

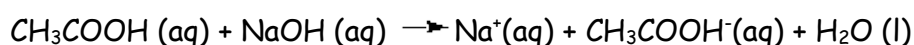
More Titration Questions

COMMON FORMULAE

Hydrochloric acid = HCl, Sodium hydroxide = NaOH, Sodium sulphate = Na₂SO₄, Sodium nitrate = NaNO₃, Nitric acid = HNO₃, Sulphuric acid = H₂SO₄, Sodium hydroxide = NaOH, Sodium sulphate = Na₂SO₄, Sodium nitrate = NaNO₃, Phosphoric acid = H₃PO₄, Sodium phosphate = Na₃PO₄, Potassium sulphate = K₂SO₄

Answer the titration calculation questions in your book, be sure to remember that 1 litre = 1 dm³ = 1000 cm³ or 1000 ml and that mol/dm³ = concentration

1. 10.0 cm³ of a solution of potassium hydroxide was titrated with a 0.10 mol/dm³ solution of hydrochloric acid. 13.5 cm³ of the acid was required for neutralization. Calculate the concentration of the potassium hydroxide solution. **0.135mol/dm³**
2. Calculate the concentration of an ethanoic acid solution if 34.57 cm³ of this solution are needed to neutralize 25.19 cm³ of 0.1025 mol/dm³ sodium hydroxide. **0.075mol/dm³ (2sf)**



3. 25.00cm³ of 0.100 mol/dm³ NaOH is needed to titrate 25.00cm³ of a solution of hydrochloric acid. Calculate the concentration of the acid. **0.100mol/dm³**
4. 23.15cm³ of 0.125 mol/dm³ NaOH is needed to titrate 25.00cm³ of a solution of hydrochloric acid. Calculate the concentration of the acid. **0.12mol/dm³ (2sf)**
5. 25.00cm³ of 0.200 mol/dm³ NaOH is needed to titrate 25.00cm³ of a solution of sulphuric acid. Calculate the concentration of the acid. **0.1mol/dm³**