

THE KENYA NATIONAL EXAMINATIONS COUNCIL

SCHOOL BASED ASSESSMENT

SCIENCE AND TECHNOLOGY – GRADE 5

VISUALLY IMPAIRED LEARNER VERSION

Learner's Name: _____

Assessment Number: _____

Date: _____ School Name: _____

INSTRUCTIONS TO LEARNERS

1. *This paper consists of **10** questions.*
2. *Answer **ALL** the questions in the spaces provided.*

The grid below to be filled by the teacher after marking the learners' work. During uploading, the teacher to upload the scores per task.

Tasks	Living Things	Matter	Force and Energy
Question Numbers	1 - 4	5 - 7	8 -10
Max. Score	12	10	8
Learner's Score			

1. There are two plants. Plant A is a bean plant. Plant B is a fern plant.

a) Identify the flowering plant. (1 mark)

b) Name a plant that belongs to the same group as Plant B. (1 mark)

c) Why is it important to classify plants into groups? (1 mark)

2. A learner drew and labelled a flower. Label C points to one of the brightly coloured petals. Label D points to a green, leaf-like part beneath the petals called a sepal.

a) State the reason why the part labelled C is brightly coloured. (1 mark)

b) List one function of the part labelled D. (1 mark)

c) A learner removes all the flowers from a plant. State what is likely to happen to the plant's production of fruits and seeds. (1 mark)

3. Four animals are shown in this order:

- Animal 1: a cow.
- Animal 2: a fish.
- Animal 3: an eagle.
- Animal 4: a frog.

a) Classify each animal into its appropriate vertebrate group. (1 mark)

b) Explain why a frog can survive both in water and on land. (2 marks)

4. Parts of a human breathing system is labelled G and H. Label G points to the main air tube leading from the throat towards the lungs. Label H points to the large muscle below the lungs called the diaphragm.

a) A learner says that breathing would still occur normally if part H stopped moving.

i) Do you agree with the learner's statement? (1 mark)

ii) Give a reason for your answer. (1 mark)

b) The air passages connected to part G become blocked. State how the blockage might affect the person's breathing. (1 mark)

5. A container holds a mixture of three substances: dry beans, iron filings and sand.

a) A learner suggests using a magnet as the first step in separating the mixture.

i) State whether you agree or disagree with the learner's suggestion. (1 mark)

ii) Give a reason for your answer. (1 mark)

b) List the steps to separate the substances completely. (1 mark)

6. A river has visible rubbish, including plastic containers and other waste, along the river. Wastewater is also flowing into the river from a pipe. Smoke is visible from factory chimneys in the background.

a) i) Identify one observable water pollutant. (1 mark)

ii) State how the pollutant may have entered the water. (1 mark)

b) A community depends on this river for drinking water and fishing. Identify one possible effect of the pollution on the community. (1 mark)

c) Suggest one way of reducing the water pollution. (1 mark)

7. Dirty water is poured into a simple filter. From top to bottom, the filter contains sand, fine gravel and cotton wool. The filtered water collects in a container below.

a) Explain how filtering improves water quality. (1 mark)

b) A learner says that filtered water is always safe to drink.

i) Do you agree with the learner? (1 mark)

ii) Give a reason for your answer. (1 mark)

8. Two identical wooden boats are in water. Boat J is empty and is floating. Boat K has several heavy blocks placed inside it and is sinking.

a) Explain why Boat J floats. (2 marks)

b) State one factor that caused Boat K to sink. (1 mark)

c) Explain one importance of floaters during floods. (1 mark)

9. A learner is beating a drum with two drumsticks.

a) State how the sound produced will change when the drum is beaten harder. (1 mark)

b) State one possible effect of the sound in (a) on the learners. (1 mark)

10. Two spoons are placed in a cup of hot tea. One spoon is made of metal and the other spoon is made of wood.

a) Identify the spoon that would be safer to hold after several minutes. (1 mark)

b) Give a reason for your answer. (1 mark)

END OF PAPER