

Solutions

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

2.1

- copper(II) oxide is a metal oxide
- it is **basic**

2.2

- e.g. **aluminium oxide** Al_2O_3 or **zinc oxide** ZnO

3.1 C

- SO_2 is a **non-metal oxide**, so it is **acidic**
- A, B and D are metal oxides (basic)

3.2

(a)

- **amphoteric** means it reacts with **both acids and bases** (to form a salt and water)

(b)

- react it with a **base** (or alkali)

3.3

- magnesium oxide is a metal oxide, so it is **basic**
- it reacts with HCl to form **magnesium chloride and water**