Solutions

Each answer shows the steps, then the **result**.

2.1

- an accurate volume of solution: a **burette** or a **(volumetric) pipette**

2.2

- a **saturated** solution holds the **maximum amount of solute** that will dissolve at that temperature

2.3

- a (top-pan) **balance**

2.4

- solvent: the liquid that a substance dissolves in
- solute: the substance that dissolves

3.1 C

- a **gas syringe** measures the volume of gas produced
- A is temperature; B is mass; D is time

3.2

(a)

- 25.0 cm^3 of acid: a **pipette** (or burette)
- temperature: a **thermometer**

(b)

- **residue**: the solid left on the filter
- **filtrate**: the liquid that passes through

3.3

(a)

- a **gas syringe** (or an upturned measuring cylinder filled with water)
- a **stop-watch**

(b)

Any two of, one mark each:

- the mass (or length) of magnesium ribbon
- the volume of acid
- the concentration of the acid
- the surface area of the magnesium

3.4

- add water and stir, so the salt dissolves
- filter: the sand stays on the filter paper as the residue
- wash the sand with a little water and leave it to dry (or dry it in a warm oven)