

## 4 Reactions, equations, and stoichiometry – Part 1 —Answers

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### Answers

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Work through these after you have tried the questions yourself.

**2.1** any three of: colour change, gas bubbles, a precipitate (solid) forming, a temperature change.

**2.2** (a) physical (still water); (b) chemical (new substances form).

**2.3**  $2\text{H}_2 + \text{O}_2 \rightarrow 2\text{H}_2\text{O}$ .

**2.4** the ratio  $\text{Mg} : \text{MgO}$  is  $2 : 2 = 1 : 1$ , so 3.0 mol of  $\text{MgO}$ .

**2.5** 0.20 mol  $\text{Mg}$  gives 0.20 mol  $\text{MgO}$ ; mass =  $0.20 \times 40 = 8.0$  g.