

**JUNIOR SECONDARY SCHOOL
REVEALED NATIONAL EXAMINATIONS**

**DETAILED
MARKING SCHEME**

SERIES: 001 - 2023



Pinpoint Publishers

Always to the point

Always Revealing More

GOOD FOR REVISION

MATHEMATICS

1. Six million six hundred and sixty six thousand six hundred and sixty.

2. Total value of digit 8 and total value of digit 5

4869357

$$8 = 800000$$

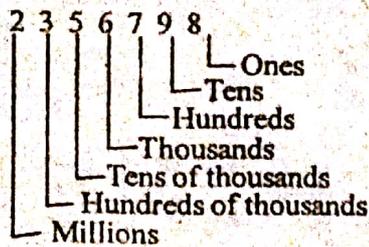
$$5 = 50$$

by how much here means take away

$$\begin{array}{r} 800000 \\ - \quad 50 \\ \hline 799950 \end{array}$$

$$= 799950$$

3. place value of digit 5



= tens of thousands

4. Total number of packets = 356170435

Round off to the nearest ten thousands

3 5 6 1 7 0 4 3 5

$$= 356200000$$

5. Largest 5-digit odd number from

7, 3, 4, 8, 6

An odd number is not divisible by 2

$$= 87643$$

6. Prime numbers between 70 and 80. A prime number is a whole number greater than 1 that cannot be exactly divided by any whole number other than itself and 1

prime numbers between 70 and 80 are

71, 73, 79

7. Boys half that of girls

$$\text{Boys} = x$$

$$\text{Girls} = 2x$$

$$x + 2x = 600$$

$$3x = 600$$

$$x = 200$$

$$\text{Boys} = 200$$

$$\text{Girls} = 400$$

How many more girls than boys

$$(400 - 200)$$

$$= 200$$

8. Length = 2.4m

8 friend = 2.4

8

each friend = 0.3m

2 friends = (0.3 x 2)

$$= 0.6m$$

9. Types of taxes in Kenya

Value added tax

- Income tax

- Excise duty

- Rental income tax

- Turnover tax

- Pay as you earn

10. Area = 648m²

height = ?

$$\text{base} = (62 + 10) = 72m$$

$$\text{Area} = \frac{1}{2}bh$$

$$648 = \frac{1}{2} \times 72 \times h$$

$$648 = 36h$$

$$36 \quad 36$$

$$= \text{height} = 18m$$

11. Square of 36 = 36²

$$= (36 \times 36)$$

$$= 1296$$

12.

Mombasa
0900hr

Nairobi
? Arrival

Arrival time = Dep + Time taken

$$0900$$

$$+ \quad 0545$$

$$1445$$

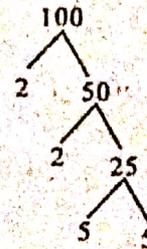
$$\text{Am/Pm} = 1445$$

$$- \quad 1200$$

$$2.45$$

$$= 2.45pm$$

13. 100 as a product of its factors.



$$2 \times 2 \times 5 \times 5$$

14. The length TR after construction is

4.5cm (-0.1 or + 0.1 cm)

15.



$$\text{EWU} = 55^\circ$$

16. Round off 5714 and 129 the near hundreds

5700 and 100

$$\text{Quotient} = \frac{5700}{100}$$

$$= 57$$

17. Men = 946
 Women = 2346
 Children = 8991
 Adult = 2346
 + 946
 3292

Difference = 8991
 - 3292
 5699
 = 5699

18. L.C.M of 8, 12, 16

2	8	12	16
2	4	6	8
2	2	3	4
2	1	3	2
3	1	3	1
1	1	1	1

L.C.M = $2 \times 2 \times 2 \times 2 \times 3$

19. Faces = 5

Vertices = 5

Edges = 8

Product = $5 \times 5 \times 8$

= 200

20. Population increase = 1379856

Current population = 4672849

in 2030 = 4 6 7 2 8 4 9

+ 1 3 7 9 8 5 6

6 0 5 2 7 0 5

= 6052705

21. Convert 2.97km to m

1km = 1000m

2.975km = 2.975×1000

= 2975m

22. Lorry = 5t 870kg

Canter = 1t 200kg

Total T kg

S 870

I 200

7 070

7t 70kg

23. $\frac{3}{4} + \frac{2}{5} - \frac{5}{8} = \frac{30 + 16 - 25}{40}$

46 - 25

40 = 21/40

24. B.P = sh. 450

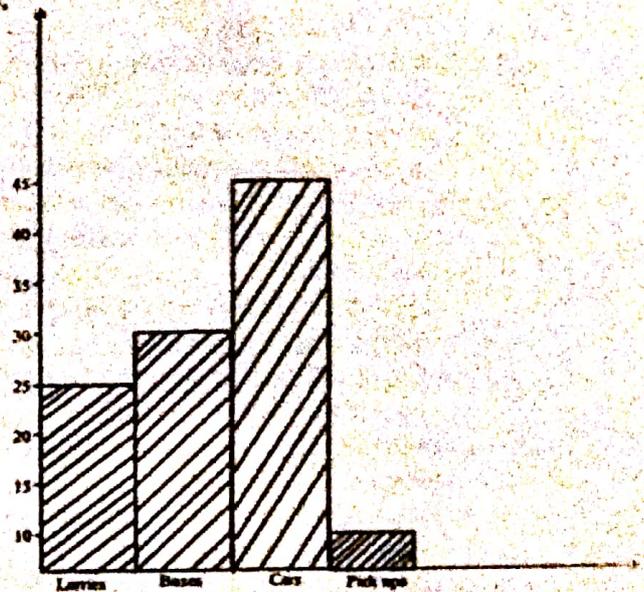
S.P = (26×20) = sh. 520

Profit = S.P - B.P

= $(520 - 450)$

sh. 70

25.



ENGLISH

1. When awarding marks in the summary, use the rubric as follows.
 - i) the summary must capture the information in the story without changing its meaning
 - ii) check on the flow of the summary. Proper usage of conjunctions should be highly considered.
 - iii) check on the sentence construction and proper use of vocabulary
 - iv) the candidate should use not more than 60 words to write the summary
2. Importance of swimming according to the first paragraph.
 - i) it is a good exercise that helps one to become physically stronger
 - ii) swimming makes a person more confident
3. The teacher smiled and introduces herself
4. To stay afloat, the writer put on brightly coloured water wings.
5. One of the students, May had already taken the beginning classes once before
6. The teacher can be described as
 - i) friendly
 - ii) patient
 - iii) dedicated(Any other description that befits the teacher is acceptable)
7. The word 'wonderful' can best be replaced with the word marvelous meaning extremely good.
8. Several lessons can be learnt but they all revolves around "practice. Makes perfect or "nothing is impossible to a willing heart"
9. East or west, home is best - Home is the most ideal place to be, regardless of its physical location
10. It is not far from my school
11. Their is a possessive pronoun
There - is an adverb meaning in or at that place
They - is a pronoun used to refer to two or more people or things previously mentioned
Correct answer is 'There'
12. Floor - The lower surface of a room
Flour - A powder obtained by grinding grains
Correct answer is floor
13. All the rooms in my house are airy, neat and clean
'and' is a coordinating conjunction that has been used to join two adjectives.
14. We have all the facilities of modern life
15. I have grown many beautiful flowers in one corner of my house grown is in past participle

16. They have completed the task, haven't they?
 17. Let's go outside, shall we? (request)
 18. None of the boys understand the question, did they? None is negative and the sentence is in past tense
Homophones
 19. hear, here
 20. won, one
 21. sea, see
Plural form
 22. The boys are drinking water.
 23. Sheep were injured by oxen.
 24. They were summoned by the chiefs
 25. Adjectives are words that describe nouns. Examples are sweet, red, big beautiful, long, good, interesting, strong
 26. Adverbs describe verbs, adjectives or another adverb
Examples are quickly, silently, very, well, really, often,
 27. Pronouns are words that replaces nouns e.g I, you, we, they, she, he, it
 28. We didn't have much money, but we were happy. (The two phrases are contrasting)
 29. The workers are not only tired but also hungry. (correlative conjunctions)
 30. When it is raining, lightning can strike anytime. Therefore, we should always take precautions. Therefore, here means 'for that reason'
 31. Excuse me, could I just say something? 'could' has been used to express polite permission.
 32. Smoking can cause cancer. can has been used to express possibility
- ### POETRY
33. The poem has two stanzas
 34. Rhyming words in the second stanza
 - i) ten/pen
 - ii) murder/order
 - iii) wail/bail
 - iv) keeps/sleep
 - v) rest/best
 35. "Education is the key to life" means that education has the power to change people's lives
 36. Benefits of getting education
 - i) it prevents us from getting into criminal activities
 - ii) it enables us to succeed in life. (get an education and be the best)
 - iii) Education enables us to excel
 - iv) with education we can live a peaceful life
 37. The most appropriate title should be anything that depicts the importance of getting education.

KISWAHILI

SESHEMU YA A - UEUPISHO

- « Mwanafunzi aweze kufupisha kifungu hadi kitimie maneno 60.
- « Zingatia hoja kuu inayojitokeza
- « Mtiririko was kifungu uwe wa kuendelea
- « Aya iwe moja tu

SESHEMU B - UFAHAMU

1. Mimea iliyotajwa Ni: mpamba, mbuni, michai, m
 2. Nchi hufaidika kwa kupata pesa za kigeni/kununulia bidhaa mbalimbali
 3. Faida za pamba Ni mafuta ya kupikia, vitambaa vya nguo, nyuzi, chakula Cha ngombe
 4. Hatua ya kwanza ni kuichanuanua ili kutoa mbegu na uchafu
 5. Nyuzi Aina nyembamba, laini na nene
 6. Vitambaa hufuliwa ili viwe safi
 7. Vitambaa mbalimbali hupatikana kwa kupitisha katika smashine ya kutia rangi mbalimbali
 8. walijitokeza
 9. kupiga
 10. wa
 11. katiba
 12. kuwika
 13. kufunguliwa
 14. jamhuri
 15. pacha, pasha.
 16. Karamu, kalamu.
 17. Iba.
 18. Hodari.
 19. Binuri.
 20. Gani.
 21. Ambalo.
 22. Muwa.
 23. zingatia jinsi neno askari limetumika.
 24. Zingatia jinsi neno mpenzi limetumika.
 25. Yeye.
 26. ! na .
 27. Sujari, chumvi, chai, mvua n.k.
 28. Petu.
 29. Ini, ubongo, figo, moyo, pafu, damu, n.k.
 30. Sitiara / Istiari.
- ### SEHEMU D - USHAIRI
31. Mimea/ mazao ya mimea/ matumizi ya mimea.
 32. Sita/6.
 33. -to, -za.
 34. 63 /sitini na tatu.
 35. Mimea tuisomeni turweze kuitambua.
 36. Tasdisa.
 37. a) Mlimau -limau.
 - b) mzabibu- zabibu.

BUSINESS STUDIES

1. refers to any activity that is carried out by an individual or an organisation in the provision of goods and services with an aim of making profit
2. is the study of activities that involve production, distribution and consumption of goods and services
3. Entrepreneurship
4. Financial literacy
5. Commerce
6. Economics
7. Accounting
8. - Equips members of the society with knowledge needed to start and operate a business
- Helps individuals to develop a positive attitude towards work
- Assists individual in appreciating the role of business in provision of goods and services
- Equips individuals with abilities to understand the role of communication and information technology in modern business management
- Helps the individuals to develop positive attitudes towards the environment
- Equips the individual with knowledge and skills required to evaluate business performance
- Makes the members of society to appreciate the need for good business management practices.
9. Banker accountant
Economist entrepreneur
10. Money is any item or medium of exchange that is accepted by people for the payment of goods and services.
11. i) serves as a medium of exchange - people use money to pay for goods and services
ii) money serves as a store of value - you do not need to store goods especially the perishable goods but you can sell the goods and store the money
iii) used as a unit of account - financial transactions can be recorded in terms of money
iv) As a measure of value - goods and services can be valued in terms of money
v) used as a transfer of immovable assets - immovable assets such as land, building can be sold and the money used to buy them elsewhere
vi) used as a standard for deferred payment - money is used to pay debts at a future date
12. The water mark - hold up to the light and from both sides you will see a perfect lion's head

- The security thread - appears as a continuous shiny thread changing colour from red to green.
 - The golden band on the back of the note shows the value
 - Feel KENYA by touching
 - Feel the value of touching
 - Feel the edge 50 1 bar
 - 100g - 2 bars
 - 200 - 3 bars
 - 500 - 4 bars
 - 1000 - 5 bars
13. 200 shilling note theme social services
symbol - medical services education and athletics
500 shillings note
Theme - governance
Symbol - national assembly
14. - Goals - it is an aim a desired result, the object of a person's ambition or effort
15. - Personal goals - is what a person wishes to achieve within a given time
16. - To improve in academic performance
- To learn how to play guitar
- To loose weight from 70kgs to 50kgs
17. - Helps one to stay motivated even during tough times
- Helps one to focus time and energy on what needs to be achieved
- Helps a person to check on the progress of what he or she wants to achieve
- One can avoid wasting resources such as time and money on unnecessary activities
- Goal setting increase chances of succeeding in life
- Keeps one accountable for their time and actions
- Success in achieving goals helps to build self confidence
18. Specific - clear and specific so your goals are easier to achieve
Measurable - measurable goals that can be tracked allowing one to see progress
Realistic - avoid overwhelming and unnecessary stress and frustration by making the goal realistic
Time bound - a date helps us stay focused and motivated, inspiring us and providing something to work towards.
19. Laptop
mobile phone
computer
digital watch
tablet
digital television
(any 4 correct)

SOCIAL STUDIES

1. Weather forecasting, teaching, farming, photography, environmental management, surveying etc
2. Geography, History and citizenship
3. beautician, salonist, catering, receptionist etc
4. (D) Educate children to avoid making career choices and entrepreneurial opportunities in Social Studies based on gender stereotypes
5. Height, weight, physical fitness, medical fitness etc
6. south west of Asia
7. Algeria, Seychelles
8. indicate x then find longitudes and latitudes
9. London $34 - 0 = 34 \times 4 = 136$

$$\begin{array}{r} 2 \\ 60 \overline{) 136} \\ \underline{120} \\ 16 \end{array} \quad \text{2hrs 16min}$$

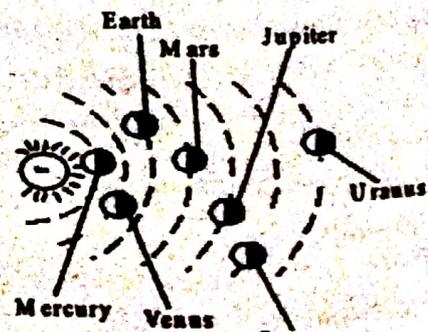
$$\begin{array}{r} 11:00 \text{ am} \\ \underline{2:16} \\ 8:44 \end{array} \quad \text{8:44 am - London}$$

$$400 + 15 = 55 \times 4 = 220 \text{ min}$$

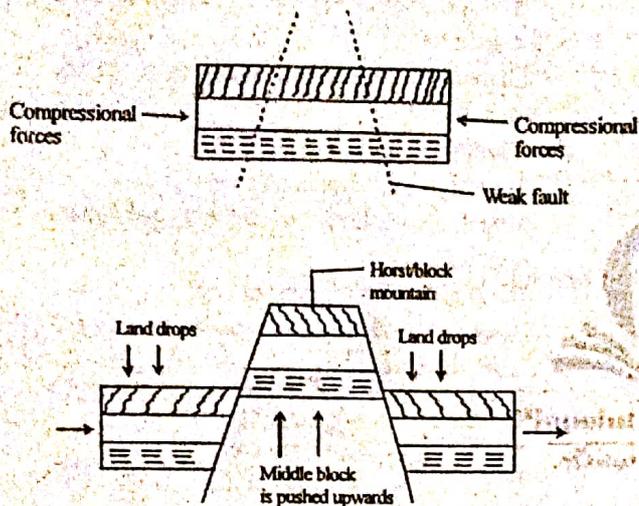
$$\begin{array}{r} 3 \\ 60 \overline{) 220} \\ \underline{180} \\ 40 \end{array} \quad \text{3hrs 40min}$$

$$\begin{array}{r} 10:40 \\ \underline{3:40} \\ 11:00 \end{array} \quad \text{11:00am Dakar}$$

10. sketch, Atlas, topographical maps
11. importance of maps
 - helps locate different physical features
 - helps get location in transport
 - gather information on climate
 - helps in delimitation of boundaries by IEBC
 - helps to locate places - pilots
 - farmers to prepare land
 - calculate distance etc
12. passing star theory, the Nebula cloud theory
- 13.



14. tall trees, thick forest, climbing plants, broad leaves, canopy, little undergrowth, hardwood etc
15. Deposition by rivers on the lower course of a river
16. Bombolulu - historix site/ cultural centre
17. proceed with caution, no parking, no entry, bumps ahead
18. soda ash - L. Magadi, Diatomite - Kariandusi, Diamond - Mwandui - Tanzania
salt - Ngomeni, Fundisa, Gongoni near Malindi
19. climate
20. executive
21. poverty, negligence by parents, peer pressure etc
- 22.



formed when the land between the two parallel, fault is forced to rise upwards after being subjected to compressional forces forming a block mountain.

CHRISTIAN RELIGIOUS EDUCATION

1. Importance of learning CRE
 - have better relationship with God
 - explore the truth in the Bible
 - become better members of the Christian community
 - acquire moral values
 - guide on making good choices in life
 - further our education
 - promotes religious tolerance (Any 3)
2.
 - acquire values
 - develop a sense of responsibility
 - work as a team
 - respect myself and others
 - have faith and hope in God
 - solve problems peacefully with others
3. multiply and fill the earth (procreation)
4. God is powerful, kind and loving
5. In both - God is the sole creator
 - Reveals God's power and attributes
 - Creation of living things and non-living things
 - Human beings have power over living things
 - God created all things out of His will
6. Name creatures (animals)
Take care of his creation
Obey his command
7.
 - Deforestation
 - Overfishing
 - Overgrazing
 - Excessive mining
 - Poaching
 - Pollution of the environment
8. Abraham
9. Act fairly to others
10. During the making of Sinai covenant
11. Birth place - Micah

ISLAMIC RELIGIOUS EDUCATION

1. min alfu shahr
2. D
3. Bayyinah
4. 23
5. C
6. hell fire
7. bad
8. Mecca
9. Munkar and Nakir
10. Yaumul Eid
11. Allah is creator of heavens and earth
 - Allah is one and only to be worshipped
 - (give a mark for correct interpretation of God/ Allah)

12. - is a command from Allah
- purifies our deeds
- keeps us away from evil
- draws us closer to Allah
- we get thawwab
- is the first thing to be asked in the last day
13. (give a mark for every bad act)
14. ASRI - 4.00
ISHAH - 5.00pm
DHUHIZI - 1.00pm
FAJIZ - 5.00am
15. Any among the 25 prophets
(Adam, Idris, Nuh, Hud, Suleiman, Daud, Musa, Ibrahim, Yaqub, Yahya, Isa, Muhammad, Zakariya etc)

LIFE SKILLS

1. Self awareness - knowing and understanding yourself better
2. Strength, weakness, emotions, values, hopes
3. Physical, social, spiritual, economical, psychological
4. Problems that people face today
5. Talents - natural skills born with
Abilities - skills that people learn
6. - smiling often
- being happy with everyone
- doing kind acts to others
- keeping the promise I make
- exercising
- investing my well being

PRE-TECHNICAL & PRE CAREER

1. Personal safety is keeping yourself free from the threat of physical harm, injuries or accident.
To protect yourself from danger
2. Hazard means danger or risk
3. Potential hazards in the locality
 - five
 - flood
 - falls
 - thunderstorms
 - poisoning
 - sharp objects
 - chemical hazards
 - drowning
 - choking
 - suffocation
 - loud noise
 - attack from animals

4. Matching PPE's



protect the eyes and the face from chemicals and particles



prevents head injuries from falling objects



offers a good grip and also protects the hands

5. Safety precautions to observe while using farm tools

- Always using farm tools for their intended purpose
- Use protective personal equipment where necessary
- Carry tools with care
- Do not pocket sharp objects
- Repair damaged tools. (keep tools in good condition)

6. An injury is a damage to your body

7. Causes of injuries

- violence
- drowning
- falls
- burns
- poisoning
- injuries obtained from sports
- being cut or pierced by an object
- injury caused by animals
- vehicle related accidents (road accidents)

8. Types of common injuries

- Animal bites and stings
- Burns
- Bruises
- Dislocation
- Sprains and strains
- Fracture
- Cuts

9. Career related to safety

- safety engineer
- risk manager
- occupational safety and health specialist
- risk specialist
- injury prevention specialists
- environmental health practitioner
- fire protection engineer
- safety coordinator (among others)

10. Reason why we should not operate tools and equipment when we are unwell
- to reduce the risk of accidents and injuries.
When one is unwell he/she cannot operate tools and equipment safely
11. Metallic - nail and panga
Non-metallic - wood and sisal

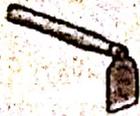
12.



rake



spade



jembe/hoe

13. Sources of energy
- electricity
- solar energy (sun)
- wind energy
- fuel like kerosene, petrol, coal, firewood, charcoal

14.



Circle



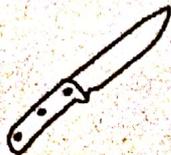
Triangle

(free hand)

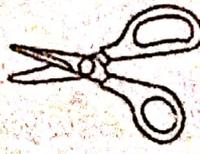
(A ruler or any other aiding tool should not be used)

15. Angle XYZ = 30°

16. House tools
(Name with picture)



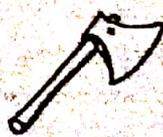
knife



scissors



broom



axe

17. i) a pair of scissors
ii) axe
iii) needle
18. First aid is help given to a sick or injured person until full medical treatment is available

19. A first aid kit is a collection of supplies and equipment used for giving emergency treatment to a sick or injured person.
20. i) false
ii) true
iii) false

HOME SCIENCE

- eating a balanced diet
 - getting enough rest/sleep
 - exercising
 - Having a shelter
 - having good clothes
- is the dressing according to the occasion, surrounding and culture.
- power black outs when using electricity
 - a store may run out of kerosene when cooking
 - firewood may not dry up due to poor weather
 - gas can get finished while cooking
 - charcoal can also get finished while cooking
- This involves teaching consumers of their rights
- to last longer
 - to prevent wastages
 - to store it for later use
 - to make use of the nutrients in the milk
 - make condition in the milk unsuitable for germs
- boil fresh water in a sufuria
 - add milk
 - add tea leaves
 - sieve into a teapot or thermos flask
 - serve hot with or without sugar
- to avoid falling off
 - to take a little space
 - to avoid creases
- to last long
 - to smell nice
 - to kill germs
 - to avoid spread of disease
- gives us time to rest
 - makes us self discipline
 - helps us to set priorities
 - helps us to have enough time to complete our tasks
- are diseases that can be spread easily from one person to another.
- 9 months
- all children should be immunised against chicken pox
 - ensure personal hygiene at all times

13. (iii) do not share personal items
on items, service or a job
14. (i) right item/right service
(ii) right price
(iii) right quantity
15. lipids
16. lack of enough proteins in the diet
17. pulses
18. (i) sun-drying
(ii) use of wood ash
(iii) use of chemicals
19. (i) polyester
(ii) acrylic
20. (i) increase in weight and height
(ii) pimples may appear on the face
(iii) hair growing under the armpits
(iv) hair growing on pubic area
21. cosmetics are items applied on the body while accessories are worn together with clothes
22. iodine
23. (i) amount of money available
(ii) size of the family
(iii) dietary needs of the family
(iv) availability of food
(v) available time
24. is the process of making fabrics by interlacing two sets of yarn to produce a woven fabric.
25. loose stitches

VISUALARTS

1. (i) Balance of form Proportion of form
(ii) Rhythm and movement
(iii) Overlapping
2. (i) Sharp tool Crayon
(ii) Black Indian Ink
(iii) Paper
3. rod
4. John made the pot using coil technique and decorated it using embedding method.
5. (i) Have a message (title)
(ii) Are attractive
6. Slab technique is used to make various shapes while pinch technique is used to make a pot.
7. perforation
8. -cutting and trimming - mounting
9. Montage
10. (i) Rolling
(ii) Colling
(iii) Stitching
11. Amina intended to make a yellow colour, she mixed a red and yellow colour. The final colour is which type of colour secondary.

12. (i) Aesthetic reason
(ii) Protection of book
(iii) Durability of book
13. (i) Pass information
(ii) Earn income
(iii) Education purposes
(iv) Source of employment
(v) Entertainment

14.



15. Any 3 letter using block letters
16. The house represents focus element of photograph. The tree represent back ground element of photograph. The place the photographer stood while taking the photo is view point
17. Open window theatre
18. (i) Thong chisel
(ii) A thong
(iii) Leather revolving punch
(iv) scissors
19. A still life drawing is drawing of non moving things object.
20. Learner should draw more than one object, the smaller object being in front of the bigger one then shade using dots to show light or dark.

AGRICULTURE

1. X Gully
Y Rill
2. (i) Water
(ii) wind
(iii) moving
3. (i) Animal activities
(ii) Human activities
(iii) Types of soil
(iv) rainfall
(v) Slopes
4. (i) Clean your working space
(ii) Dispose off the soil appropriately
(iii) Take care not to splash water or mud to your classmates
5. They hold water
They lead water away from farming land
Prevent water from flowing into farms
Prevent soil erosion

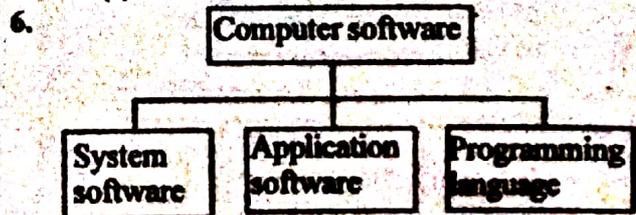
6. (i) To maintain soil fertility
(ii) To increase quantity of crop produce
(iii) To increase quality of crop produce
7. A piece of land for growing crops
8. (i) Sunken seedbed/sunken bed
(ii) Shallow pit
9. (i) vegetables eg kales (ii) cereals eg maize
(iii) Tubers eg carrots (accept example)
10. Items that keep off wild animals from our farms or homes
11. (i) fences
(ii) traps
(iii) deflectors
(iv) innovative sound devices
12. Wear protective clothes eg gloves
Lift thorny branches using sticks
Be careful to avoid being pricked (or any other relevant)
13. (i) Wiremesh
(ii) wooden posts
(iii) A panga
(iv) A hammer
(v) nails (or any other relevant)
14. (i) Birds
(ii) Mice
(iii) Beavers
(iv) Hares
(v) rats (or any other correct)
15. (i) Hanging reflective materials
(ii) Hanging torches
(iii) Using solar light
16. (i) Birds
(ii) Squirrels
(iii) hares
(iv) wild cats
(v) monkeys
(vi) hedgehog
(vii) mongoose
(viii) moles (any other)
17. (i) Birds damage the seeds of cereals and ripe fruits eg mousebird
(ii) Some birds feed on young chicks eg eagles
(iii) Squirrel eat grains of maize
(iv) Mongoose eat chicken and scare them
(v) Monkeys eat small domestic animals
18. (i) feeding
(ii) watering

- (iii) cleaning tools and equipment
- (iv) Maintaining appropriate number
- (v) parasite control
- (vi) veterinary care
19. Crops that grow along the ground or Plants that have a weak stem and spread on the ground.
20. (i) water melons
(ii) pumpkins
(iii) strawberries
(iv) cucumber
(v) Calabash
21. (i) Wrongly disposed plastic wastes
(ii) Excessive agricultural chemicals
(iii) Wrongly disposed chemical containers
22. (i) Use of wrong artificial fertilisers/chemicals
(ii) Use of wrong amount of artificial fertilisers/chemicals
(iii) Inorganic farming
(iv) Dumping plastic wastes
(v) dumping used chemical containers
(vi) Excessive use of chemicals

COMPUTER SCIENCE

1. (i) monitor/screen (ii) C.P.U
(iii) Mouse (iv) Keyboard
2.

(a) Hardware	(a) Input
(b) Software	(b) Output
(c) Liveware	(c) Storage
3. (a) Webcam
(b) Printer
(c) Flash disk
4. (i) Graphic user interface
(ii) Random Access Memmory
(iii) Central Processing Unit
5. - Antivirus
(i) Kaspersky
(ii) McAfee
(iii) AVG
(iv) Ncrton
(v) Avira



7.
 - a) microsoft word
 - b) Google doc
 - c) Open office writer
 - d) Word pad

- a) Microsoft word 2011
 - b) Microsoft word 2015
 - c) Microsoft word 2019
 - d) Microsoft word 2007
8.
 - (i) undo
 - (ii) do
 - (iii) close button
 - (iv) minimize button
 - (v) restore button
 - (vi) maximize button
9.
 - (i) Space bar key
 - (ii) Delete key
 - (iii) Backspace key
 - (iv) Shift key
10. Excel program or spreadsheet
11.
 - (i) Super-computer
 - (ii) Mainframe computer
 - (iii) Mini-computer
 - (iv) Micro-computer
12. Any game (a) (b)
13.
 - (i) Be sure your devices are secure
 - (ii) Handle the devices gently
 - (iii) Keep liquids away from the devices
 - (iv) Stay away from rogue website
 - (v) Use of anti-glare protector
 - (vi) Good sitting posture.

PE AND SPORTS SCIENCE

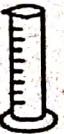
1.
 - (i) On to your mark
 - (ii) Go (Sound of the gun)
2.
 - (i) Bullet start/Bunch start
 - (ii) Medium start
 - (iii) Elongated start
3.
 - (i) Run through technique
 - (ii) Shoulder shrug technique
 - (iii) Drop finish technique
4.
 - (i) Wear the correct attire kit
 - (ii) Do not run on a slippery ground
 - (iii) Ensure there are no sharp objects on the ground
 - (iv) Run on a leveled ground
5.
 - (i) Long jump
 - (ii) high jump
 - (iii) javelling
 - (iv) discus
 - (v) shortput



6.
 - (i) Center circle
 - (ii) Center spot
 - (iii) Penalty area
7. A game of soccer lasts for 90 minutes. It consists of 2 halves with a 15 minutes half timebreak.
8. Overhead
9. Outside of the foot inside of the foot instep
10.
 - (i) Chest trap
 - (ii) Sole of the foot trap
 - (iii) High trap
11.
 - (i) Underarm serve
 - (ii) Overarm serve
12. Overhead serve
13.
 - (i) Tag belt
 - (ii) Rugby ball
 - (iii) Trazing cones
14. A score in the game of rugby is called a try and is awarded one point.
15. One action (single action) sequence which involves one activity
16.
 - (i) pivoting
 - (ii) one-foot landing
 - (iii) double-feet landing
17.
 - (i) Automatic leadership
 - (ii) Democratic leadership
 - (iii) Coaching leadership
 - (iv) Transformational leadership
 - (v) Deligative leadership
18. Speed - The ability to move all or part of the body as quickly as possible.
19. Power - The ability to exert force in the shortest period of time
20. Materials needed to light a camp fire are Firewood, twigs, dry leaves, match box, Tinder, kindling and fuel.
21. Sports related injuries
 - (i) Fainting
 - (ii) Insects bites and stings
 - (iii) Snake bites
 - (iv) Fractures
 - (v) Cuts
 - (vi) Muscle pulls
 - (vii) Strains
 - (viii) Sprains
 - (ix) Dislocation
22. Fainting
23.
 - (i) Python
 - (ii) Black mamnba
 - (iii) Boomslang
 - (iv) Cobra

- (v) Green mamba
(vi) Puff adder
24. Signs and symptoms of snake bites
(i) pain in the affected area
(ii) Skin redness
(iii) swelling
(iv) fast heart beat
(v) Bruising of skin
(vi) anxiety
(vii) Dizziness
25. Triangular bandage is used to support a limb or secure dressing in place.

INTEGRATED SCIENCE

1.  funnel
 Test tube
 beaker
 Measuring cylinder

2. Cause of common laboratory accidents
- Lack of warning signs
- Poor laboratory designs
- Failure to follow instructions
- Lack of personal protective equipments
- Spills and breakages
3. Gas Q is carbondioxide
- Used as fire extinguisher
- Making plant food
- Preserving soft drinks
4. (a) Observation
• The candle went off after sometime
• The level of water in the basin dropped
• Water level in the glass jar rose
b) They concluded that part of air (oxygen)
5. Litmus paper
6. Acid - lemon juice and sour milk
Base - baking powder and anti-acid tablet
7. i) Evaporation occurs in the kettle
ii) Condensation occurs on the cold lid
8. The cold lid enable the water vapour to condense.
9. Volume

10. Effects of sound pollution on health
- Can cause deafness
- Sleep disturbances
- stress
- Other hearing problems (can damage eardrums)
- High blood pressure
- Affects mental health
11. It was due to convectional current in liquids. When water is heated, it becomes light and more upwards as cold heavy water moves downwards.
12. Ways of reducing friction force
• Oiling and greasing
• Using wheels, rollers and bearings
• Smoothing the surface
• Streamlining
13. Conclusion - Solids expand when heated Before heating the ball passes through the ring easily. When it is heated, it cannot pass through the ring because it has expanded.
14. Examples of slopes (inclined planes)
- ladder
- staircase
- ramp
15. The ramp used in raised buildings are mainly meant for people who are physically changed.
16. Examples of plants with tap root
- Legumes - beans, peas, groundnuts, greengrams
- Mango, acacia, pigweed, cassava, potatoes etc.
17. Importance of fungi to human beings
• Some like mushroom are edible (food)
• Some are medicinal eg penicillium
• Yeast is used in raising dough
18. That is either amphibians or reptiles
19. The diagram shows a tick. It is in the same group with scorpion, spider and mite (eight legs and 2 body parts)
20. i) W - Fight auricle
ii) Y - Left ventricle
21. Uterus - Gives room for the growth and development of the foetus
Oviduct (Fallopian tube) - It is where fertilization takes place.
22. Parts of the human skeleton
- skull
- Vertebrate (backbone)
- Ribcage
- Chest bone
23. Three types of blood group
Blood group A
Blood group B
Blood group O ABO

24. Blood vessels and their functions
 i) Veins - Transport blood to the heart
 ii) Pulmonary vein - Transports oxygenated blood from the lungs to the heart
 iii) Arteries - Transport blood from the heart to other body organs
 iv) Pulmonary artery - Transports deoxygenated blood from the heart to the lungs.
25. A person who is dumb has 5 sense organs
 Tongue, skin, eyes, ears and nose.

HEALTH EDUCATION

1. Health - The state of being free from illness or injuries.
2. Health Education - Education that promotes an understanding of how to maintain personal health
3. Importance of health education for healthy living.
 - It teaches about physical, mental, emotional and social health
 - It boosts a community's economy by reducing the amount of money spent in healthcare
 - It motivates people to improve and maintain their health
 - Health education makes us live longer lives
 - It helps to prevent disease
 - It offers health related career opportunities
4. Career opportunities related to health education
 - Public health officer
 - Doctors
 - Nurses
 - Psychologists
 - Nutritionist
 - Health promotion officers
 - Physiotherapists
5. Examples of health related activities at school
 - Washing of hands
 - Physicals
 - Keeping the environment clean
 - Boiling or treating drinking water
 - Eating healthy food
6. Goitre is caused by lack of iodine in the body
 Constipation is caused by not eating enough fibre
 Marasmus is caused by not eating enough of balanced diet.
7. Signs and symptoms of marasmus
 - (i) Almost all the muscles disappear
 - (ii) The child looks sad
 - (iii) Wrinkled skin
 - (iv) Severe loss of weight
 - (v) The child looks like an old person
8. Macro-nutrients
 Proteins
 Carbohydrates
 - Fats/Lipids
 Others like vitamins and minerals are micro-nutrients.
9. Examples of non-communicable diseases and disorders
 - Diabetes
 - Obesity
 - Hypertension
 - Epilepsy
 - Asthma
 - Heart diseases
 - Cancer
10. The patient was suffering from epilepsy
11. First aid services to an epileptic person
 - Keep other people out of the way
 - Clear hard or sharp objects away from the person
 - Don't try to hold them down or stop the movement
 - Don't put anything in their mouth.
 - Loosen any tight clothing.
12. Ways of preventing non-communicable diseases and disorders.
 - Healthy diet
 - Regular exercise
 - Moderate use of salt, fats and sugar
 - Regular medical checkup
 - Proper use of medicines
 - Avoid alcohol and substance abuse.
13. Diseases that affect the breathing system
 - Asthma
 - Pneumonia
 - Colds
 - Influenza
 - Tuberculosis
 - Coughs
14. Water borne diseases are diseases that are spread through contaminated water.
15. Signs and symptoms of Cholera
 - Violent diarrhoea
 - Vomiting
 - dehydration
 - Sunken eyeballs
 - Muscles cramps
 - Weakness
 - Intense thirst
16. The external parasite that causes scabies
 Mite
17. Examples of internal body parasites
 - Tapeworm
 - Roundworm
 - Threadworms
 - Whipworms
 - Hookworms
 - Pin worms

18. Social implications that comes with adolescence
 -They want to be independent
 -They are keen to take more responsibilities
 -They feel shy about their body changes
 -Strong feelings and moods
 -They want to be treated as adults
 -Peer influence
 -They are attracted to opposite sex
 Health implications that comes with adolescence
 -depression
 -Anxiety
 -Eating disorder
 - Substance use disorders
19. Healthy eating habits for adolescents
 - Balanced diet
 - Correct portions
 - Correct choice of snacks
 - Time for meals
 - Table etiquette
 -Essential nutrients for age groups.
20. Ways of managing different types of waste
 - Reducing waste generation
 - Recycling waste
 - Reusing waste.

PERFORMING ARTS

1. tempo - speed of a song
 pitch - highness or lowness of a song
 dynamics - how loud or soft sound is
2. three, harmony
 soprano 1, soprano 2 Alto
 Soprano, alto base
3. Patriotism, hardwork, responsibility
4. -During the flag raising assembly
 -At the beginning and end of daily sessions during Kenya Music festivals
 -At the beginning and end of daily sessions of Kenya drama festivals
 -During national celebrations and events
5. Crescendo, deminuendo
6. Teaches good morals
 entertains
 Gives and carries certain messages
7. Vocal ornamentation, mood, climax, structure
8. Shirir - Luhya
 Uta - mijikenda
 Wandindi - kikuyu/embu/meru
9. Wandindi, orutu, shiriri, mbeve etc
10. i) Identify the string to tune
 ii) Identify the desired sound to be produced
 iii) Loosen or sound being produced until you achieve the desired sound.
11. i) an empty cylindrical tin
 ii) stick
 iii) another flexible stick
 iv) knife

- v) tape measure
 vi) hammer
 vii) nail
 viii) cristal threads

12.



Quaver



Crotchet



Minim



Semibreve

13.

- Gochet - taa
 Minim - taa - aa
 Semibreve taa -aa -aa -aa

14.

A dotted minim

15.

A well drawn drum indicating; membrane, resonator, sling, turning pegs, laces.