



PHYSICAL CHANGES



Name : _____

Class : _____

Date : _____

Read – Understand – Apply!

1 WHAT IS A PHYSICAL CHANGE?

A physical change is a change that affects the shape, size, or state of matter of a substance.

No new substance is formed.

The substance remains the same.

Example: Ice melting into water, paper cut into pieces, water freezing into ice.

2 CHARACTERISTICS OF PHYSICAL CHANGE

- 1 No new substance is formed.**
The substance remains the same.
Example: Ice → Water



- 2 Only physical properties change.**
Shape, size, form, or state of matter may change.
Example: Paper → Pieces of paper



- 3 Some physical changes are reversible.**
The change can be changed back to the original form.
Example: Ice → Water → Ice

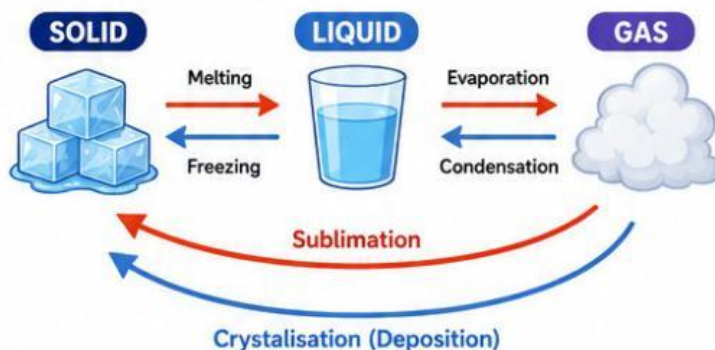


3 EXAMPLES: PHYSICAL CHANGE OR NOT?

Tick (✓) the correct column!

EVENT	PHYSICAL CHANGE	NOT A PHYSICAL CHANGE
Ice melts	☐	☐
Paper is cut	☐	☐
Water evaporates	☐	☐
A glass is broken	☐	☐
Wood is burned	☐	☐
Water freezes	☐	☐
An egg is cooked	☐	☐
A can is crushed	☐	☐

4 THE SIX CHANGES OF STATE OF MATTER



5 MATCH THE PROCESS WITH THE CORRECT EXAMPLE!

Write the correct letter (A–F) for each process.

1. Melting	☐
2. Freezing	☐
3. Evaporation	☐
4. Condensation	☐
5. Sublimation	☐
6. Crystallisation (Deposition)	☐

6 COMPLETE THE TABLE!

Fill in the correct state of matter and whether heat is gained or lost.

PROCESS	FROM	TO	HEAT GAINED / LOST
Melting	Solid	_____	_____
Freezing	_____	Solid	_____
Evaporation	Liquid	_____	_____
Condensation	_____	Liquid	_____
Sublimation	Solid	_____	_____
Crystallisation (Deposition)	_____	Solid	_____

7 THINK LIKE A SCIENTIST!

- 1** You put ice in a cup and leave it on the table. After a while, the ice becomes water.



- a. What process happened? _____
b. State change: _____ → _____
c. Is this a physical change? Why? _____

- 2** You take a cold drink from the refrigerator. Water drops appear on the outside of the can.



- a. What process happened? _____
b. State change: _____ → _____



REMEMBER: Physical change changes the form of a substance, but **no new substance** is formed.



CHEMICAL CHANGE

READ • OBSERVE • THINK!

Name : _____

Class : _____

Date : _____

1 WHAT IS A CHEMICAL CHANGE?

A chemical change is a change that produces one or more **NEW SUBSTANCES**.

The new substance has different properties from the original substance.



REMEMBER!

**Chemical Change =
New Substance Formed!**



Wood

Ash and smoke



Raw egg

Cooked egg



Iron

Rust

2 CHARACTERISTICS OF CHEMICAL CHANGE



1 A NEW SUBSTANCE IS FORMED

The original substance changes into a different substance.

Example: Iron → Rust



2 COLOR MAY CHANGE

A substance may change color during a chemical change.

Example: Iron → reddish-brown rust



3 GAS MAY BE PRODUCED

Some chemical changes produce gas.

Example: A reaction may create bubbles or gas.



4 ENERGY MAY CHANGE

A chemical change may release or absorb energy.

Example: Burning wood produces heat and light.

3 WHICH ONES ARE CHEMICAL CHANGES?

Put a ✓ in the correct box!

EVENT	CHEMICAL CHANGE	NOT A CHEMICAL CHANGE
 Ice melts	☐	☐
 Wood burns	☐	☐
 Paper is cut	☐	☐
 Iron rusts	☐	☐

EVENT	CHEMICAL CHANGE	NOT A CHEMICAL CHANGE
 An egg is cooked	☐	☐
 Water freezes	☐	☐
 A banana turns brown	☐	☐
 A can is crushed	☐	☐

4 SPOT THE EVIDENCE!

Look at each event. What sign of chemical change can you observe? Tick (✓) all that apply!

A Iron rusting



- ☐ New substance formed
- ☐ Color change
- ☐ Gas produced
- ☐ Heat or light produced

B Wood burning



- ☐ New substance formed
- ☐ Color change
- ☐ Gas or smoke produced
- ☐ Heat or light produced

C Cooking an egg



- ☐ New substance formed
- ☐ Color or texture changes
- ☐ Gas produced
- ☐ The change is difficult to reverse



FINAL MISSION!

A chemical change happens when a _____ is formed.

Give one example of a chemical change:

Why is it a chemical change?



REMEMBER!

PHYSICAL CHANGE

Same substance →
Different form

Example:

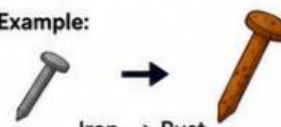


Ice → Water

CHEMICAL CHANGE

Original substance →
New substance

Example:



Iron → Rust