

Solutions

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

2.1

- an alloy is a **mixture of a metal with one or more other elements**

2.2

- brass is **copper** and **zinc**

3.1 B

- different-sized atoms **stop the layers sliding**
- A, C and D are not why alloys are harder

3.2

(a)

- **chromium** and **nickel** (or carbon)

(b)

- it is **hard** and **does not rust**

3.3

- in a pure metal the atoms are the same size, so layers **slide easily**
- in an alloy different-sized atoms **distort the layers** and stop them sliding