

COMPETENCY BASED EDUCATION
JUNIOR SCHOOL EDUCATION ASSESSMENT
NOVEMBER-DECEMBER ASSIGNMENT 2026



GRADE 8 – INTEGRATED SCIENCE PRACTICAL

Time: 2 Hours

LEARNER'S DETAILS

Name: _____ . School: _____ .

Assessment Number: _____ . Date: _____ .

School Code: _____ . Signature: _____ .

INSTRUCTIONS TO CANDIDATES

1. Write your name in the spaces provided above.
2. Write the name of your school and your stream in the spaces provided.
3. Write your admission number and the date of the assessment in the spaces provided.
4. This paper consists of three tasks
5. Answer all questions
6. Answer the questions in English.
7. All answers MUST be written in the spaces provided in the paper.
8. Do NOT remove any page from this question paper.

FOR OFFICIAL USE ONLY (EXAMINER'S USE)

TASK	MAXIMUM MARKS	LEARNER'S SCORE
Task 1	10	_____
Task 2	10	_____
Task 3	10	_____
TOTAL	30	_____ / 30

COMPETENCY-BASED PERFORMANCE SCORE GRID

Score Range	Performance Level	Points
27-30	EE1 - Exceeding Expectation	8
23-26	EE2 - Exceeding Expectation	7
18-22	ME1 - Meeting Expectation	6
13-17	ME2 - Meeting Expectation	5
10-12	AE1 - Approaching Expectation	4
7-9	AE2 - Approaching Expectation	3
4-6	BE1 - Below Expectation	2
1-3	BE2 - Below Expectation	1

Examiner's Total Score: _____ / 30

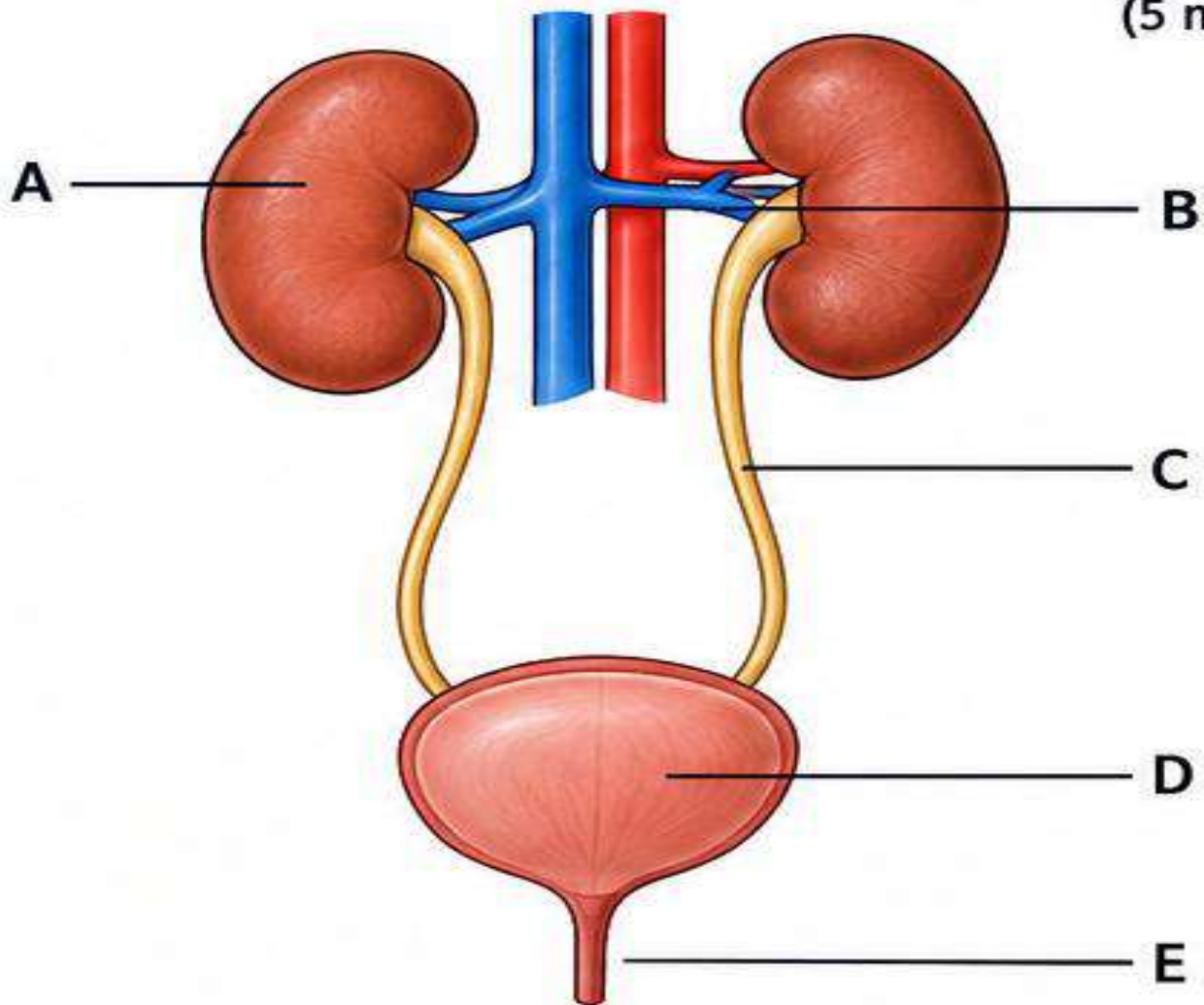
Performance Level: _____

Points: _____ / 8

TASK 1: BIOLOGY (10 MARKS)

A. Label the diagram of the human urinary system

(5 marks)



B. Name the parts and state their functions

(5 marks)

Part	Name	Function
A		
B		
C		
D		
E		

TASK 2: PHYSICS (10 MARKS)

- A. The diagram below shows a solid block placed on a table. The block has a mass of 6 kg and the surface area in contact with the table is 0.03 m^2 .



- i) Calculate the pressure exerted by the block on the table.
(4 marks)
 - ii) If the area of the block in contact with the table is reduced to 0.015 m^2 , what will be the new pressure?
(3 marks)
- B. State **two** factors that affect the pressure exerted by a solid on a surface.
(3 marks)

TASK 3: CHEMISTRY (10 MARKS)

- A. Identify the laboratory apparatus below and state one use for each. (5 marks)**

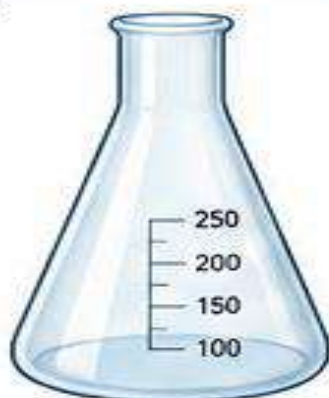
A



Name: _____

Use: _____

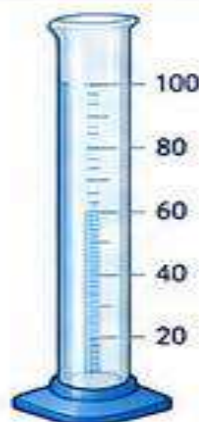
B



Name: _____

Use: _____

C



Name: _____

Use: _____

D



Name: _____

Use: _____

E



Name: _____

Use: _____

F



Name: _____

Use: _____

- B. State one safety precaution to observe when using each of the following apparatus. (5 marks)**

Apparatus	Safety precaution
Beaker	
Conical flask	
Measuring cylinder	
Test tube	
Bunsen burner	

GRADE 8 INTEGRATED SCIENCE PRACTICAL EXAMINATION

MARKING SCHEME — 30 MARKS

TASK 1: BIOLOGY — HUMAN URINARY SYSTEM (10 MARKS)

A. Identify the parts labelled A-E. (5 marks)

Label	Answer	Marks
A	Left kidney	1
B	Right kidney	1
C	Ureter	1
D	Urinary bladder	1
E	Urethra	1
Total		5

B. State ONE function of each part. (5 marks)

Part	Function	Marks
Kidney	Filters the blood and removes metabolic wastes to form urine.	1
Ureter	Transports urine from the kidney to the urinary bladder.	1
Bladder	Stores urine temporarily before it is expelled.	1
Urethra	Carries urine from the bladder to the outside of the body.	1
Kidneys	Regulate water and salt balance in the body.	1
Total		5

TASK 1 TOTAL: 10 MARKS

TASK 2: PHYSICS — PRESSURE OF SOLIDS (10 MARKS)

Given:

Mass, $m = 6 \text{ kg}$

Area, $A = 0.03 \text{ m}^2$

Acceleration due to gravity, $g = 10 \text{ N/kg}$

A. Calculate the pressure exerted by the block. (4 marks)

Step 1: Calculate the weight of the block.

$$F = mg$$

$$F = 6 \times 10$$

$$F = 60 \text{ N}$$

Step 2: Calculate the pressure.

$$P = \frac{F}{A}$$

$$P = \frac{60}{0.03}$$

$$P = 2000 \text{ Pa}$$

Marks:

- Correct formula for weight – 1 mark
- Correct weight – 1 mark
- Correct pressure formula and substitution – 1 mark
- Correct answer – 1 mark

B. Calculate the new pressure when the area is 0.015 m^2 . (3 marks)

The weight remains:

$$F = 60 \text{ N}$$

$$P = \frac{F}{A}$$

$$P = \frac{60}{0.015}$$

$$P = 4000 \text{ Pa}$$

Marks:

- Correct formula – 1 mark
- Correct substitution – 1 mark
- Correct answer – 1 mark

C. State TWO factors that affect pressure exerted by a solid. (2 marks)

1. Force or weight acting on the surface.
2. Area of contact between the solid and the surface.

1 mark each.

D. State ONE way of increasing pressure. (1 mark)

- Increase the force or weight while keeping the contact area constant.

OR

- Reduce the area of contact while keeping the force constant.

TASK 2 TOTAL: 10 MARKS**TASK 3: CHEMISTRY — LABORATORY APPARATUS (10 MARKS)**

A. Identify the apparatus and state ONE use of each. (6 marks)

Label	Name	One use
A	Beaker	Holding, mixing or heating liquids.
B	Conical flask	Mixing liquids by swirling with reduced spillage.
C	Measuring cylinder	Measuring the volume of liquids.
D	Funnel	Transferring liquids into containers with narrow openings.
E	Test tube	Holding or heating small quantities of substances.
F	Dropper	Transferring small quantities of liquids drop by drop.

Award 1 mark for each correct name and use pair.

TASK 3A: 6 MARKS

B. State ONE safety precaution for each apparatus. (4 marks)

Apparatus	Safety precaution
Beaker	Handle carefully to avoid breakage and cuts.
Measuring cylinder	Place it on a flat surface when measuring liquids.
Test tube	Point the mouth away from yourself and others when heating it.
Bunsen burner	Keep flammable materials away from the flame.

Award 1 mark for each correct precaution.