States of Matter Notes

States of matter - The **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** in which a substance can exist

Matter is made up of tiny particles called **\_\_\_\_\_\_\_\_\_\_\_\_** and **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

* They are always **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** and **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

Particles of a solid –

Particles of a liquid –

Particles of a gas –

Solid -

Two kinds:

1. Crystalline



Examples:

1. Amorphous



Examples:

Liquid –

Surface tension – a **\_\_\_\_\_\_\_\_\_\_\_\_** that acts on the **surface** of the liquid causing **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** drops

Viscosity –

High viscosity –

Low viscosity –

Gas –

Behavior is affected by:

Temperature – how **\_\_\_\_\_\_\_\_\_\_\_** the **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** in an object are **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

* The **\_\_\_\_\_\_\_\_\_\_\_\_\_\_** the particles are moving, the more **\_\_\_\_\_\_\_\_\_\_\_\_\_\_** they have.
* On a hot day, a balloon will \_\_\_\_\_\_\_\_\_\_\_\_
* On a cold day, a balloon will \_\_\_\_\_\_\_\_\_\_\_\_\_

Volume - The amount of **\_\_\_\_\_\_\_\_\_\_\_\_\_** an object **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

* + - Gases **\_\_\_\_\_\_\_\_** their containers, **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**
    - The particles in a gas are **\_\_\_\_\_\_\_\_\_\_\_\_\_** so they can be **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

Pressure - The **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** on the area of a surface

* Adding more **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** to a container **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

Scientists found out that temperature, pressure and volume are **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.** Changing \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ will change the **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

1. Boyle’s Law - Gas volume **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** as pressure **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**, if temperature **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**
2. Charles’s Law - If pressure **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**, volume will **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** as temperature **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

Change of state – the change from \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

The substance \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

To change a state, you must \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Melting –

* Melting point - \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ at which a solid will change to a \_\_\_\_\_\_\_\_\_\_\_\_\_\_
  + Water =

Freezing –



* Freezing point – temp. at which a \_\_\_\_\_\_\_\_\_\_\_\_\_\_ will change to a \_\_\_\_\_\_\_\_\_\_\_\_\_\_
  + Water =

Evaporation –

* Boiling point – temp. at which a \_\_\_\_\_\_\_\_\_\_\_\_\_\_ changes to a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
  + Water =

Condensation –

* Condensation point – temp. at which a \_\_\_\_\_\_\_\_\_\_\_\_\_\_ changes to a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
  + Water =

Sublimation –

* Example:

Deposition –

* Example:

4th State of Matter?

Plasma –

Examples: