

SMARTWIZ

GRADE 5 NATURAL SCIENCE EXAM

MARKS: 50

MARKS	
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TIME: 1 hour

SCHOOL _____

CLASS (e.g. 4A) _____

SURNAME _____

NAME _____

MYST PATHWORKS

Instructions for Students:

- > Read all instructions carefully before beginning the exam.
- > Write your name and student ID clearly on the answer sheet/booklet.
- > Answer all questions unless otherwise stated.
- > Show all your work/calculations where applicable.
- > Write clearly and legibly.
- > Use blue or black ink only. * Do not use correction fluid/tape.
- > No electronic devices (calculators, phones, etc.) are allowed unless explicitly permitted.
- > Raise your hand if you have any questions.
- > Do not talk to other students during the exam.
- > Any form of cheating will result in disqualification.

QUESTION 1: Life and Living (10 Marks)



1.1 What are the five senses of the human body? (5)

1.2 Name two functions of the skeleton. (2)

1.3 What do herbivores eat? (1)

1.4 Give two examples of vertebrate animals. (2)

QUESTION 2: Matter and Materials (10 Marks)

2.1 What is the difference between a solid and a gas? (2)

2.2 Tick (✓) the correct property for each material. (4)

Material	Hard	Soft	Transparent	Opaque
Brick	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sponge	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Glass	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Wood	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

2.3 What happens when you heat ice? (1)

2.4 Give three examples of liquids. (3)

QUESTION 3: Energy and Change (10 Marks)

3.1 What is energy? (2)

3.2 Name two renewable sources of energy. (2)

3.3 List three appliances that use electricity in the home. (3)

3.4 Why should we save energy? (2)

3.5 What is the main source of energy on Earth? (1)

QUESTION 4: Planet Earth and Beyond (10 Marks)

4.1 What is the Earth made of? Name three layers. (3)

4.2 What is the name of our galaxy? (1)



4.3 Why do we not fall off the Earth? (2)

4.4 List two ways humans harm the environment. (2)

4.5 What causes day and night? (2)

QUESTION 5: Processes and Properties of Materials (10 Marks)

5.1 What is a property of a material? (2)

5.2 Write R for reversible or I for irreversible change: (4)

- Cutting paper: _____
- Rusting metal: _____
- Boiling water: _____
- Baking a cake: _____

5.3 Name two methods to separate a mixture. (2)

5.4 What do we mean by dissolving? (2)

TOTAL: 50 MARKS

MEMO: GRADE 5 NATURAL SCIENCE – PAPER 4

QUESTION 1: Life and Living (10 Marks)

1.1 Five senses of the human body:

- Sight ✓
- Hearing ✓
- Smell ✓
- Taste ✓
- Touch ✓
(5 marks)

1.2 Two functions of the skeleton:

- Supports the body ✓
- Protects internal organs ✓
(2 marks)

1.3 Herbivores eat:

- Plants / grass / leaves ✓
(1 mark)

1.4 Two examples of vertebrate animals:

- Dog ✓
- Fish ✓
(or any other vertebrate like cat, bird, horse)
(2 marks)

QUESTION 2: Matter and Materials (10 Marks)

2.1 Difference between solid and gas:

- Solid has a fixed shape and volume.
- Gas has no fixed shape or volume; it spreads to fill the space.

(2 marks)

2.3 When you heat ice:

- It melts and becomes water (liquid).

(1 mark)

2.4 Three examples of liquids:

- Water ✓
- Milk ✓
- Juice ✓
(or oil, tea, etc.)

(3 marks)

QUESTION 3: Energy and Change (10 Marks)

3.1 What is energy?

- Energy is the ability to do work or cause change.

(2 marks)

3.2 Two renewable sources of energy:

- Solar energy ✓✓
- Wind energy ✓✓
(or water/hydro, biomass)
(2 marks)

3.3 Three appliances that use electricity in the home:

- Television ✓✓
- Refrigerator ✓✓
- Light bulb ✓✓
(or radio, stove, fan)
(3 marks)

3.4 Why should we save energy?

- To protect the environment.
- To save money.
(2 marks)

3.5 Main source of energy on Earth:

- The sun.
(1 mark)
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QUESTION 4: Planet Earth and Beyond (10 Marks)

4.1 Three layers of the Earth:

- Crust ✓✓
- Mantle ✓✓

- Core ✓
(3 marks)

4.2 Name of our galaxy:

- The Milky Way.
(1 mark)

4.3 Why we do not fall off the Earth:

- Because of gravity which pulls us towards the Earth's center.
(2 marks)

4.4 Two ways humans harm the environment:

- Cutting down trees (deforestation).
- Pollution (littering, smoke).
(2 marks)

4.5 What causes day and night?

- The Earth rotates on its axis.
- When the side faces the sun, it is day; the other side is night.
(2 marks)

QUESTION 5: Processes and Properties of Materials (10 Marks)

5.1 What is a property of a material?

- A property is a characteristic or quality of a material, such as hardness, color, or texture.
(2 marks)

5.2 Reversible or irreversible change:

- Cutting paper: I (irreversible)

- Rusting metal: **I**
- Boiling water: **R** (reversible)
- Baking a cake: **I**
(4 marks – 1 mark each)

5.3 Two methods to separate a mixture:

- Sieving.
- Filtering.
(or evaporation, sorting)
(2 marks)

5.4 What do we mean by dissolving?

- When a solid mixes with a liquid and disappears to form a solution.
(2 marks)

TOTAL: 50 MARKS