

## Year 11 Trilogy Chemistry Paper 1 Revision List

- Labelled diagram of an atom, the size of atoms
- Charges and relative mass of protons, electrons & neutrons
- Atomic number, mass number and calculating the number of protons, electrons and neutrons from these
- Definitions of elements, compounds, mixtures, isotopes
- Composing word & balanced symbol equations
- Separating Mixtures by filtration, crystallisation, distillation, chromatography
- History of how the model of the atom was developed over time
- Development of the early and modern periodic table
- Properties and reactions of Alkali metals
- Properties and reactions of Halogens
- Stating and explaining trends in reactivity in Group 1 and Group 7
- 3 states of matter and changing state
- Describing and explaining ionic bonding, simple & giant covalent bonding and metallic bonding. Drawing dot and cross diagrams for these.
- Comparing and explaining properties of ionic and covalent substances
- Alloys
- Relative formula mass, calculating relative formula mass, moles
- Using balanced equation to work out reacting masses, calculating concentrations
- Displacement reactions
- Extracting metals
- Making salts from metals + acids, acid + base, acid + alkali, acid + a carbonate
- pH scale, neutralisation, strong & weak acids
- Electrolysis
- Exothermic & endothermic reactions, reaction profiles
- Bond energy calculations