Subject

# BST

Topic

# MATTER

Class

# JSS1

# OBJECTIVES

At the end of the lesson students should be able to:

1. Define the term matter.
2. Recognize that all living and living things are made up of matter.
3. List the distinguishing characteristics of living and non-living things.
4. List the three states of matter as the change in state.
5. State the importance of plant and animals to human beings

# INTRODUCTION

All materials in the world around will have two qualities in common is each occupy space an I weight. Since all things in and around us have these qualities, in common, they are put together in one group called Matter.

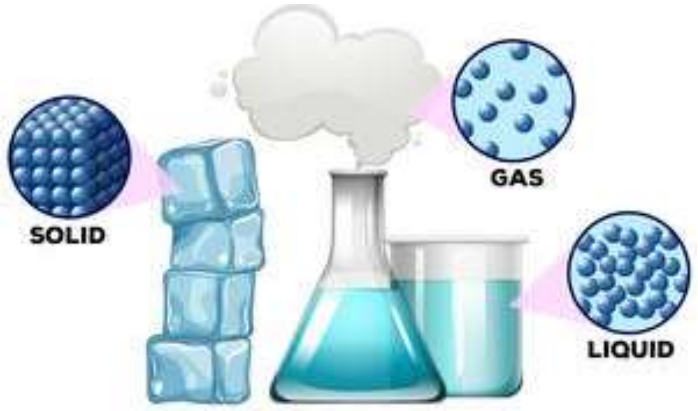
Matter can therefore be defined as anything that has mass (weight) and occupy space. Matter is made up of small parts called particles.

**States of Matter:** There are 3 states of matter namely Solid, Liquid and Gas.

## States of Matter:

There are 3 states of matter namely

1. Solid
2. Liquid
3. Gas.



The three states of matter can be disguised from each other through the following properties.

- Volume
- Shape
- Compressibility
- Density
- Movement of particles.

# Properties of states of matter

**SOLID STATE:** The particles in solid are regularly arranged, fairly firmly held together. They have definite shape, volume. They are not compressible and they are less dense. Examples are stone, ice block, piece of chalk, bottles etc.

**LIQUID STATE:** The particles are held so firmly together and are further set apart and are free to move. Liquid has no definite shape but rather take the shapes of the container.

- Has a definite volume
- They are incompressible and less dense. Examples are water, kerosene, petrol, soft drink etc.

**GASEOUS STATE:** Particle are further set apart, flows freely and fills any into which it is put. It has no definite shape, no definite least dense of the 3 state.

They can be compressed – example are oxygen, Carbon(iv) oxides, not gases, perfumes

# Change of State of Matter

All matter are interchangeable that is it can change from one state to the other. Below is an illustration of how matter can change from one state to the other with

examples.

State 1: solid – liquid (Melting) ice block – water

State 2: liquid – solid (Freezing) water – ice block

State 3: liquid - Gas (Evaporate) water – steam

Stages 4: Gas – liquid (Condensation)

Stages 5: Solid – Gas (Sublimation)

**Melting:** This is a process where a solid changes freely into a liquid.

**Melting point:** This is the temperature, at which a solid changes freely from solid to liquid.

**Boiling:** This is a process where a liquid changes into vapour.

**Boiling Point:** This is the temperature at the liquid changes freely into gas (vapour).

**Condensation:** This is when a gas changes into a liquid e.g. steam to water.

**Sublimation**

This when solid changes directly into a gas.

It should be noted that melting, boiling and sublimation involve heat while condensation and freezing does not involve heating.

# THANK YOU
# FOR WATCHING!