KENYA NATIONAL EXAMINATION AND ASSESSMENT PREDICTION SERIES

ENDTERM 2 ASSESSMENT 2025

GRADE 9

INTEGRATED SCIENCE PP2

MARKING SCHEME

QUESTION ONE (20 marks)

Step	Procedure	Observation	Material Separated/Recovered
1	Initial Observation of Mixture	A heterogeneous mixture of white powder (maize flour and salt) and small, granular, yellowish/brownish particles (sand).	N/A
2	Sieving	What remains on sieve: Larger, gritty particles (sand)	What remains on sieve: Sand
		What passes through sieve: Fine white powder (maize flour and salt)	What passes through sieve: Maize flour and salt
3	Adding Water and Stirring	The white powder (maize flour and salt) mixes with water. Salt dissolves to form a clear solution, while maize flour remains suspended, making the water cloudy.	Salt (dissolved), Maize flour (suspended)
4	Filtration	Filtrate (liquid collected): Cloudy liquid (water and dissolved salt)	Filtrate (liquid collected): Salt solution
		Residue (on filter paper): White, pasty substance (maize flour)	Residue (on filter paper): Maize flour
5	Evaporation of Filtrate	What remains in evaporating dish: White crystalline solid	What remains in evaporating dish: Salt

(a) Name the separation technique used in step 2. (1 mark) Sieving

(b) Name the separation technique used in step 4. (1 mark) Filtration

(c) What were the three original components of the mixture? (3 marks)

1. Sand
2. Maize flour
3. Salt

(d) State three basic science skills you applied in this practical. (3 marks)

1. Observation
2. Measuring
3. Recording (or Communicating)
4. Experimenting (or Investigating)
5. Inferring (or Interpreting data)

QUESTION TWO (10 marks)

(a) Record your measurements: (i) Measured volume of water = **60 cm^3** (3 marks) (ii) Measured temperature of water = **(e.g., 25) °C** (3 marks) *(The actual temperature will depend on the ambient temperature of the water at the time of the practical. A typical room temperature water reading would be around 20-30°C. For the purpose of providing an answer, a placeholder like '25' is used, but in a real assessment, the student would read the thermometer.)*

(b) State the SI unit for volume. (1 mark) Cubic meter (m3)

(c) State the SI unit for temperature. (1 mark) Kelvin (K)

(d) Name the two main pieces of apparatus you used for measurement in this practical. (2 marks)

1. Measuring cylinder
2. Thermometer

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