Molecules- Are two or more atoms which are chemically bounded. All compounds are classed as molecules.

Compounds- When two or more different elements join together/combine chemically they form a compound.

Mixtures- Are a combination of two or more substances that do not bond hence can be easily separated.

Mechanical separation methods- A method which can successfully separate something without the use of chemicals.

Physical properties- Properties of a substance that can be displayed without any change in chemical composition.

Physical change- A change in shape, size or state that does not change the chemical composition of the substance. This change does not cause a new substance to be formed. This change can be reversed. Example: Heating up water, snapping a ruler in half, cutting paper, growing.

Chemical change- A change in the chemical composition of a substance, which results in a new substance being formed. This change cannot easily be reversed.

Chemical properties- Properties of a substance that give it the ability to undergo change in chemical composition.

**SOLIDS**

- Solids resist changes in shape or volume
- Solids do not flow and cannot be compressed
- Atoms in solids are bound to each other very tightly which results in solids being very dense
- Solids have a fixed volume
- Solids have a fixed shape
- Atoms in solids have very low levels of kinetic energy

**LIQUIDS**

- Liquids have a fixed volume
- Liquids DO NOT have a fixed shape
- Liquids can flow
- Some liquids can be slightly compressed
- The particles in liquids have moderate amounts of kinetic energy