

Year 5 – Assessment Study Guide

Term 2 - 2025-2026

Subject	Topics included	Refer to
PowerPoint presentations are saved in -Assessments Topics – Term 2 - Science - with the following folder name		
SCIENCE	<u>Materials</u> ➤ Properties of materials ➤ Electrical conductors and insulators ➤ Thermal conductors and insulators <u>Types of changes</u> ➤ Reversible changes ➤ Separating Mixtures ➤ Melting ➤ Physical change	PowerPoint Presentation saved in General-Files- Assessments Topics Term 2 -Science, with the given folder name- Materials Topic Book pages: 1,2,3,5,6,7,8, 10, 11, 12 Workbook pages: 1,2,5,6,7, 9, 10, 12 Worksheets PowerPoint Presentation and worksheets saved in General-Files-Assessments Topics-Science, with the given folder name- Types of changes <u>Textbook Reference:</u> Topic book Pages: 1,3, 6, 7, 9, 10 Workbook pages: 1, 7, 9 Worksheets SAMPLE PRACTICE WORKSHEETS UPLOADED AS – SCIENCE PRACTICE SHEETS

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b) Define:

- Thermal conductor

- Thermal insulator

c) Name two thermal conductors and two thermal insulators.

Question 3 – Changes of State

a) Identify the process for each change:

Solid → Liquid _____

Liquid → Gas _____

Liquid → Solid _____

b) Define reversible change.

c) Define irreversible change.

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Section B: Properties of Materials

Question 4. State the correct term.

- a) The substances objects are made from are called _____.
- b) The temperature at which a liquid changes into a gas is called the _____.
- c) The temperature at which a solid changes into a liquid is called the _____.
- d) The boiling point of the liquid is _____.
- e) The melting and freezing points of water are _____.

Question 5 – Properties

a) Identify the property that means:

- Cannot see through = _____
- Able to soak up water = _____
- Able to protect from water = _____

b) Compare transparent and translucent materials.

(Write one similarity or difference.)

<u>Transparent:</u>	<u>Translucent:</u>

Section C: Applying Scientific Knowledge

Question 6 – Separating Mixtures

a) List three ways of separating mixtures.

- _____
- _____
- _____

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b) Sand and iron filings are mixed together.

i) Suggest a suitable method to separate them. _____

ii) Explain why your method works. _____

c) Salt is mixed with water.

i) Outline how you would separate the salt from water. _____

ii) Predict what would happen if you left the salt water in the sun for several days. _____

Question 7 – Physical Changes

a) Define a physical change.

b) Ice melting and paper burning are both changes.

i) Compare these two changes.

Ice melting: _____ Paper burning: _____

ii) Justify which one is irreversible. _____

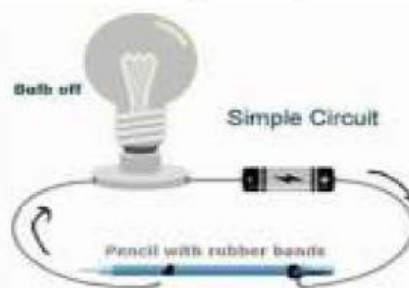
Section D: Experiment-Based Questions

Question 8 – Electrical Investigation

A student builds a simple circuit to test various materials (a coin, a rubber, a plastic spoon, and a nail).



COIN



PENCIL

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a) Describe how the student can test if a material is a conductor.

b) The bulb lights up when the nail is tested.

Interpret this result. _____

c) The rubber does not allow the bulb to light. Explain why.

Question 9 – Thermal Conductivity Experiment

A student places a metal spoon and a wooden spoon in hot water.

a) Predict which spoon will become hot faster. _____

b) Explain your answer using scientific vocabulary.



c) Evaluate why saucepan handles are often made of plastic instead of metal.

Question 10 – Absorbency Investigation

A student tests three materials: **cotton**, **plastic** and **paper towel** to see which absorbs the most water.



a) Predict which material will absorb the most water. _____

b) After the test, the student observes:

- Cotton absorbed a lot of water.
- The paper towel absorbed some water.
- Plastic did not absorb water.

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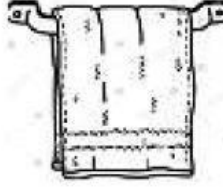
Explain why plastic did not absorb water.

d) Suggest one everyday object that needs to be absorbent. Explain why.

Section E: Materials & Their Properties

Question 11

For each object below, **identify** two important properties and **justify** your choice.

Object	Property 1	Property 2	Justification
Fridge magnet 			
Bath towel 			
Steel keys 			
Plastic umbrella 			

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Question 12 – Everyday Materials

Some objects are made from more than one material.

Choose any four objects from the list (Chair, Pencil, Glasses, Saucepan, Coat, Shoes).

a) Identify the materials used.

b) Explain why each material is suitable.

Material	Explanation

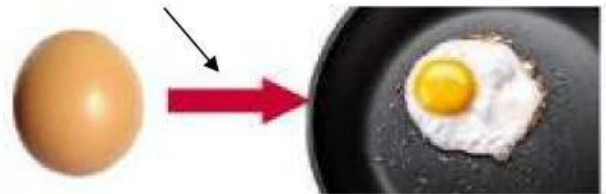
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Section F: Thinking Scientifically

Question 13 – Reversible & Irreversible Changes



a) Analyse how reversible and irreversible changes are different.

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b) Bread baking is an irreversible change. Explain why it cannot be reversed.

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c) List a few examples of reversible and irreversible changes.

<u>Reversible changes</u>	<u>Irreversible changes</u>

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Question 14

Challenge Question

Real-Life Scientific Design Challenge

A company wants to design a lunch box that:

- Keeps food warm
- Is lightweight
- Does not break easily

a) Analyse what properties the material should have.

b) The company is choosing between metal, plastic and glass.

i) State one advantage of each material.

- Metal: _____
- Plastic: _____
- Glass: _____

ii) Identify which material you think is the best choice. _____

iii) Explain why you chose that material using words such as:

insulator, strong, lightweight or durable.

c) Suggest one improvement to make the lunch box better at keeping food warm.

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