CONFIDENTIAL GUIDE FOR TEACHERS

THE KENYA NATIONAL EXAMINATION AND ASSESSMENT PREDICTION SERIES

Teacher's Name		**TSC NO.**	
School Name		**School Code**	
Teacher's Signature		**Date**	

KENYA JUNIOR SCHOOL EDUCATION ASSESSMENT

905/2 INTEGRATED SCIENCE
PAPER 2 (*practical*)

TERM 2 ENDTERM 2025

Experiment: Separation of a Mixture (Sand, Maize Flour, Salt)

Overall Guidance for Teachers:

a) This experiment reinforces concepts of mixtures, solutions, and various separation techniques.
b) Ensure all listed apparatus and materials are prepared.
c) Emphasize careful execution of each separation step to minimize loss of material.
d) Safety with heat source is critical.

Preparation of Materials (Prior to Exam):

- **Mixture of Sand, Maize Flour, and Salt:** Prepare a homogenous mixture in advance. Ensure sand is visibly coarser than maize flour.
- **Water:** Tap water.
- **Sieve:** A sieve with mesh size that retains sand but allows maize flour and salt to pass.
- **Beaker:** For dissolving and filtering.
- **Filter Funnel:**
- **Filter Paper:** Appropriate size for the funnel.
- **Evaporating Dish:** Heat resistant.
- **Source of Heat:** Bunsen burner, spirit lamp, or hot plate.
- **Tripod Stand and Wire Gauze:** For heating.

Question One (20 marks)

Procedure Monitoring:

- **Step 1 (Initial Observation):**
  - **Teacher's Role:** Guide learners to describe the mixture's appearance.
- **Step 2 (Sieving):**
  - **Teacher's Role:** Ensure gentle shaking to effectively separate.
  - **Expected Outcome:** Sand remains on the sieve; maize flour and salt pass through.
- **Step 3 (Adding Water and Stirring):**
  - **Teacher's Role:** Ensure adequate stirring for salt to dissolve fully.
  - **Expected Outcome:** Salt dissolves, maize flour forms a suspension/settles, sand settles at the bottom.
- **Step 4 (Filtration):**

-INTEGRATED SCIENCE-