SNC 1D Date: Oct. 5/2021 **Changes in Matter**

Physical Change

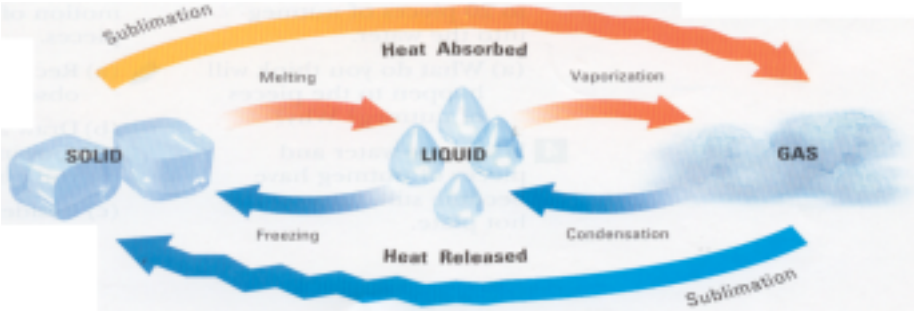
Alters only the **form** or **state** of a substance (freezing, breaking, melting). **No** new substance is created.

The chemical **composition** remains the same.

It is usually temporary or **reversible**. The substance can usually return to the way it was before.

Types of Physical Change Examples:

1. Change of State Ice Melting
2. Dissolving Mixing sugar in tea
3. Change of Form Chopping wood



Changes of state	Heat added or lost	Two everyday examples	
Freezing	Lost	Ice cubes	Ice cream
Condensation	Lost	Mirror Fogging	Steamy mirror after shower
Vapourization	Added	Drying Clothes	Wet hair drying
Melting	Added	Ice cream in the sun	Ice cubes in drinks
Sublimation (gas to solid)	Lost	Water vapour to ice	Snow from water vapour

Sublimation (solid to gas)	Added	F	Solid fragrance tablets

SNC 1D Date: Oct. 5/2021 **Chemical Change**

Changes a substance into a **new** substance that has different **physical** & **chemical properties** & a new **chemical formula**.

Chemical changes are **not** usually reversible. The substance **cannot** be changed into what it was before.

Chemical changes are the result of **chemical reactions**/bonds.

Examples: - Cooking an egg
- A car rusting
- Burning wood
- Digesting food

Signs that a chemical change has happened:

1. A permanent change in **colour**.
2. Bubbles of **gas** are produced.
3. Two solutions mix to form a **solid** called a **precipitate**.
4. Energy in the form of **heat** or **light** is released or absorbed.
5. **Electricity** is produced.
6. The change is **not easily reversed**. **

What type of change is occurring in this candle? Explain?

Both a physical change and a chemical change are occurring in this candle. The wax dripping is a physical change, and is caused by the flame which is a chemical change.