Homework sheet

Name Class Date

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Element | C | N | O | Na | K |
| Relative atomic mass (*Ar*) | 12 | 14 | 16 | 23 | 39 |

**1** 100 cm3 of a solution of magnesium sulfate contains 0.26 g of dissolved solid. Calculate the concentration of this solution in g/dm3.

**2** A solution of sodium chloride has a concentration of 10 g/dm3. Calculate the mass of sodium chloride in 50 cm3 of this solution.

**3** 25 cm3 of a solution of sodium hydroxide contains 0.00125 mol of dissolved solid. Calculate the concentration of this solution in mol/dm3.

**4** A solution of potassium hydroxide has a concentration of 0.05 mol/dm3. Calculate the number of moles of potassium hydroxide in 75 cm3 of this solution.

**5** A solution of potassium nitrate, KNO3, has a concentration of 2.02 g/dm3. Calculate the concentration of this solution in mol/dm3.

**6** A solution of sodium carbonate, Na2CO3, has a concentration of 0.125 mol/dm3. Calculate the concentration of this solution in g/dm3.

Use these equations to help you with the calculations:

