

Homework 2 – Combining Equations

National 5 Extension

- 1) What mass of NaOH is required to make 250cm³ of a 0.1 mol l⁻¹ solution?
- 2) What mass of NaNO₃ is required to make 1 litre of a 0.2 mol l⁻¹ solution?
- 3) What mass of H₂SO₄ is required to make 100cm³ of a 0.2 mol l⁻¹ solution?
- 4) 52.5g of citric acid (GFM = 210g) is made up to a 500cm³ solution. What is the concentration of the solution?
- 5) Calculate the mass of calcium chloride needed to make 100cm³ of a 2mol l⁻¹ solution?
- 6) If 1.03g of sodium bromide was dissolved and made up to 250cm³, what would be the concentration of the solution?
- 7) Calculate the mass of sodium sulfate needed to make 500cm³ of solution with a concentration of a 5mol l⁻¹.
- 8) A pupil had 50g of calcium carbonate and wanted to make a solution with a concentration of 0.2mol l⁻¹. What is the maximum volume of solution she could make?