



LEARNER'S DETAILS

Name: _____

School: _____

Assessment Number: _____

Date: _____

School Code: _____

Signature: _____

Instructions for Learners

1. Write your **full name** and **assessment number** in the spaces provided above.
2. Indicate your **school name** and **school code** clearly.
3. **Sign and date** this paper in the spaces provided.
4. This paper consists of **TWO** tasks.
5. Answer **ALL** questions in **BOTH** tasks.
6. Write your answers in the spaces provided in this question paper.
7. Do **NOT** remove any **page** from this paper.
8. All responses must be written in **English**.

FOR OFFICIAL USE ONLY -FOR EXAMINER'S USE

SECTION	TASK 1	TASK 2	% SCORE	EE1	EE2	ME1	ME2	AE1	AE2	BE1	BE2
SCORE RANGE	14 MARKS	16 MARKS		90-100	75-89	58-74	41-57	31-40	21-30	11-20	1-10
POINTS				8 POINTS	7 POINTS	6 POINTS	5 POINTS	4 POINTS	3 POINTS	2 POINTS	1 POINT
LEARNER'S TOTAL SCORE											

SECTION A: (20 MARKS)

Question 1: Measuring Volume (5 marks)

You are provided with a measuring cylinder containing water.

a) Record the volume of water shown. (1 mark)

.....

b) State the SI unit used to measure volume. (1 mark)

.....

c) Name the apparatus used to measure this volume. (1 mark)
.....

d) Give one precaution to observe when reading the volume. (1 mark)
.....

e) Why is it important to take measurements at eye level? (1 mark)
.....

Question 2: Separation of Mixtures (5 marks)

You are given a mixture of sand and salt.

a) Name the method you would use to separate the mixture. (1 mark)
.....

b) Describe the procedure you would follow. (2 marks)
.....
.....

c) Name the process used to obtain salt after separation. (1 mark)
.....

d) State one application of this method in daily life. (1 mark)
.....

Question 3: Heating Experiment (5 marks)

A learner sets up a Bunsen burner, tripod stand and wire gauze to heat water.

a) Name the type of flame used for heating. (1 mark)
.....

b) What is the function of the wire gauze? (1 mark)
.....

c) State one safety precaution when using a Bunsen burner. (1 mark)
.....

d) What happens to water when heated for a long time? (1 mark)
.....

e) Name the process involved. (1 mark)
.....

Question 4: Human Body Observation (5 marks)

After running, a learner notices sweating.

a) Name the process by which sweat is produced. (1 mark)
.....

b) State the function of sweating. (1 mark)
.....

c) Name one waste product removed through sweat. (1 mark)
.....

d) Which organ is responsible for producing sweat? (1 mark)
.....

e) Why is sweating important during exercise? (1 mark)
.....

SECTION B: (10 MARKS)

Question 5: Density Investigation (5 marks)

A learner measured a metal block with the following dimensions:

Length = 10 cm

Width = 2 cm

Height = 5 cm

Mass = 200 g

a) Calculate the volume of the block. (2 marks)
.....

b) Calculate the density of the block. (2 marks)
.....

c) State the SI unit of density. (1 mark)
.....

Question 6: Observation and Conclusion (5 marks)

A learner tested three substances using litmus paper:

Substance	Red Litmus	Blue Litmus
A	No change	Turns red
B	Turns blue	No change
C	No change	No change

a) Identify substance A. (1 mark)
.....

b) Identify substance B. (1 mark)
.....

c) Identify substance C. (1 mark)
.....

d) What conclusion can you make about acids? (1 mark)
.....

e) State one safety rule when handling chemicals. (1 mark)
.....

- a) 50 cm³ / 50 mL
- b) Cubic metre (m³)
- c) Measuring cylinder
- d) Read the volume at eye level.
- e) To avoid parallax error.

2.

- a) Dissolving, filtration and evaporation
- b) Add water to dissolve the salt, filter to remove sand, then evaporate the filtrate to obtain salt.
- c) Evaporation / crystallization
- d) Obtaining salt from sea water / water purification.

3.

- a) Blue flame
- b) To distribute heat evenly and prevent the beaker from cracking.
- c) Tie long hair and keep flammable materials away from the flame.
- d) Water changes into steam / water vapour.
- e) Evaporation / boiling.

4.

- a) Sweating / perspiration
- b) To cool the body.
- c) Water / salts / urea
- d) Skin / sweat glands
- e) It helps regulate body temperature.

5.

a) Volume

$$V = l \times w \times h = 10 \times 2 \times 5 = 100 \text{ cm}^3$$

$$\text{Volume} = 100 \text{ cm}^3$$

b) Density

$$\rho = \frac{200}{100} = 2 \text{ g/cm}^3$$

$$\text{Density} = 2 \text{ g/cm}^3$$

c) kg/m³

6.

- a) Acid
- b) Base / alkali
- c) Neutral substance
- d) Acids turn blue litmus paper red.
- e) Wear gloves when handling chemicals.