

Solutions

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

2.1

- cobalt(II) chloride paper turns **blue to pink**
- the test shows water is present, **not** that the liquid is **pure**

2.2

- chlorine **kills harmful microbes**

3.1 B

- pure water **boils at exactly** 100 °C
- A tests for water, not purity; C and D do not prove purity

3.2

(a)

- carbon **removes bad tastes and smells**

(b)

- nitrates cause **deoxygenation** of the water
- so aquatic life **cannot get enough oxygen**

3.3

- tap water contains **dissolved impurities**
- these could interfere with reactions; distilled water has **far fewer impurities**