

1.1 Atoms

Element - substance made of one type of atom

Molecule - 2 or more of the same type of atom
Chemically bonded together tiny central nucleus with electrons orbiting it

G1 - Alkali metals

G8 - Noble gases

↓
Protons/neutrons

G2 - Alkaline earth metal

G3 between G3 - Transition Metals

G7 - Halogens

1.2 Chemical equations → should be balanced, count 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 may be due to oxygen reacting with reactants.

Less mass of product may be due to gas escaping

1.3 Separating mixtures and 1.4 Fractional distillation and chromatography
↳ 2 or more substances that are not chemically bonded.

Filtration

- uses filter paper and funnel to separate insoluble substance (residue) from the solvent (the filtrate)
- warm residue to get a clean substance after washing it with distilled water

Crystallisation

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