AQA GCSE Chemistry

Topic 3: Quantitative chemistry

Using concentrations of solutions in mol/dm3 (chemistry only)

Notes

(Content in bold is for Higher Tier only)

- Concentration of a solution can be measured in mol. per given volume of solution e.g. mol. per $dm^3 3$ ($mol./dm^3$)
- Mass of a solute and the volume of a solution are related to the conc. of the solution through the equation moles = concentration x volume
    - Use mass to find mol: mol. = mass / molar mass, then use conc. = mol. / vol. as seen below
- If the volumes of two solutions that react completely are known and the concentration of one solution is known, the concentration of the other solution can be calculated:
    - work out moles of solution where volume and concentration is known by moles = conc x vol (make sure volume is in dm^3, to go from cm^3 to $dm^3 \div 1000$)
    - work out moles of other solution by mole ratio from equation
    - now work out unknown concentration by using conc = mol / vol