

# TARGETER WINGS

## JUNIOR SCHOOL ASSESSMENT



### GRADE 8 - 2024

Wings  
005

TIME: 1 hour 20 mins

### INTEGRATED SCIENCE

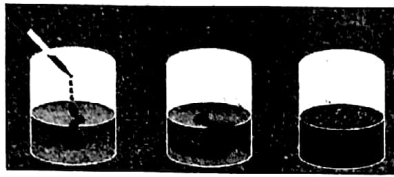
Name _____
School _____
Adm No: _____ Date _____

**Instructions:**

- (a) Write your name, school, admission number and date in the spaces provided above.
- (b) Answer all questions in this question paper.

FOR EXAMINER'S USE ONLY			
Questions	Maximum score	Student's score	Performance scale
1	2		
2	3		
3	3		
4	6		
5	3		
6	4		
7	4		
8	3		
9	5		
10	3		
11	2		
12	3		
13	3		
14	3		
15	3		
<b>Total</b>	<b>50</b>		

1. During an experiment, Grade 8 learners placed some drops of red ink at the bottom of a beaker of cold water as shown below. They left the beaker for some time. They observed that the red colour of the ink had spread throughout the water. (2 marks)



The red ink spread as a result of .....

2. Below are some activities that happen in real life and require basic skills in Science. Identify the skill used in each of the activities. (3 marks)

- i. Meteorologists studying weather patterns to forecast weather then advise farmers when to plant .....
- ii. A contractor took measurements of a site before digging trenches for the construction of a classroom .....
- iii. An environmentalist separates organic waste from inorganic waste. ....

3. Mutiso was deep frying mandazi when the cooking oil splashed and caught fire. He rushed to get water but his mother stopped him and warned him never to use water to put out such fire.

a) Give a reason why Mutiso's mother warned him never to use water to put out the fire. (2 marks)

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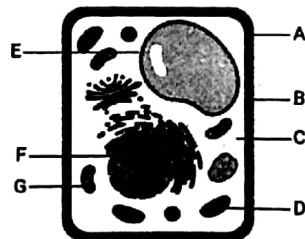
b) Name the type of extinguisher that Mutiso could have used to put out that fire (1 mark)

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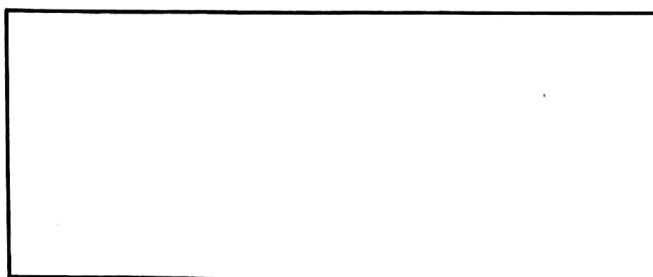
4. Grade 7 learners at Vision Academy were observing plant and animal cells under a light microscope.

a) They observed a plant cell as shown below. Name the parts labelled B, D and F. (3 marks)

- B .....
- D .....
- F .....



a) Draw and label an animal cell as observed by the learners in a light microscope (3 marks)



5. Plant cells and animal cells have similarities as well as differences. Outline three differences between plant cells and animal cells (3 marks)

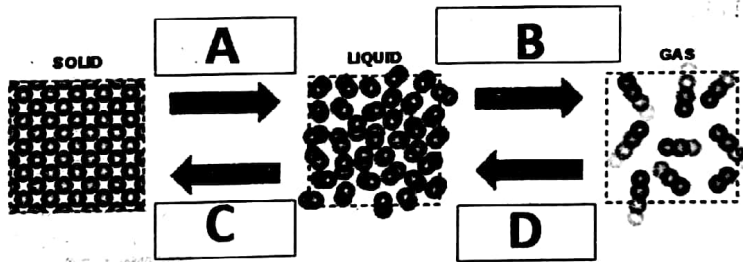
PLANT CELLS	ANIMAL CELLS

6. Matter can undergo a number of changes. Some changes are temporary while others are permanent. In the table below, indicate whether the description is a temporary physical change, a temporary chemical or a permanent change. (4 marks)

Characteristics	Temporary Physical, Temporary Chemical or Permanent Change
a) No new substance is formed	
b) There is no change in mass	
c) The change is irreversible	
d) A new substance is formed but the change can be reversed	

7. Grade 6 learners at Moms school were learning about the changes of states of matter and their application in our day to day lives. Name the changes of states of matter labelled A – D in the diagram below (4 marks)

A. .... B. ....  
C. .... D. ....



8. During a tour to a fire station, Grade 8 learners learnt that for a fire to burn, there are three components that must be present. Name the three components. (3 marks)

i. .... ii. ....  
iii. ....

9. Fire can be categorised into various classes on their causes. Outline the causes of the classes of fire shown below. (5 marks)

		Causes

10. Chemical symbols are used instead of names to refer to elements since they are easier and convenient. Chemical symbols of elements can either be derived from their English names or Latin names. Match the elements below with their Chemical symbols. (3 marks)
- i. Sodium .....
  - ii. Gold .....
  - iii. Potassium .....

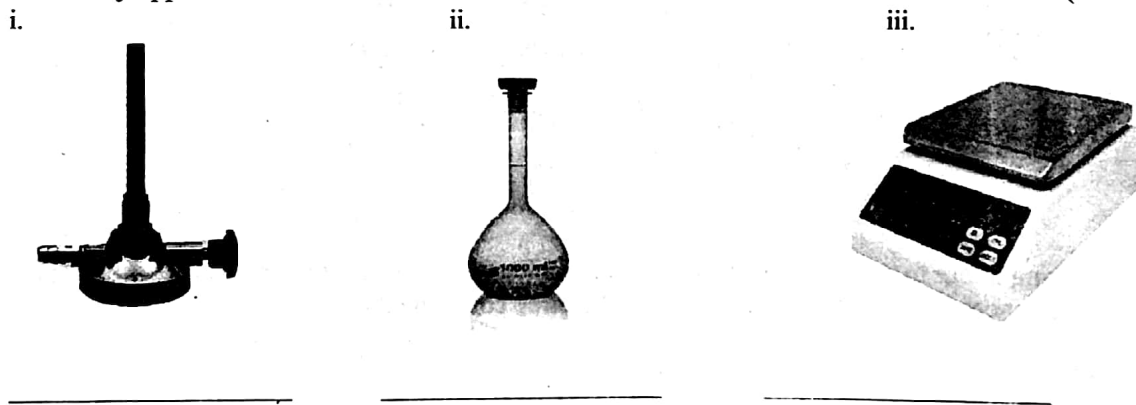
11. As grade 8 learners were learning about fire safety, they were taught about the different types of fire extinguishers. Mention two types of fires that can be extinguished by the fire extinguisher shown below. (2 marks)



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 .....

12. During a visit to a power generation plant, Grade 7 learners at Joeshar school learnt about various sources of electricity. Mention any 3 sources that they learnt. (3 marks)
- i. ....
  - ii. ....
  - iii. ....

13. A laboratory is a very important room when learning Integrated Science at any level. Identify the laboratory apparatus drawn below. (3 marks)



14. Derived quantities in Science are those quantities that cannot be measured directly. They are calculated from two or more measurements. List three such quantities. (3 marks)
- i. ....
  - ii. ....
  - iii. ....

15. pH scale is used to find the numeric value of the level of acidity or basicity of a substance. Fill in the table below correctly according to the pH scale (3 marks)

pH Scale value	Acidic, basic or neutral
7	
3	
11	