)

3. C
4. (Open) Participating in tree planting exercises, disposing of rubbish and dirt properly, cleaning the environment, protecting the oceans, lakes and rivers by not polluting them. etc

C. African socialism
1. A set of aims and beliefs that guide the way citizens conduct themselves and how they carry out the affairs of the country
2. A
3. D
4. The colonial government, through the introduction of the European ways of life.

D. Importance of African socialism
1. (Open)
   • Encourages people to take part in economic activities to promote the development of the country
   • guides people towards respecting one another
   • encourages unity and love for one another
   • encourages people to share the available resources
   • teaches people to be law abiding
   • teaches people to be hardworking
   • teaches people to avoid engaging in social evils
   • discourages discrimination and promotes equality
• encourages unity
• encourages equal distribution of national resources

2. A

Know More
1. Citizenship is membership of people to a certain state, country or nation
2. Is legally registered as a member of that country and has rights in that country
3. By birth, by registration
4. (Open) Loyalty, obedience, respect for others and their property, justice, kindness, patriotism, hard working
5. (Open) Voting, paying taxes, cleaning and taking care of the environment, taking part in community projects, obeying the law, defending our country, participating in meaningful civic activities like elections
6. a) (Open)
   • It promotes peace and unity in the country.
   • It ensures that all citizens are treated fairly.
   • It promotes patriotism.
   • It promotes harmony in the country.
   • It promotes respect and friendliness to each other in the society.
   b) (Open)
   • It facilitates easy governance.
   • It makes it easy for the government to start and finish development projects successfully.
   • The government is able to function effectively due to availability of funds from taxes paid.
   • It encourages faster growth and development of the country.
   • When citizens obey the laws of the country, the government has more time to plan on how to provide services to the people.

EVALUATION PAPER 6
19. C 20. D

UNIT 7: DEMOCRACY AND HUMAN RIGHTS

A. Main principles of democracy
1. Its a system of government in which the people of a country vote to elect their representatives.
2. (Open)
   • indirect / direct
   • Representative / indirect
   • Delegative
   • Liberal
   • Nominational
3. Principles of democracy
4. (Open)
   a) Justice - All people should be treated with fairness
   b) Equality - The law should apply to citizens indiscriminately irrespective of gender, race, profession, etc. Also, all citizens should be governed by the same set of laws.
   c) Fairness - Public resources should
be distributed fairly among the people, regions, counties,
d) **Rule of law** - All citizens are equal before the law. If they commit a certain crime, they should be judged in the same manner.
c) **Recognition of minority groups** - No group of people should be ignored. Even if they are few, they have their own special needs and must be listened to.
f) **Respect for human rights** - Citizens are encouraged to know, exercise and defend their rights

**B. Human rights**

1. Human rights are those rights/things every individual must enjoy as a human being in order to live a normal life.

2. (Open)
   - Right to life
   - Right to good medical care
   - Right to fair trial
   - Right to education
   - Right to own property
   - Right to be listened to
   - Right to basic needs
   - Right to vote
   - Right to security
   - Right to information
   - Right to privacy
   - Right to holding different opinions
   - Right to shelter
   - Right to education
   - Right to livelihood
   - Right to association

3. D (Right to education)

4. Bill of rights

5. C

6. D

7. A

8. Right to education, right to healthcare, right to marry and have a family, freedom from discrimination based on gender, race or religion, privacy

**C. Rights and responsibilities of persons with special needs.**

1. Are people who have challenges in the functioning of one or more parts of the body
2. Visually impaired, hearing impaired, physically impaired, mentally challenged etc

3. (Open)
   - Right to think, speak and be listened to so as to associate with other citizens with ease
   - Right to be treated without discrimination or harassment
   - Right to pursue their social, cultural and spiritual interests and freedoms
   - Right to be provided with a physical environment that is safe and secure
   - Right to be included in decision-making processes
   - Right to take part in nation building, etc
   - Work and be respected like other people
   - Ask and be informed about what's happening in their country
   - Express their views
   - Use facilities for public use with ease
   - Pursue social cultural and spiritual interest
   - Be treated without discrimination
   - Think, speak and be listened to
4. (Open)
   • Obey rules and the laws that govern wherever they are
   • Treat other citizens fairly
   • Ensure that any information they give to those in authority is true.
   • Ensure that they pay taxes or any other payments expected of them
   • Observe safety guidelines and ensure they avoid being involved in activities that could endanger them or other people.

Creative corner

1. a) Yes
   b) (Open)
   • People vote to elect their leaders in government
   • Anyone is free to vie for any elective position so long as they meet the requirements
   • Job opportunities are offered on qualifications and without discrimination
   • The people are involved in decision making by giving their opinions and views about the laws in the constitution

2. (Open)
   • There is tolerance, compromise and agreement between majority and minority tribes
   • Voting for representatives in elections is allowed
   • Everyone is given an opportunity to express himself/herself
   • Human Rights are upheld and protected
   • The leaders are guided by the wishes of the people
   • Everyone above 18 years is encouraged to participate in the voting exercise

Know More

1. Democracy is the rule of the people by the wishes of the people for the benefit of those people.
2. (Open) Participatory / direct, representative / indirect, delegative, liberal, nominational
3. People, people
4. Dictatorship
5. Human rights are those rights / privileges every individual has to / must enjoy as a human being in order to live a normal life
6. Constitution
7. Bill of Rights
8. Law

EVALUATION PAPER 7

1. A  2. B  3. C

UNIT 8 LAW, PEACE AND CONFLICT RESOLUTION

A. Factors that promote peace
1. Are rules that have been developed to guide the behaviour of people and ensure there is peace and order in the society.
2. (Open) Respect for the rule of law, reconciliation, fairness and justice, forgiveness, transparency, honesty,
respect for one another, trust, obeying the law, protection of human rights, equal treatment of all, equal distribution of resources, practising patience and tolerance

3. i) *Mediation* - a third neutral person listens to the cause of the disagreement from both sides and assists the people in conflict to come to a peaceful agreement

ii) *Peace-making and keeping* - this method is used by international bodies like the UN to bring peace in countries where there is war. Soldiers from various countries are sent to a country to maintain peace by controlling the groups in conflict and protecting the citizens

iii) *Litigation* - those disagreeing take the case to the law court so that the judge or magistrate gives a solution

iv) *Negotiation* - the disagreeing parties come together to discuss the cause of the conflict. An agreement may be reached

v) *Forgiveness* - the person who started the conflict asks the other party for forgiveness

4. In this process a mediator is called in listen to causes of conflict and helps the two sides to reach an agreement in the following ways:

- A third party is involved to reconcile the conflicting parties. This makes the groups at war to trust the neutral person and come to an agreement
- The arbitrator (mediator) does not give a solution but only guides the two groups into finding a solution. This makes each of the two to accept the agreement reached
- Usually the arbitrator listens to both groups. This ensures the cause of the conflict is understood and is well addressed

B. Factors that undermine peace

1. a) *Unemployment* – people who have no jobs have no source of income hence may not have enough money and food. They therefore take part in criminal activities like armed robbery, robbery with violence or theft. This affects other people and undermines peace in the society.

b) *Lawlessness* – lawless people are rowdy, disorderly and do not respect the law and abuse the rights of other people. This disturbs peace among people in the society.

c) *Corruption* – when leaders steal public property for personal gains or force other people to pay for services owed to them by the government, people become angry and may fall in conflict with the leaders, hence undermining peace.

d) *Abuse of power* – when people in authority misuse their power to make the common people suffer, the people will be discontented. They will then hate and protest against their leaders.

e) *Tribalism and nepotism* – when people in power favour their own tribe, ethnic group, family members or relatives, other people will be angry and can rebel against the leaders or even start wars.

2. Wars and tribal clashes

3. Refugees
4. (Open) Corruption, oppression of the poor majority by the rich minority
5. (Open) Civil wars and clashes will arise, property will be destroyed, people will migrate to other areas for safety, creation of bad relations among people in the society, destructive riots and demonstrations

C. Importance of peace in the society

1. (Open)
   • Peace encourages good relations among people in a country and between different countries
   • It creates harmony and people practise law and order
   • People do their businesses more effectively and without fear hence creating wealth for themselves and the country
   • Social and economic growth and development is achieved quickly in a peaceful society
   • Learning in schools and other institutions goes on smoothly
   • A peaceful society encourages trade hence people are able to get things which they need but do not produce
   • Government plans, projects and activities are effected more easily and efficiently
   • The country grows and develops at a faster rate
   • People are friendly, kind and hospitable to one another
   • When there is peace, tourists are encouraged to visit the tourist attractions in our country hence earning our government foreign exchange
   • A peaceful society encourages people to make business investments hence, creating more jobs for the people.

Know More

1. Conflict resolution means restoring/bringing about peace and good relations between people or groups that are in disagreement or conflict.
2. Violence
3. Tribalism
4. Lawless
5. Peace
6. (Open)
   • People were displaced from their homes/Internally Displaced People (IDPs)
   • Property was destroyed by being burnt
   • Loss of life as many people were killed in the fights and clashes
   • Property was stolen
   • The economy of the country went down
7. Kofi Annan of Ghana
8. Mediation
9. (Open) Graca Machel Mandela, Benjamin Mkapa
10. Mwai Kibaki, Raila Odinga

EVALUATION PAPER 8

2. C  5. B  6. A
7. B  20. A
UNIT 9: THE GOVERNMENT OF KENYA

A. The functions of the Independent Electoral and Boundaries Commission (IEBC)

1. Ensuring constituency boundaries are set
2. Creating new boundaries
3. Offering civic education to voters
4. Registering voters and issuing them with voter’s cards
5. Keeping and updating the voters’ register
6. Organising for the printing of ballot papers
7. Recruiting and training election officials who ensure that election procedures are followed during elections
8. Providing the necessary materials and equipment needed during the voting exercise e.g. voters’ registers, ballot papers and ballot boxes
9. Establishing polling stations within a constituency
10. Receiving nomination papers from nominated candidates and clearing those candidates

B. The member of county assembly electoral process in Kenya

1. Member of county assembly
2. (Open)
   a. Be a Kenyan citizen
   b. Have attained the age of 18 years
   c. Be of sound mind
   d. Be registered as a voter
   e. Be nominated by a political party, e.t.c
3. (Open)
   a. The speaker of county assembly declares the seats vacant
   b. The body in-charge of elections announces the vacant seats
   c. Political parties nominate candidates and forward their names to the electoral body
   d. The body in-charge of elections announces the period for campaigns
   e. The candidates and their political parties proceed with campaigns
   f. The body in-charge of elections registers the voters
   g. The body in-charge of elections identifies the polling stations
   h. The body in-charge of elections identifies and trains polling officers and clerks
   i. The polling materials are transported to the polling stations
   j. Voters cast their votes on the polling date
   k. Votes are counted at the end of the voting exercise
   l. Results are announced indicating the number of votes obtained by every candidate
• The winner is given a certificate by the chairperson of the electoral body

4. Ward

C. How one may lose a county assembly seat

1. (Open)
• If one is declared bankrupt
• If one is imprisoned
• If found to have committed an electoral offence
• If one resigns the post
• If one goes insane
• If election results are cancelled by a court of law

2. By-elections

Know more

1. Coalition
2. Dr. Johann Kriegler
3. Justin Muturi
4. April 2008
5. Hon. Uhuru Kenyatta, Hon. Musalia Mudavadi

7. Waki

EVALUATION PAPER 9

1. A 2. B 3. D
19. C 20. C

KCPE MODEL EXAMINATION PAPERS

KCPE PAPER 1

1. D 2. D 3. A
4. B 5. D 6. A
25. D 26. B 27. A
31. B 32. A 33. A
34. B 35. D 36. C
37. B 38. A 39. A
40. C 41. D 42. D
43. C 44. B 45. D
46. A 47. A 48. A
52. D 53. A 54. B
55. C 56. D 57. A
58. C 59. C 60. B

KCPE PAPER 2

<table>
<thead>
<tr>
<th>KCPE PAPER 3</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>4. D</td>
<td>5. D</td>
</tr>
<tr>
<td>31. D</td>
<td>32. A</td>
</tr>
<tr>
<td>34. D</td>
<td>35. C</td>
</tr>
<tr>
<td>40. D</td>
<td>41. B</td>
</tr>
<tr>
<td>43. C</td>
<td>44. A</td>
</tr>
<tr>
<td>46. C</td>
<td>47. A</td>
</tr>
<tr>
<td>49. A</td>
<td>50. C</td>
</tr>
<tr>
<td>52. C</td>
<td>53. D</td>
</tr>
<tr>
<td>55. D</td>
<td>56. D</td>
</tr>
<tr>
<td>58. D</td>
<td>59. A</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>KCPE PAPER 4</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. D</td>
<td>2. D</td>
</tr>
<tr>
<td>4. D</td>
<td>5. A</td>
</tr>
<tr>
<td>31. C</td>
<td>32. B</td>
</tr>
<tr>
<td>34. A</td>
<td>35. B</td>
</tr>
<tr>
<td>40. B</td>
<td>41. C</td>
</tr>
<tr>
<td>43. D</td>
<td>44. A</td>
</tr>
<tr>
<td>46. A</td>
<td>47. C</td>
</tr>
<tr>
<td>49. C</td>
<td>50. B</td>
</tr>
<tr>
<td>52. A</td>
<td>53. A</td>
</tr>
<tr>
<td>55. A</td>
<td>56. A</td>
</tr>
<tr>
<td>58. C</td>
<td>59. B</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>KCPE PAPER 5</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>25. D</td>
<td>26. B</td>
</tr>
</tbody>
</table>
KCPE PAPER 6

1. A  2. B  3. A
34. A 35. D 36. C
37. A 38. D 39. D
40. B 41. A 42. A
43. B 44. C 45. C
46. B 47. A 48. B
49. D 50. A 51. B
52. A 53. B 54. C
55. C 56. C 57. B
58. B 59. B 60. D

KCPE PAPER 7

31. C 32. A 33. D
34. B 35. B 36. A
40. C 41. A 42. A
43. D 44. D 45. A
46. A 47. B 48. C
49. A 50. C 51. C
52. B 53. D 54. B
55. A 56. D 57. A
58. D 59. D 60. A

KCPE PAPER 8

34. A  35. D  36. D
40. A  41. D  42. B
43. A  44. B  45. D
46. B  47. D  48. A
52. A  53. B  54. C
55. B  56. C  57. D
58. A  59. D  60. B

KCPE PAPER 9
31. D  32. B  33. D
34. D  35. B  36. C
40. A  41. B  42. C
43. A  44. D  45. D

KCPE PAPER 10
34. C  35. C  36. A
40. A  41. A  42. C
43. B  44. C  45. A
46. D  47. B  48. C
49. A  50. D  51. C
52. B  53. B  54. B
55. A  56. D  57. D
58. C  59. A  60. C
UNIT 1: THE CREATION OF HUMAN BEINGS

a) Stories of creation in the Bible
   i) The creation of human beings
   1. B 11. Rib
   2. Sixth 12. A
   3. Adam and Eve 13. B
   5. Eden 15. B
   6. Animals 16. C
   7. Genesis 17. A
   8. Soil 18. D
   10. Cultivate and guard it 20. B
   
   ii) The fall of human beings
   1. Middle 5. Snake
   2. Serpent/snake 6. A
   3. Naked 7. B
   4. A 8. A
   
   iii) Authority given to human beings over creation
   1. Watering the plants, weeding, pruning, nourishing them with fertilizer
   2. Making a hive for them in a safe place
   3. D
   4. B
   5. Name
   6. C
   7. God

b) Creation stories in traditional African society
   1. B 4. 9
   2. Ngai, Gikuyu, Mumbi 5. Sky

UNIT 2: NEW LIFE IN THE COMMUNITY

a) New life in traditional African society
   1. C
   2. Birth, initiation, marriage, death
   3. Death
   4. Initiation
   5. By putting blue ochre mud on their heads
   6. Initiation
   7. D 8. A
   9. death brought sadness, sorrow, mourning
   10. Singing, eating food and making merry

---

<table>
<thead>
<tr>
<th>Community</th>
<th>Name of God</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Agikuyu</td>
<td>Ngai</td>
</tr>
<tr>
<td>b) Ameru</td>
<td>Murungu</td>
</tr>
<tr>
<td>c) Nandi</td>
<td>Asis</td>
</tr>
<tr>
<td>d) Akamba</td>
<td>Mulungu</td>
</tr>
<tr>
<td>e) Luo</td>
<td>Nyasaye</td>
</tr>
<tr>
<td>f) Maasai</td>
<td>Enkai</td>
</tr>
</tbody>
</table>

8. Mwambu, Sela
9. B

c) How we respond to God’s creation
   1. Plants and animals, fish, stars, sky
   2. Feeding them, sheltering them
   3. Because they are God’s creation and we are supposed to take care of them
   4. A 5. C
b) New life in Christianity
6. a) true  
   b) true  
   c) false  
   d) true

c) How we give our lives to God

d) God sharing with us new life

e) Christians sharing with others
1. God 2. The sick, the poor, the homeless, widows, orphans, widowers 3. Needs 4. Accept any correct answers like pens, books, pencils, food, clothes 5. C 6. cigarettes, drugs, alcohol 7. i) They shared food  ii) They preached to non-believers  iii) They baptised people  iv) They sold their possessions or property to take care of the needy

f) How our ancestors served the clan
1. A clan is a group of people with the same ancestor 2. Ancestors 3. Appeasing ancestral spirits, offering sacrifices, uniting family members, carrying out reconciliation between warring parties or individuals.

h) How our ancestors shared their possessions

i) How Christians share their new life with Jesus Christ
1. Kind 2. D 3. Care for them, visit them, help them to get treatment, show them love 4. healed, fed 5. books, pens, pencils, erasers 6. B
UNIT 3: BREAKING THE BREAD

a) The importance of sharing a meal
1. Generosity
2. Zacchaeus
3. Food, pens, balls, books
4. He climbed on a sycomore tree
5. C 6. Jericho
7. Sycomore 8. Short
9. Sinner 10. Four

b) The meaning of Passover
1. D 2. D 3. D
10. Year

c) What Jesus Christ said and did during the Last Supper
1. Body 2. Blood
3. Remember 4. Special
5. Jerusalem
6. Arrest at the Garden of Gethsemane
7. Lord’s Supper
8. B

d) Why we remember the death and resurrection of Jesus Christ
1. Sins
2. To remember that Jesus died because of our sins and that He rose again and He is alive in heaven.
3. Third 4. Death
5. Sunday 6. Alive
7. resurrection 8. D

e) How the communion is shared
1. The Last Supper
2. Eucharist
3. Repent our sins
4. Christians
5. Wine and bread, juice and biscuits, juice and bread
6. 5, 2 7. Share
8. women and children 9. Thanks
10. Twelve

f) Getting ready for the second coming of Jesus Christ
1. A thief
2. Heaven will disappear with a shrill noise, heavenly bodies will burn up and be destroyed, the earth with everything in it will disappear
3. Pure
4. righteousness
5. Repenting and asking for forgiveness, praying, reading the word of God, being kind and caring to others, sharing God’s word with others
6. ready

g) The meaning of repentance and forgiveness
1. Being sorry for a mistake one has made and turning away from it
2. the willingness to stop having bad feelings towards somebody who did something wrong to you
3. Son 4. Forgiveness
5. Servant 6. God, you
7. Peace 8. Repent

h) Celebrating the breaking of bread
1. Disciples
2. Memory or remembrance
3. Command
4. Holy Communion, Eucharist, Lord’s Table
5. The Last Supper
6. body
7. blood

i) Values required during the breaking of bread

1. Good behaviour
2. Repentance, forgiveness, prayer, sharing, fellowship, humility, love, tolerance, thankfulness
3. Humble
4. Humility and service to others
5. Generosity
6. A

UNIT 4: CHRISTIANS
SUPPORTING PEOPLE WITH SPECIAL NEEDS

a) Christians supporting people with special needs

1. See
2. Helping them to cross the road
3. Siloam
4. Lame
5. Buying them wheelchairs
6. Temple
7. Hear
8. Sign language
9. Communication disorders
10. Building special schools for them
11. Orphans
12. Emotionally
13. Orphans
14. Poor
15. Giving them food, clothes, shelter
16. HIV and AIDS
17. Syringes
18. Street children
19. Refugees
20. Braille

b) Caring for people with special needs

1. Actions
2. Feed them, give them some work to do so as to enable them to get their daily food.
3. Showing them love, giving them medication, washing their clothes, praying for them and with them.
4. C
5. i) Mentally handicapped - A mad person
   ii) Physically handicapped - A person who is lame
   iii) A street child - A child who lives in the streets of a town
6. B

UNIT 5: LIVING A RESPONSIBLE LIFE

a) Acquiring self-awareness/self-worth

1. God created us in His likeness
2. Weaknesses
3. God 4. D
5. Self-worth 6. A
7. False 8. True

b) Identifying interests and abilities

1. Things we can do very well, for
example, running, singing, knitting
2. Things we like doing, for example, reading
3. Manager
4. Take them away from us
5. Ability
6. Accept any correct answer

c) Character traits needed for acceptance by others
1. Character is behaviour.
2. Obedience, hard work, friendliness, honesty, responsibility
3. Dishonest
4. Jesus
5. Obey
6. Spiritual milk

d) Accepting feelings of worth
1. The value one attaches to themselves, when we accept who we are, feel good about ourselves and know that we are important in God’s sight.
2. By learning how to accept oneself, knowing that we were created in God’s image, pray to God to give us love for ourselves and for others.
3. loves
4. born
5. confidence
6. A
7. Kindness, humility, generosity, loyalty, honesty, obedience, faithfulness
8. Selfishness, rudeness, cruelty, unfriendliness, unkindness, dishonesty

e) Acquiring socially responsible behaviour
1. It is the expected and accepted good behaviour in the society
2. Respecting parents and elders, having good table manners, using good or acceptable language, praying together, honesty, avoiding jealousy
3. living
4. lying, jealousy, stealing, anger, bitterness, hypocrisy, evil speaking
5. A
6. B

f) Developing goal seeking behaviour
1. Goal
2. God or Holy Spirit
3. Accept various correct answers.
4. Abilities
5. the three servants
6. Lazy
7. True
8. True

g) Developing life skills
1. Assertiveness, decision making, critical thinking, creative thinking, how to listen and respond
2. Assertiveness
3. Critical thinking
4. A creative thinker
5. Decision making
6. Life skills are abilities that help a person to develop positive behaviour towards solving problems.

UNIT 6: BEING LED BY THE HOLY SPIRIT

a) Gifts and fruit of the Holy Spirit
1. Serve
2. Wisdom, knowledge, faith, healing, preaching, performing miracles, speaking God’s message, speaking in spiritual language and interpretation of spiritual languages
3. Love, joy, peace, patience, kindness, goodness, faithfulness, humility and self-control
4. The fruits of the Holy Spirit help in controlling our lives through positive actions while the gifts of the Holy Spirit are the special abilities to perform particular service.
5. Directs or guides us, to comfort us, to help us to live according to the Christian values
6. Human nature/bodies
7. Temptation of this world
8. Do good to them
9. Helper

b) Story of Gideon
5. Moreh  6. 3
7. B
8. A trumpet, a jar with a torch inside
9. A

c) Response of Paul to the Holy Spirit
1. A
2. To preach the good news in Macedonia
3. The Holy Spirit
4. Saul
5. Damascus
6. Timothy and Silas
7. Ananias
8. a) True (√)
   b) False (×)
   c) True (√)
   d) True (√)

d) How the Holy Spirit led the writers of the Bible
1. The Holy Spirit
2. Accept any correct answers such as Moses (Genesis, Exodus, Leviticus, Deuteronomy, Numbers), Joshua (Joshua), Jeremiah (1 Kings, 2 Kings), Nehemiah (Ezra, 1 Chronicles, 2 Chronicles)
3. Accept any correct answers such as Matthew (Matthew), Luke (Luke, Acts), John (John)
4. 66  5. D
6. Revelation  7. Genesis
8. True

e) Using the Bible as our guide
1. D
2. It helps us to know God, the teaching helps us to live righteous lives
3. Jesus Christ
4. Jerusalem
5. be baptised
6. Isaiah
7. True
8. C

f) Charismatic renewal in the church in Kenya
1. Presbyterian Church of East Africa, Anglican Church of Kenya, Deliverance Church, Catholic Church, Baptist Church
2. Through the media, open-air crusades, door to door preaching, singing in church
3. God’s children
4. True
5. the Holy Spirit


g) The Holy Spirit in the life of a Christian
1. Helps in prayer, gives courage when faced by challenges and temptations, helps a Christian to live a righteous life.
2. The third person of the Trinity
3. grace, peace, knowledge
4. Holy Spirit
5. D
6. the truth
7. D

h) Unity in the Church
1. Pride, jealousy, envy, gossip, dishonesty in handling church funds, disrespect among church members
2. By praying together, remembering that we were all created in God’s image, loving one another, putting God first in everything they do in church, attending church service together.
3. It is the coming together of different denominations aimed at greater Christian unity or cooperation
4. C
5. Unity
6. B

UNIT 7: GOD’S PEOPLE
COME TOGETHER

a) Differences in class
1. Guide pupils through this task
2. Accept various answers: Hint; boys/girls, tall/short, light/dark complexion.
3. Male
4. bodies
5. born
6. True
7. False

b) How different we are in our local community
i) Ethnic
1. Functions
2. Serve
3. evil
4. lazy
5. B
6. True
7. True

ii) Racial
1. Christ Jesus
2. Jew, Samaritan
3. Jews
4. True
5. B

iii) Wealth
1. Lazarus went to heaven while the rich man went to hell.
2. To dip his finger in some water to cool the rich man’s tongue.
3. Go through the eye of a needle.
4. sores
5. dogs
6. Abraham
7. We should help the poor, needy and the sick. We should also love them and treat them with respect.

iv) Poverty
1. They should share their possessions with the less fortunate, they should show love and acceptance to the poor.
2. rich
3. B
4. D
5. True

v) Religion
1. A
2. Christianity, Islam, Hinduism, Buddhism
3. respect
4. a) True
b) True
c) False
d) False
e) True

vi) Nationality
1. Accept various correct answers
2. Germany, USA, France, accept various correct answers
3. boast
4. False
5. True
c) Accepting the needy people
1. He healed them, (He took pity on them and told them to go and let the priests examine them. While on the way, they were healed.)
2. 10
3. 1
4. B
5. C
6. Sin
7. dead
d) We are all equally important before God
1. Singing, knitting, drawing, painting; Accept other various correct answers.
2. appearance
3. D
4. C
5. Faith
e) Role of the church in uniting people
1. A
2. By encouraging peaceful co-existence, worshipping together, praying together, reading the Bible together
3. D
4. judging
5. blessing
6. True
7. True

UNIT 8: DIGNITY OF WORK

a) Definition of work
1. It is a useful activity that we carry out in our daily lives. Work enables people to earn a living
2. 6
3. Holy
4. Eden
5. work
6. D
7. B

b) Reasons why people work today and in traditional African society
1. Farming, teaching, mining, looking after domestic animals, fishing
2. Get food
3. They will lack food and other basic needs; there will be disunity in the family
4. To pass in their examination so as to move to the next level of education, that is, secondary school level.
5. Honour
6. Provide basic needs for us
c) Reasons why God wants us to work
1. A
2. Abilities
3. Fishermen
4. Others
5. Creation
e) Forms of child labour
1. Using children as a source of free or cheap labour
2. Working as house helps, working in coffee farms, sand harvesting, hawking
3. Syrians
4. Light
5. Any person under the age of 18 years
6. D
7. B
f) Effects of child labour
1. Children may become sick, they may sustain injuries, may be emotionally disturbed, may perform poorly at school, may drop out of school
2. Philippi
3. Poverty
4. A
5. C
6. money
7. B

k) What it means to work for God
1. Work
2. Accept various correct answers such as serving in the church, visiting the sick in hospital, helping the needy
3. worked
4. D
5. False
6. D

UNIT 9: THE HOPE OF THE WORLD

a) Our hopes
i) After primary school
1. Hope is a belief that good things will happen to us
2. Accept any correct answer
3. Purpose
4. True
5. patience
6. God’s
7. D

ii) Future adult life
1. Accept any correct answer
2. Not disaster
3. A
4. troubles
5. promised

b) How we overcome disappointments
1. Hopes
2. Seek God in prayer
3. Prosperity
4. Teachers, parents, church leaders
5. D
6. false
7. false
8. disappointed
c) Jesus Christ the hope of the world

i) What a church hopes for
1. Jesus 2. Saved
3. To go to heaven, have eternal life

ii) The wise men hope for the King
1. Baby Jesus 4. Various gifts
2. Bethlehem 5. Jesus

iii) A sure hope for human kind
1. Gabriel 4. Jesus
2. Jesus 5. Jesus

model Paper 1
29. C 30. A

Model Paper 2
29. C 30. C

d) Our ambitions in life
1. An ambition is a strong desire and determination to achieve success
2. Ambitions 3. Fair
4. God 5. D
6. B 7. jealous
8. True

e) Jesus Christ’s hope for eternal life
1. Everlasting life 2. punishment
3. Have eternal life 4. salvation
5. C 6. D

f) Eternal life - how it is received
1. Eternal life
2. They will be raised to life
3. True
4. C

5. spiritual
6. resurrection
7. B

g) Life after death
1. (a) Jesus  b) Thomas
2. Death
3. True Christian life
4. Holy Spirit
5. Rooms
6. D
### Model Paper 3

### Model Paper 4

### Model Paper 5

### Model Paper 6