

JUNIOR SECONDARY SCHOOL REVEALED NATIONAL EXAMINATIONS

DETAILED MARKING SCHEME

SERIES: 001 - 2023



Pinpoint Publishers

Always to the point

Always Revealing More

GOOD FOR REVISION

JUNIOR SECONDARY - SERIES 001 2023

1

PINPOINT

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

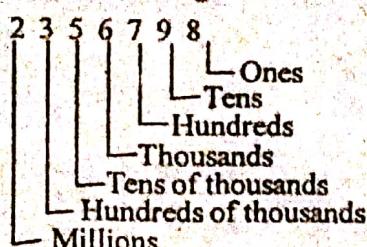
800000

 50

799950

= 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

Boys = x

Girls = $2x$

$$x + 2x = 600$$

$$3x = 600$$

$$x = 200$$

Boys = 200

Girls = 400

How many more girls than boys

$$(400 - 200)$$

$$= 200$$

8. Length = 2.4m

$$8 \text{ friend} = 2.4$$

8

each friend = 0.3m

$$2 \text{ friends} = (0.3 \times 2)$$

$$= 0.6m$$

9. Types of taxes in Kenya

Value added tax

- Income tax

- Excise duty

- Rental income tax

- Turnover tax

- Pay as you earn

$$\text{Area} = 648 \text{m}^2$$

height = ?

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

$$\text{Area} = \frac{1}{2} \times \text{base} \times \text{height}$$

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

$$648 = 36h$$

$$36 = 36$$

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

11. Square of 36 = 36^2

$$= (36 \times 36)$$

$$= 1296$$

- 12.

Mombasa 0900hr Nairobi ? Arrival

Arrival time = Dep + Time taken

$$0900$$

$$+ 0.545$$

$$1445$$

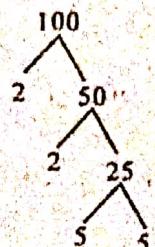
$$\text{Am/Pm} = 1445$$

$$- 1200$$

$$2.45$$

= 2.45pm

13. 100 as a product of its factors.



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

14. The length TR after construction is

$$4.5 \text{cm} (-0.1 \text{ or } +0.1 \text{ cm})$$

- 15.



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

16. Round off 5714 and 129 the near hundreds

$$5700 \text{ and } 100$$

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

$$= 57$$

17. Men = 946
 Women = 2346
 Children = 8991
 Adult = 2346
 $\underline{+ 946}$
 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

$$\text{L.C.M} = 2 \times 2 \times 2 \times 2 \times 2 \times 3$$

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

$\frac{46 - 25}{40} = 21/40$

24. B.P = sh. 450
 S.P = $(26 \times 20) = \text{sh. } 520$
 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 replace nouns e.g., 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/ deep
 - 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 deposits the importance of getting education.

KISWAHILI

SESHEMU YAA-UFUPISHO

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

SESHEMULB -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 kuichanuachanua ili kutoa mbegu na uchafu
 5. Nyuzi Aina nyembamba,laini na nene
 6. Vitambaa hufuliwa ili viwe safi
 7. Vitambaa mbalimbali hupatikana kwa kuitisha 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 mimiea/ matumizi ya mimea.
 32. Sita/6.
 33. -to, -za.
 - 34.63 /sitini na tatu.
 35. Mimea tuisomeni tuweze 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

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

$$\begin{array}{r} 2 \\ 60 \longdiv{136} \\ 120 \\ \hline 16 \end{array}$$

2hrs 16min

11 : 00 am
2 : 16
8 : 44

8 : 44 am - London

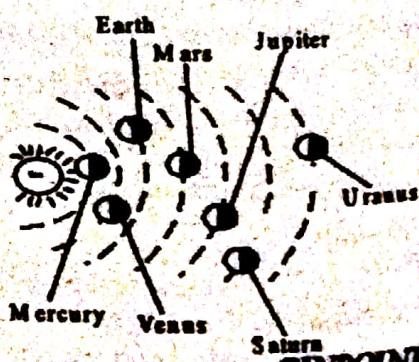
$$400 + 15 = 55 \times 4
= 220\text{min}$$

$$\begin{array}{r} 3 \\ 60 \longdiv{220 \text{ min}} \\ 180 \\ \hline 40 \end{array}$$

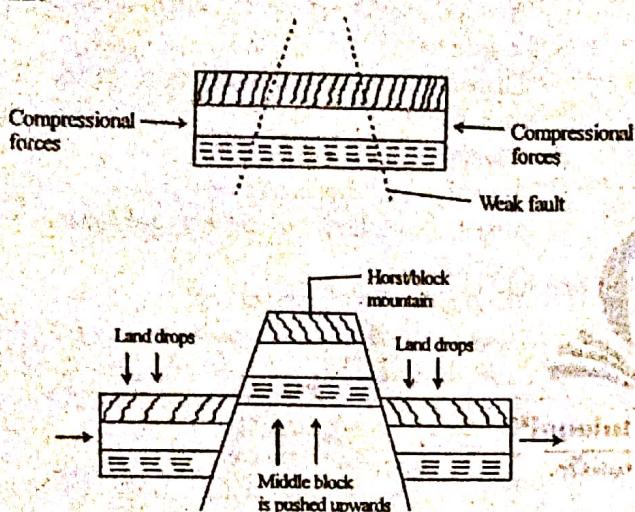
3hrs 40min
10 : 40
3 : 40

11 : 00 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 - historic site/ cultural centre
 17. proceed with caution, no parking, no entry, bumps ahead
 18. soda ash - L. Magadi, Diatomite - Kariandusi, Diamond - Mwandui - Tanzania
 19. salt - Ngomeni, Fundisa, Gongoni near Malindi
 20. climate
 21. executive
 22. poverty, negligence by parents, peer pressure etc



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

- 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)
1. acquire values
2. develop a sense of responsibility
3. work as a team
4. respect myself and others
5. have faith and hope in God
6. solve problems peacefully with others
7. multiply and fill the earth (procreation)
8. God is powerful, kind and loving
9. 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
10. Name creatures (animals)
11. Take care of his creation
12. Obey his command
13. Deforestation
14. Overfishing
15. Overgrazing
16. Excessive mining
17. Poaching
18. Pollution of the environment
19. Abraham
20. Act fairly to others
21. During the making of Sinai covenant
22. Birth place - Micah

ISLAMIC RELIGIOUS EDUCATION

1. min al fu 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 (give a mark for every bad act)
13. ASRI - 4.00
14. 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
- 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
- fire
- 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)
- Be aware of your surroundings
- 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)

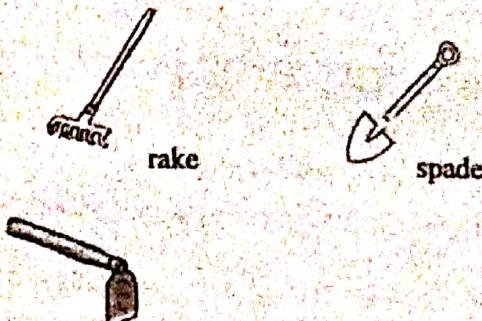
8. Types of common injuries

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

9. Career related to safety

- safety engineer
- risk manager
- occupational safety
- health and safety 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.



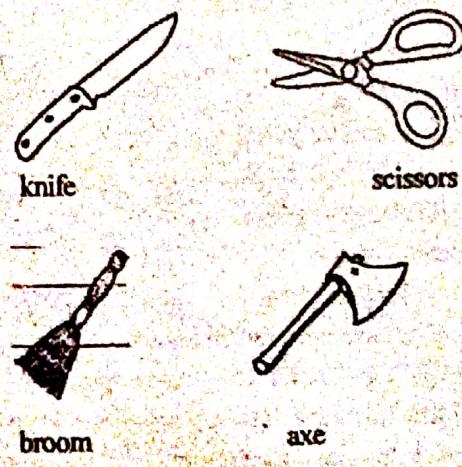
13. Sources of energy
 - electricity
 - solar energy (sun)
 - wind energy
 - fuel like kerosene, petrol, coal, firewood, charcoal

- 14.
- | | | |
|--------|----------|-------------|
| | | (free hand) |
| Circle | Triangle | |

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

15. Angle XYZ = 30°

16. House tools
 (Name with picture)



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

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

13. (i) do not share personal items
on home, service or a job
14. Bright tone high colour
Bright price
Bright 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. Polyester
20. Acrylic
21. (i) increase in weight and height
(ii) pimples may appear on the face
(iii) hair growing under the armpit
(iv) hair growing on public area
22. cosmetics are items applied on the body while accessories are worn together with clothes
23. iodine
24. (i) amount of energy available
(ii) size of the family
(iii) dietary needs of the family
(iv) availability of food
(v) available time
25. is the process of making fabrics by interlacing two sets of yarn to produce a woven fabric.
26. loose stitches

12. (i) Aesthetic reason
(ii) Protection of book
(iii) Durability of book
(iv) Pass information
(v) earn income
(vi) Education purposes
(vii) Source of employment
(viii) Entertainment
13. 
14. 

15. Any 3 letter using block letters
16. The house represents focus element of photographs. The tree represent background 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.

VISUAL ARTS

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.

AGRICULTURE

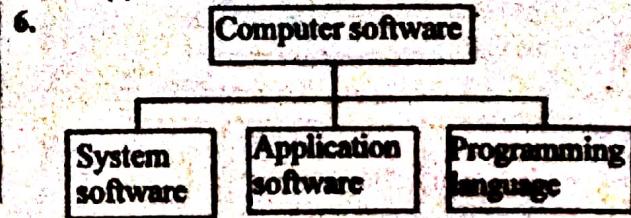
1. X Gully
Y Ra
2. (i) Water
(ii) wind
(iii) moving
3. (i) Animal activities
(ii) Human activities
(iii) Types of soil
(iv) rainfall
(v) Slopes
4. (i) Clean your working space
(ii) Dispose off the soil appropriately
(iii) Take care not to splash water or mud to your classmates
5. They hold water
- They 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
 (iv) rats (or any other correct)
15. (i) Hanging reflective materials
 (ii) Hanging torches
 (ii) 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

- | | |
|-------------------------------|---------------|
| (i) monitor/screen | (ii) C.P.U |
| (iii) Mouse | (iv) Keyboard |
| (a) Hardware | (a) Input |
| (b) Software | (b) Output |
| (c) Liveware | (c) Storage |
| (a) Webcam | |
| (b) Printer | |
| (C) Flash disk | |
| (i) Graphic user interface | |
| (ii) Random Access Memory | |
| (iii) Central Processing Unit | |
| -Antivirus | |
| (i) Kaspersky | |
| (ii) McAfee | |
| (iii) AVG | |
| (iv) Norton | |
| (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) shotput



6. 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

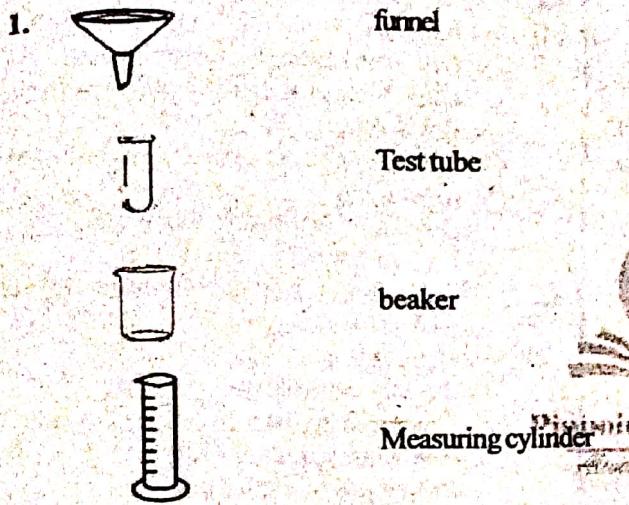
- (i) Fainting
(ii) Insects bites and stings
(iii) Snake bites
(iv) Fractures
(v) Cuts
(vi) Muscle pulls
(vii) Strains
(viii) Sprains
(ix) Dislocation

22. Fainting

23. (i) Python
(ii) Black mambba
(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. Cause of common laboratory accidents
 - Lack of warning signs
 - Poor laboratory designs
 - Failure to follow instructions
 - Lack of personal protective equipments
 - Spills and breakages
2. Gas Q is carbondioxide
 - Used as fire extinguisher
 - Making plant food
 - Preserving soft drinks
3. (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)
4. Litmus paper
5. Acid - lemon juice and sour milk
6. Base - baking powder and anti-acid tablet
7. i) Evapoartion 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
 • Smoothening 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.
 Examples of slopes (inclined planes)
 - ladder
 - staircase
 - ramp
14. The ramp used in raised buildings are mainly meant for people who are physically challenged.
15. Examples of plants with tap root
 - Legumes -beans, peas, groundnuts, greengrams
 - Mango, acacia, pigweed, cassava, potatoes etc.
16. Importance of fungi to human beings
 • Some like mushroom are edible (food)
 • Some are medicinal eg penicillium
 • Yeast is used in raising dough
17. That is either amphibians or reptiles
18. The diagram shows a tick. It is in the same group with scorpion, spider and mite(eight legs and 2 body parts)
19. i) W - Fight auricle
 ii) Y - Left ventricle
20. Uterus - Gives room for the growth and development of the foetus
 Oviduct (Fallopian tube) -It is where fertilization takes place.
21. Parts of the human skeleton
 - skull
 - Vertebrate (backbone)
 - Ribcage
 - Chest bone
22. 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
 Importance of health education for healthy living.
 - It teaches about physical, mental, emotional and social health
 - It boosts 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
 3. Career opportunities related to health education
 - Public health officer
 - Doctors
 - Nurses
 - Psychologists
 - Nutritionist
 - Health promotion officers
 - Physiotherapists
 4. Examples of health related activities at school
 - Washing of hands
 - Physics
 - Keeping the environment clean
 - Boiling or treating drinking water
 - Eating healthy food
 5. Goitre is caused by lack of iodine in the body
 Constipation is caused by not eating enough fibre
 Marasmus is caused not eating enough of balanced diet.
 6. 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
 7. Macro-nutrients
 Proteins
 Carbohydrates
 - Fats/Lipids
 Others live vitamins and minerals are micro-nutrients.
 Examples of non-communicable diseases and disorders
 - Diabetes
 - Obesity
 - Hypertension
 - Epilepsy
 - Asthma
 - Heart diseases
 - Cancer
 8. The patient was suffering from epilepsy
 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.
 9. 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.
 10. Diseases that affect breathing system
 - Asthma
 - Pneumonia
 - Colds
 - Influenza
 - Tuberculosis
 - Coughs
 11. Water borne diseases are diseases that are spread through contaminated water.
 12. Signs and symptoms of Cholera
 - Violent diarrhoea
 - Vomiting
 - dehydration
 - Sunken eyeballs
 - Muscles cramps
 - Weakness
 - Intense thirst
 13. The external parasite that cause scabies
Mite
 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
 Healthy eating habits for adolescents
 - Balanced diet
 - Correct portion sizes
 - Correct choice of snacks
 - Time for meals
 - Table etiquette
 -Essential nutrients for age groups.
 Ways of managing different types of waste
 - Reducing waste generation
 - Recycling waste
 - Reusing waste.

PERFORMING ARTS

1. tempo - speed of a song
 2. pitch - highness or lowness of a song
 3. dynamics - how loud or soft sound is
 4. three, harmony.
 5. soprano 1, soprano 2 Alto
 6. Soprano, alto base
 7. Patriotism, hardwork, responsibility
 8. -During the flag raising assembly
 9. -At the beginning and end of daily sessions during Kenya Music festivals
 10. -At the beginning and end of daily sessions of Kenya drama festivals
 11. -During national celebrations and events
 12. Crescendo, diminuendo
 13. Teaches good morals
 14. entertains
 15. Gives and carries certain messages
 16. Vocal ornamentation, mood, climax, structure
 17. Shirir - Luhya
 18. Uta - mijikenda
 19. Wandindi - kikuyu/embu/meru
 20. Wandindi, orutu, shiriri, mbwe 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) crystal 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.