

DOYEN

KENYA JUNIOR SCHOOL EDUCATION ASSESSMENT



TERM 1 2025 OPENER EXAM GRADE 9 – INTEGRATED SCIENCE

Time: 2 hours

NAME: _____

SCHOOL: _____

STREAM: _____ DATE: _____

INSTRUCTIONS

- Write your name, school, stream and date in the spaces provided above.
- Answer **all** questions in this booklet.
- All answers must be given as per the guidelines of the questions.
- All answers **must** be written in this booklet.

ASSESSMENT RUBRIC

RANGE (%)	LEVEL
80 - 100	Exceeding expectation
60 - 79	Meeting expectation
40 - 59	Approaching expectation
0 - 39	Below expectation

LEARNER'S SCORE

Out of 50	
Score	
%	

This paper consists of 4 printed pages. Candidates should check the question paper to confirm that all pages are printed as indicated and that no questions are missing.

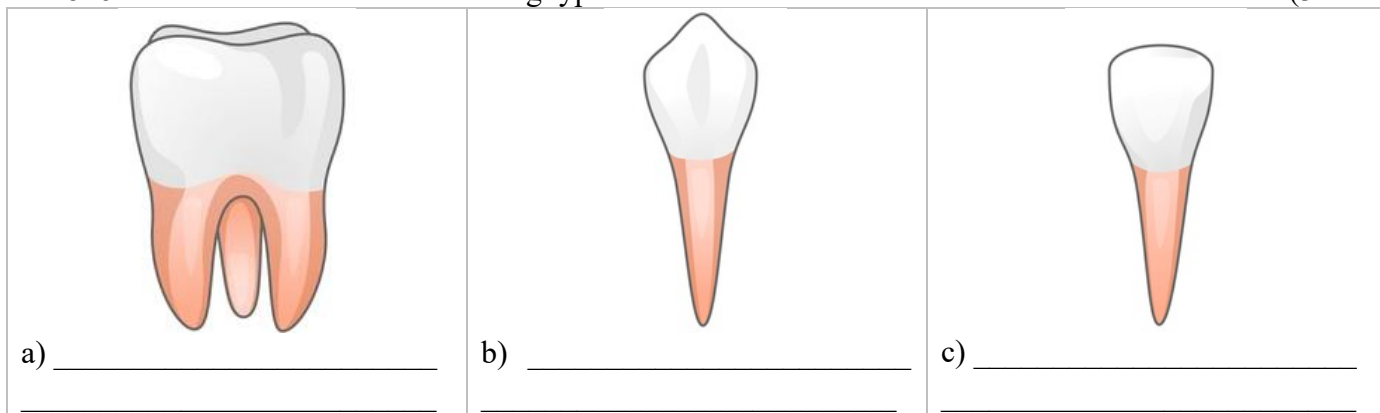
1. Differentiate between an element and a compound. (2 marks)

2. Give the symbols for the following elements of the periodic table. (3 marks)

- a) Iron - _____
b) Magnesium - _____
c) Helium - _____

3. The electron configuration of Fluorine is 2.7. It also has 9 protons and 10 neutrons in its nucleus. Calculate the mass number of Fluorine. (2 marks)

4. Give **one** function of each of the following types of teeth. (3 marks)



5. Name the method of separation that can be used to separate: (2 marks)

- a) Small particles of sand from water. - _____
b) Common salt from a mixture of common salt and ammonium nitrate. - _____

6. The table below shows the basic quantity units and their SI units. Fill it in accurately. (4 marks)

Basic Quantity	SI Unit
a) Mass	kilogram
b) Length	_____
c) _____	Second
d) Temperature	_____

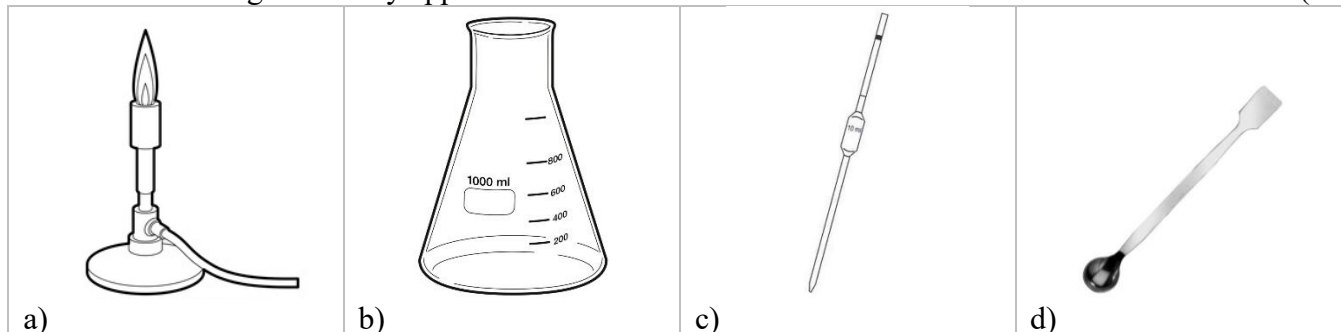
7. State **two** precautions that are necessary when handling a microscope. (2 marks)

8. Write **two** examples of vitamins. (2 marks)

9. Name any **two** substances that undergo temporary chemical changes. (2 marks)

10. List **two** applications of the changes of states of matter in day-to-day life. (2 marks)

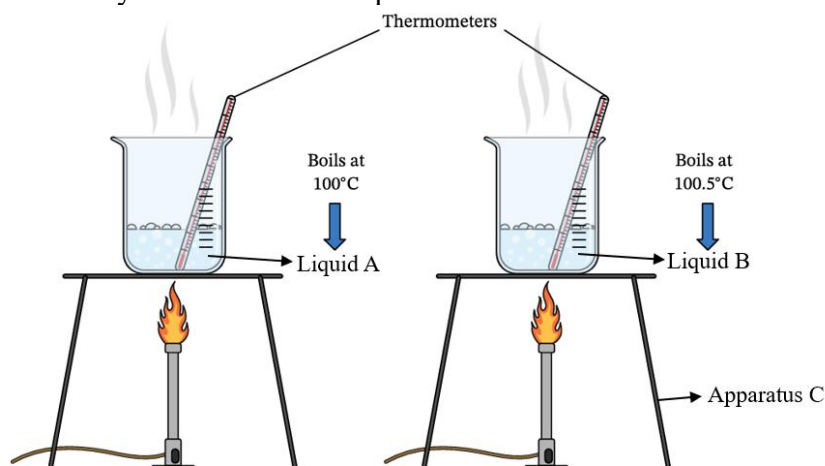
11. Name the following laboratory apparatus. (4 marks)



12. Differentiate between fertilization and implantation. (2 marks)

13. List any **three** functions of the skin. (3 marks)

14. Grade 9 learners at Nabwani Junior School set up the experiment below to determine the boiling point of water. Study it and answer the questions that follow.



a) Which liquid is likely to be distilled water? (1 mark)

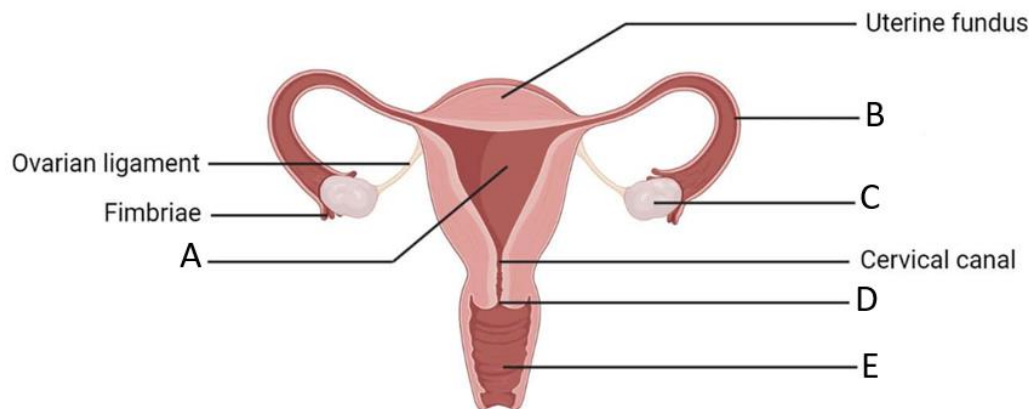
b) Which liquid is likely to be dirty water? (1 mark)

- c) Name the apparatus marked C. (1 mark)
- d) State any **two** effects of impurities on water. (2 marks)

15. State any **two** dangers associated with fire. (2 marks)

16. Differentiate between osmosis and diffusion. (2 marks)

17. Study the diagram below and answer the questions that follow.



- a) Name the parts labeled: (2 marks)
- A – _____
- B – _____

- b) State the **two** functions of the part labeled D. (2 marks)

- c) What is the plural of the part labeled C. (1 mark)

- d) State **three** functions of the part labeled E. (3 marks)

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