

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 do plants need to grow? Name four things. (4)

1.2 What do we call animals that eat both plants and animals? (1)

1.3 Give one example of a carnivore. (1)

1.4 Write two uses of plants for humans. (2)

1.5 What is photosynthesis? (2)

QUESTION 2: Matter and Materials (10 Marks)

2.1 Choose the correct word: (Write the word) (5)

- A plastic bottle is _____. (solid/liquid/gas)

Answer: _____

- Steam is a _____. (liquid/gas/solid)

Answer: _____

- Water changes to ice by _____. (melting/freezing/boiling)

Answer: _____

- A sponge feels _____. (smooth/hard/soft)

Answer: _____

- Glass is _____ because you can see through it.

Answer: _____

2.2 Give two materials that can dissolve in water. (2)

2.3 Name three properties of metal. (3)

QUESTION 3: Energy and Change (10 Marks)

3.1 What is the source of energy for plants? (1)

3.2 Name two sources of heat energy. (2)

3.3 Write one use of energy in your home. (1)

3.4 Why must we use electricity carefully? (2)

3.5 Match the energy source with its correct use by completing the table. (4)

Energy Source	Use
Solar energy	<hr/>
Electrical energy	<hr/>
Food energy	<hr/>
Wind energy	<hr/>

QUESTION 4: Planet Earth and Beyond (10 Marks)

4.1 What is pollution? (2)

4.2 Name two ways people can help protect nature. (2)

4.3 What does the sun give us? (2)

4.4 Fill in the missing words: (4)

- The Earth rotates on its _____.
- We see the moon because it reflects _____.
- Stars are balls of burning _____.
- The sun appears to rise in the _____.

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

5.1 What is a mixture? (2)

5.2 Give one example of a mixture you use at home. (1)

5.3 How can we separate stones from rice? (1)

5.4 State whether the following changes are reversible or irreversible. (4)

- Melting butter: _____
- Burning wood: _____
- Dissolving sugar: _____
- Frying an egg: _____

5.5 Give two reasons why recycling is important. (2)

TOTAL: 50 MARKS

MEMO: GRADE 5 NATURAL SCIENCE

QUESTION 1: Life and Living (10 Marks)

1.1 What do plants need to grow?

- Sunlight ✓
- Water ✓
- Air ✓
- Soil/nutrients ✓
(4 marks)

1.2 Animals that eat both plants and animals are called:

- Omnivores ✓
(1 mark)

1.3 Example of a carnivore:

- Lion / Tiger / Eagle / Crocodile ✓
(1 mark)

1.4 Two uses of plants for humans:

- Food ✓
- Medicine / Oxygen / Shelter / Furniture ✓
(2 marks)

1.5 Photosynthesis:

- It is the process where plants make their own food using sunlight, water, and carbon dioxide. ✓
(2 marks)

QUESTION 2: Matter and Materials (10 Marks)

2.1 Fill in the correct words:

- A plastic bottle is **solid** ✓
- Steam is a **gas** ✓
- Water changes to ice by **freezing** ✓
- A sponge feels **soft** ✓
- Glass is **transparent** ✓
(5 marks)

2.2 Two materials that can dissolve in water:

- Salt ✓
- Sugar ✓
(2 marks)

2.3 Three properties of metal:

- Shiny ✓
- Strong ✓
- Hard / Can conduct electricity / Can be bent ✓
(3 marks)

QUESTION 3: Energy and Change (10 Marks)

3.1 Source of energy for plants:

- The sun ✓
(1 mark)

3.2 Two sources of heat energy:

- Fire ✓
- Electricity / Gas / Sun ✓
(2 marks)

3.3 One use of energy in your home:

- Cooking ✓
- Heating water ✓
- Lighting ✓
(1 mark)

3.4 Why must we use electricity carefully?

- To avoid waste ✓
- To reduce cost ✓
- To prevent load shedding / safety ✓
(2 marks)

3.5 Match energy sources with uses:

Energy Source

Use

Solar energy

Heating water / solar panels ✓

Electrical energy

Lights / appliances / TV ✓

Energy Source

Use

Food energy

Body movement / walking / thinking ✓

Wind energy

Turning windmills / generating power ✓

(4 marks – 1 mark each)

QUESTION 4: Planet Earth and Beyond (10 Marks)

4.1 Pollution:

- Pollution is when harmful things are added to the environment like smoke, litter or chemicals. ✓

(2 marks)

4.2 Two ways to protect nature:

- Plant trees ✓
- Do not litter / recycle / clean water ✓

(2 marks)

4.3 What does the sun give us?

- Light ✓
- Heat ✓

(2 marks)

4.4 Fill in the blanks:

- The Earth rotates on its **axis** ✓
- We see the moon because it reflects **sunlight** ✓

- Stars are balls of burning **gas** ✓
 - The sun appears to rise in the **east** ✓
(4 marks – 1 mark each)
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QUESTION 5: Processes and Properties of Materials (10 Marks)

5.1 Mixture:

- A mixture is made when two or more things are combined but can still be separated. ✓
(2 marks)

5.2 Example of mixture:

- Cereal and milk / sand and water / salad ✓
(1 mark)

5.3 Separate stones from rice:

- By hand / using a sieve ✓
(1 mark)

5.4 Reversible (R) or Irreversible (I):

- Melting butter: **R** ✓
- Burning wood: **I** ✓
- Dissolving sugar: **R** ✓
- Frying an egg: **I** ✓
(4 marks)

5.5 Two reasons why recycling is important:

- Saves natural resources ✓

- Reduces waste / protects the environment ✓
(2 marks)
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TOTAL: 50 MARKS

