

Solutions

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

2.1

- overall: $2\text{H}_2 + \text{O}_2 \rightarrow 2\text{H}_2\text{O}$
- the only product is **water**, so the cell releases no carbon dioxide

2.2

- the only chemical product is **water**

3.1 B

- it produces **only water, not pollutants**
- A and D are disadvantages; C is false

3.2

(a)

- the only product is water, so it **does not pollute the air**

(b)

- hydrogen is **hard/dangerous to store and transport**

3.3

- hydrogen is often made using energy from **fossil fuels**
- burning those fuels releases **pollutants / CO₂ elsewhere**