SCI – MATTER

Matter is anything that has mass and occupies space. Mass can be likened to weight, in other words we could redefine matter as anything that has weight and occupies space. With this definition, we would find that almost everything in the world is matter as they have weight and occupies space. As such there are living and non-living matter. The living matter are called living things while the non-living matters are called non-living things.

A matter contains smaller matter inside of it. For example, a human is a matter and he has a stomach, the stomach is a matter. Matter can be reduced progressively until it results into particles that are indivisible. We can call these particles atoms or molecules.

Kinds (States) of Matter

There are three states of matter: solid, liquid and gas.

- Solid: solids have indivisible particles (molecules or atoms) that are very closely packed, and are held firmly together by forces of cohesion, such that its particles cannot move but can vibrate about their fixed position. Examples: ice, humans, plastics, etc.
- Liquid: liquids have their particles to be a bit free than solids. The forces of cohesion that holds the particles of a liquid are weaker than those of solids as a result they can vibrate, rotate and translate. A liquid still possesses a fixed volume but do not have a fixed shape. Examples: kerosene, water, grease, etc.
- Gas: in a gas, the particles have much more kinetic energy than those in a liquid. The cohesive forces in a gas are negligible and the particles are free to move about in any direction at great speed, restricted only by the walls of the container. A gas has no definite shape and no definite volume. Examples: oxygen, carbon dioxide, nitrogen, etc.

Missing scripts → elements, compounds, and mixtures.