



GAUTENG PROVINCE
EDUCATION
REPUBLIC OF SOUTH AFRICA

GAUTENG DEPARTMENT OF EDUCATION

BASELINE ASSESSMENT

2026

TERM 1

GRADE 8

NATURAL SCIENCES

TIME: 1 HOUR

GRADE: 8

MARKS: 45

SCHOOL NAME	
NAME of School attended in 2025	
CLASS (e.g., 8A)	
STRAND	LIFE AND LIVING
SURNAME	
NAME	

Questions	1	2	3	4		TOTAL
Mark Allocation	8	8	10	14		40
Learner Marks						

INSTRUCTIONS

1. This baseline assessment paper consists of 06 pages in total including the cover page.
2. Please write neatly and legibly.
3. Read the instructions of each question carefully before attempting to answer.
4. All questions must be answered in the spaces provided on this question paper.
5. You are required to answer **ALL** the questions

SECTION A: Multiple

QUESTION 1

1.1 Four options are given as possible answers to the following questions. Every question has only ONE correct answer. Choose the correct answer and write down only the letter (A-D) next to the question number (1.1 – 1.4)

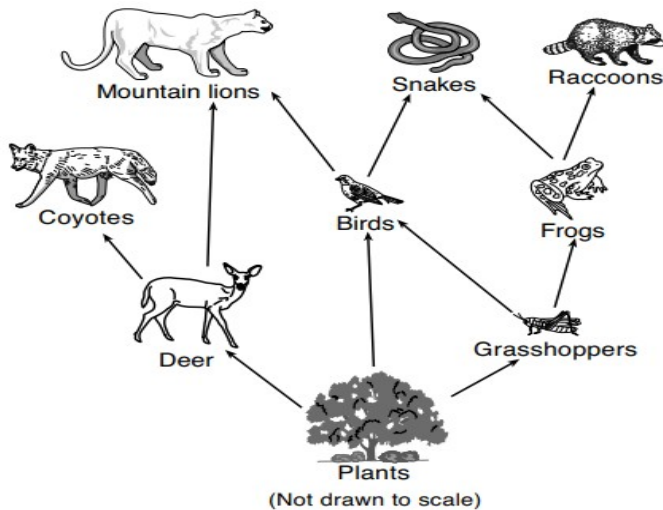
- 1.1 The products of photosynthesis are ... (1)
- A glucose and oxygen
 - B carbon dioxide and oxygen
 - C glucose and carbon dioxide
 - D carbon dioxide and water
- 1.2 Which of the following is NOT an example of a micro-organism? (1)
- A bacterium
 - B mushroom
 - C protista
 - D virus
- 1.3 Which one of the following is arranged from smallest to largest? (1)
- A population, community, ecosystem, biosphere

- B ecosystem, biosphere, community, population
- C biosphere, ecosystem, community, population
- D biosphere, ecosystem, population, community

1.4 Jade wants to test whether the gas produced during an experiment is carbon dioxide gas. Which one of the following reactants can Jade use to test for the presence of carbon dioxide gas? (1)

- A copper hydroxide
- B iodine solution
- C clear lime water
- D milky white lime water

Base your answers to questions 1.5 through 1.7 on the diagram below. The diagram represents a food web. (1)



1.5 According to this food web, which organism is an omnivore? (1)

- A. deer
- B. Grasshopper
- C. bird
- D. raccoon

1.6 Which food chain best represents the transfer of energy from plants to mountain lions in this food web? (1)

- A. plants → deer → birds → mountain lions
- B. plants → deer → coyotes → mountain lions

C. plants → grasshoppers → frogs → mountain lions

plants → grasshoppers → birds → mountain lion

1.7 Based on the diagram, which interaction demonstrates competition between organisms? (1)

A. plants and birds compete for the grasshoppers

B. coyotes and mountain lions compete for the deer

C. snakes and frogs compete for the raccoons

D. frogs and grasshoppers compete for the plants

1.8 A learner wondered if different types of plants would produce different amounts of oxygen. A pea plant, a fern, and a cactus were growing in equal-sized containers with equal amounts of soil. The learner measured the amount of oxygen produced by each. (1)

State one possible hypothesis for this experiment.

A. The amount of fruit produced depends on the type of tree.

B. The amount of oxygen produced depends on the type of soil.

C. The amount of oxygen produced depends on the type of tree. A pea plant will produce a different amount of oxygen compared to the fern plant or cactus plant.

D. A pea plant will produce more oxygen compared to the fern plant or cactus plant.

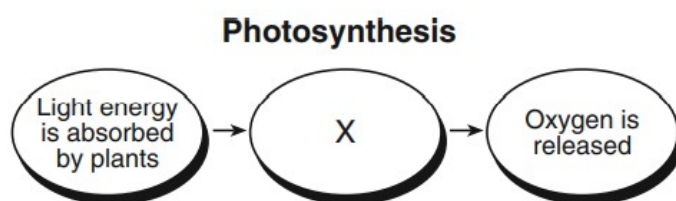
[8]

Question 2

Give ONE word/term for each of the following descriptions. Write only the word/term next to the question number (2.1 – 2.4)

2.1 Which structure is found only in plant cells and helps plants capture energy from sunlight? (2)

2.2 The flowchart below represents the process of photosynthesis. One step in the process is labelled X. (2)



Which activity occurs at X?

2.3 Which gas do animals need to carry out life processes? (2)

2.4 The variety of plant and animal species in a specific area. (2)

[8]

SECTION B

QUESTION 3

An investigation was conducted to find out the effect of the amount of sugar and different temperatures on the growth of yeast.

3.1 Identify the aim of the investigation (2)

3.2 Name the group of organisms that yeast belongs to. (2)

3.3 Identify the independent variable in the investigation. (2)

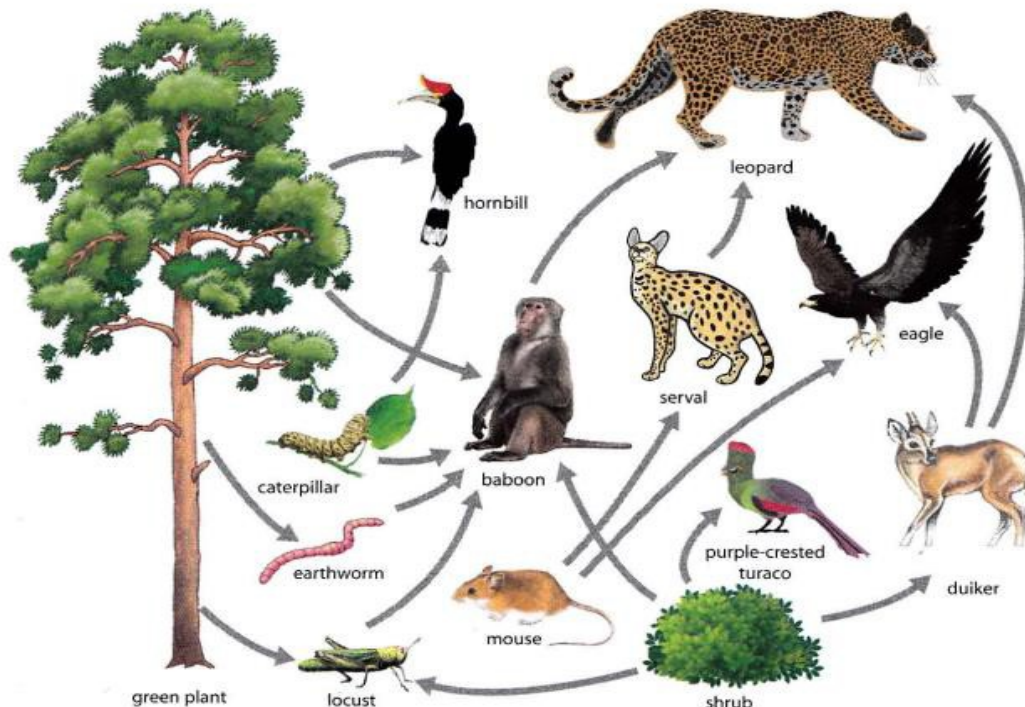
3.4 Name the dependent variable and explain how it was measured. (2)

3.5 Suggest reasons why there are “holes” in bread? (2)

[10]

Question 4

Study the following diagram and answer questions that follows



4.1 Select organisms from the food web and write one food chain with four links. (5)

4.2 Name an omnivore in the food web. (1)

4.3 Suggest a reason why most food chains begin with green plants. (2) (2)

4.4 Predict what would happen to the mice if all of the eagles dies from a disease. (2) (2)

- 4.5 Energy pyramids are used to show the relationships between living things.
- 4.5. Explain what an energy pyramid shows us. (2)
1
- 4.5. Explain why the trophic levels become smaller at each level as you move (2)
2 up the pyramid.
- [14]**
- GRAND TOTAL: [40]**