



# TARGETER WINGS



## KENYA JUNIOR SCHOOL EDUCATION ASSESSMENT

### GRADE 8 - 2026

TIME: 1 Hour 20 Minutes

### INTEGRATED SCIENCE

Learners's Name		Assessment Number	
School Name		School Code	
Learner's Signature		Date	

#### INSTRUCTIONS TO LEARNERS

1. Write your name and assessment number in the spaces provided above.
2. Write the name and code of your school in the spaces provided above.
3. Sign and write the date of the assessment in the spaces provided above.
4. This paper consists of two sections: A and B.
5. Section A comprises Multiple Choice Questions numbered 1 to 20.
6. Section B comprises short, structured questions number 21 to 26.
7. Answer ALL the questions in section A on the separate ANSWER SHEET provided.
8. Answer ALL the questions in section B in the spaces provided in this QUESTION PAPER.
9. Do NOT remove any page from this question paper.
10. Answer ALL the questions in English.

#### For official use only SECTION B

Question	21	22	23	24	25	26				
Maximum score	8	3	10	4	4	1				
Learner's Score per question.										

#### SECTION A

#### Read all the instructions carefully

1. You have been given this question paper and a separate answer sheet. This section consists of 30 multiple choice questions.
2. Answer ALL questions on the ANSWER SHEET provided, NOT on the question paper.
3. Do all the necessary rough work on the question paper.

#### HOW TO USE THE ANSWER SHEET

4. Use an ordinary HB pencil.
5. Confirm that the answer sheet you have been provided with has the following:  
YOUR ASSESSMENT NUMBER  
YOUR NAME  
NAME OF YOUR SCHOOL  
NAME OF THE SUBJECT
6. Keep the answer sheet clean and dry. DO NOT fold it.
7. For each of the questions 1-20, four options are given. The options are lettered A, B, C and D. In each case, only ONE of the four options is correct. Choose the correct option.
8. On the answer sheet, the correct answer is to be shown by drawing a DARK LINE inside the box in which the letter you have chosen is written.

#### Example:

In the Question Paper:

16. Which element is used in making medals?  
A. Chlorine                      B. Bronze

C. Sulphur

D. Iron

16. [A]

[B]

[C]

[D]

The correct answer is B.

On the answer sheet, in the set of boxes given for number 16, draw a DARK LINE inside the box with the letter B printed in it as marked below.

9. Your dark line MUST be within the box. DO NOT make any marks outside the boxes.
10. For each question, ONLY ONE box is to be marked.

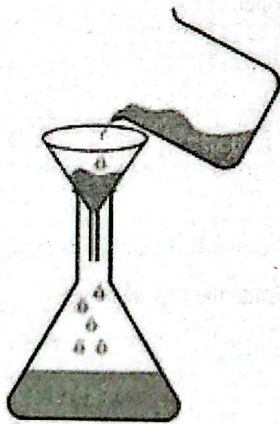
*This paper consists of 7 printed pages.*

*Learners should check the question paper to ascertain that all the pages are printed as indicated and that no questions are missing.*

The paper below contains two sections; Section A and section B. Answer all the questions in the two sections.

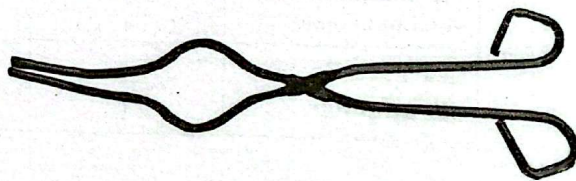
**SECTION A: 20 MARKS**

1. Which of the following laboratory apparatus is used to hold small amounts of liquids for mixing or heating?  
A. Conical flask  
B. Graduated cylinder  
C. Test tube  
D. Petri dish
2. Learners of Maji Mazuri School take githeri for lunch. Which of the following methods of separating mixtures can be used to separate the contents of githeri?  
A. Handpicking  
B. Winnowing  
C. Use of magnet  
D. Decanting
3. Mutunga was asked to separate a certain mixture using the method below. This type of method is known as



- A. Chromatography
- B. Fractional distillation
- C. Filtration
- D. Decantation

4. Akinyi crushed some purple cabbage leaves and added a little water to make juice. She used the juice to test if some household substances are acidic or alkaline. What did she use the purple cabbage extract as?  
A. Solvent  
B. Solute  
C. Catalyst  
D. Indicator
5. Below are components of Integrated science. Which one is **not**?  
A. Chemistry  
B. Physics  
C. Mathematics  
D. Biology
6. Below is a laboratory apparatus. What is its function?



- A. Holding test tubes
  - B. Measuring precise volumes of liquids
  - C. Heating substances
  - D. Mixing substances
7. Which of the following is an example of a common laboratory accident due to improper use of equipment?  
A. Falling due to a wet floor  
B. A cut from a broken glassware  
C. Burns from a hot plate  
D. A fracture from dropping a heavy equipment

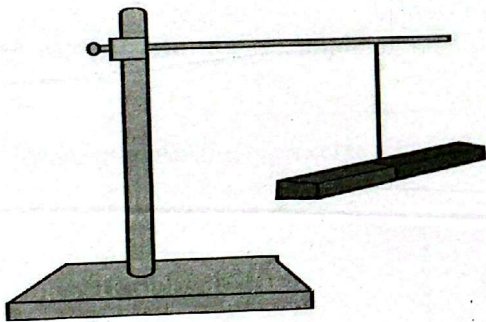
8. During a class discussion on human reproductive system, grade 7 learners discussed a part of the male reproductive system that allows passage of semen and urine to the outside body. Which part were they discussing?

- A. Sperm duct
- B. Scrotum
- C. Penis
- D. Urethra

9. Which of the following is a physical change?

- A. Rusting of iron
- B. Burning of wood
- C. Melting of ice
- D. Digestion of food

10. During an Integrated Science lesson, grade 7 learners hung a bar magnet freely using a string. In which direction did it align itself with?



- A. East → West direction
- B. North → West direction
- C. South → East direction
- D. North → South direction

11. Grade 8 learners were discussing the process by which the human body removes waste matter.

The process they were discussing is known as \_\_\_

- A. digestion
- B. egestion
- C. respiration
- D. excretion

12. During their lesson about acids and bases, grade 7 learners were informed by their laboratory technician that a certain liquid had a pH of 3. This substance was a

- A. Strong base
- B. Strong acid
- C. Weak acid
- D. Weak base

13. During a lesson, learners discussed the applications of acids and bases. They listed the following applications. Manufacture of

- i. Car batteries
- ii. Soft drinks
- iii. Toothpaste
- iv. Baking powder

Which applications listed above are for acids only?

- A. i and ii
- B. ii and iii
- C. iii and iv
- D. i and iv

14. Grade seven learners wanted to test the pH of sodium hydroxide using phenolphthalein as their indicator. What colour did it show?

- A. Pink
- B. Blue
- C. Yellow
- D. Colourless

15. Njuguna noted that in their science laboratory, most apparatus were made of glass. Which of the following is the reason for this?

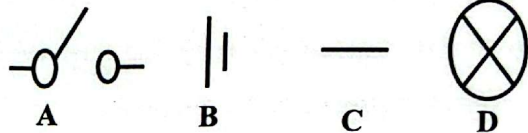
- A. Glass does not break easily
- B. Glass does not react with chemicals
- C. Glass is cheap
- D. Glass is a poor conductor of heat.

16. Grade eight learners burnt a magnesium ribbon in a flame. The ribbon burnt with a dazzling white flame leaving behind a white residue. The type of change the magnesium undergoes is
- temporary change
  - permanent change
  - permanent chemical change
  - reversible change

17. The process by which the zygote moves from the oviduct and enters the uterus, attaching itself to the uterus wall is known as
- Fertilization
  - Menstruation
  - Implantation
  - Ovulation

18. The following are functions of the outermost layer of the skin. Which one is **not**?
- Acts as a protective later.
  - Cushions muscles and bones.
  - Provides skin colour.
  - Makes new skin cells.

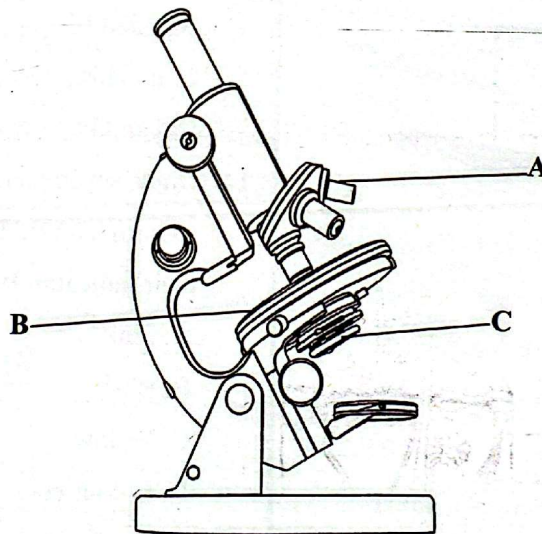
19. In a simple circuit, which of the following symbol is used to represent the bulb?



20. Which element has a symbol of Ag?
- Aluminium
  - Silver
  - Gold
  - Mercury

**SECTION B: 30 MARKS**

21. The diagram below shows parts of a microscope. Study it carefully and answer the questions that follow.



- a. Identify the parts labeled A, B and C. (3 marks)

i. A \_\_\_\_\_

ii. B \_\_\_\_\_

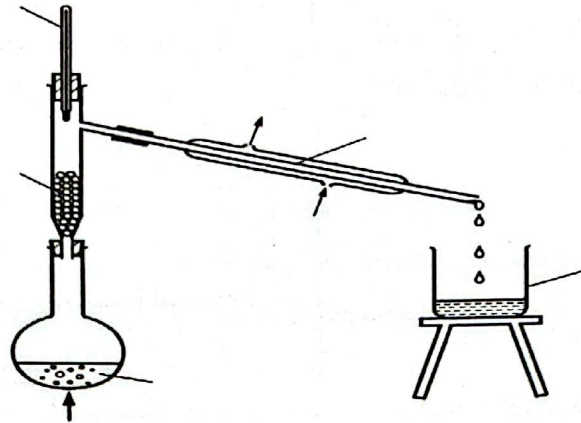
iii. C \_\_\_\_\_

- b. State two functions of part B. (2marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

22. Grade 7 learners used the method below to separate a mixture of ethanol and water.



a. Identify the method used above.

(1 mark)

\_\_\_\_\_

b. Which property of the two components of the mixture makes separation possible using the above method?

(2 marks)

\_\_\_\_\_

c. Which liquid is collected first?

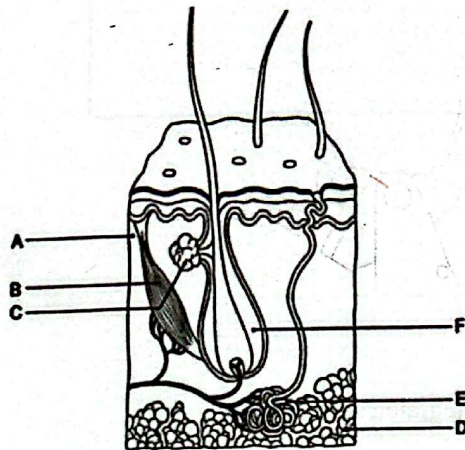
(1 mark)

\_\_\_\_\_

d. Identify any other example of a mixture that can be separated using the method above. (1 mark)

\_\_\_\_\_

23. The diagram below represents a human excretory system. Use it to answer the questions that follow.



(a) Identify the parts labeled

(3 marks)

E \_\_\_\_\_

D \_\_\_\_\_

B \_\_\_\_\_

(b) List **three** waste products excreted by the organ above.

(3 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_
- iii. \_\_\_\_\_

24. During a lesson, grade 8 learners were asked to name common electrical appliances that convert electrical energy to heat energy in their homes.

a. List two appliances they could have mentioned.

(2 marks)

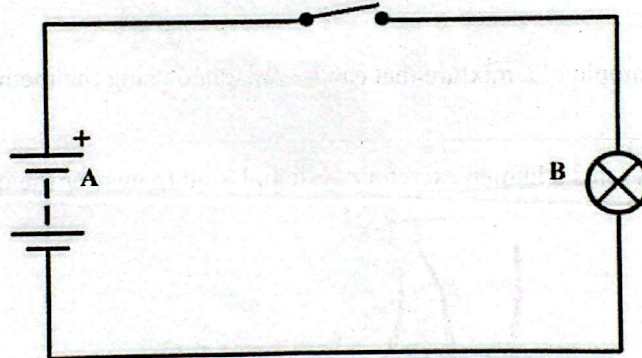
- i. \_\_\_\_\_
- ii. \_\_\_\_\_

b. Identify two safety measures to observe when using electrical appliances at home.

(2 marks)

- i. \_\_\_\_\_
- ii. \_\_\_\_\_

c. The learners also drew the simple circuit shown below.



Identify the part labeled A.

(1 mark)

A \_\_\_\_\_

25. Define the following terms as used in integrated science.

(4 marks)

- a. Atom - \_\_\_\_\_
- b. Element - \_\_\_\_\_
- c. Compound - \_\_\_\_\_
- d. Molecule - \_\_\_\_\_

26. Below are common elements. Indicate the chemical symbol for each element. (2marks)

a. Gold - \_\_\_\_\_

b. Copper - \_\_\_\_\_

27. Urine is one of the waste products of our excretory system. Name two components of urine. (2 marks)

i. \_\_\_\_\_

ii. \_\_\_\_\_

28. Water is an example of a compound. Write the word equation of the reaction that forms water as a compound. (1 mark)

