Worksheet 3

Name Class Date

The Avogadro constant is 6.02 × 1023 mol−1.

**1** A solution of magnesium nitrate, Mg(NO3)2, has a concentration of 0.025 mol/dm3.

**a** Calculate the number of moles of magnesium nitrate in 50 cm3 of this solution.

**b** Magnesium nitrate is an ionic compound. Calculate the total number of moles of ions formed from magnesium nitrate in 50 cm3 of this solution.

**2** Glucose, C6H12O6, is a covalent compound. 25 cm3 of a solution of glucose contained 1.204 × 1021 molecules of glucose.

Calculate the concentration of the glucose solution in mol/dm3.