**Atoms**

Element - substance made of one type of atom

Molecule - 2 or more of the same type of atom

- Tiny central nucleus with chemically bonded together electrons orbiting it

G1 - Alkali metals

G8 - Noble gases

Protons/Neutrons

G2 - Alkaline earth metals

G2 to G3 - Transition Metals

G7 - Halogens

1.2 Chemical equations

- Answer: balance - write the number of each atom on both sides

Law of Conservation of mass - Total mass of the products formed in a reaction is equal to the total mass of the reactants

Extra mass of product might be due to either

- Excess reactant material
- Gas escaping

- Less mass of product might be due to gas escaping

1.3 Separating mixtures

1.4 Fractional Distillation and Chromatography

- 2 or more substances that aren't chemically bonded

Filtration
- Uses filter paper and funnel to separate insoluble substance (residue) from the solvent (the filtrate)

- Leave residue to get a clean substance after washing it with distilled water

Crystallisation
- Place evaporating flask under water bath which is being heated, crystals will appear as more of the solvent is evaporated.