

12 Which equation represents the overall reaction in a hydrogen–oxygen fuel cell?

- A** $2\text{H}_2 + \text{O}_2 \rightarrow 2\text{H}_2\text{O}$
- B** $2\text{H}_2\text{O} \rightarrow 2\text{H}_2 + \text{O}_2$
- C** $\text{H}_2 + \text{O}_2 \rightarrow \text{H}_2\text{O}_2$
- D** $\text{H}_2\text{O}_2 \rightarrow \text{H}_2 + \text{O}_2$

12 Hydrogen–oxygen fuel cells can be used to power vehicles.

Which statement about hydrogen–oxygen fuel cells is correct?

- A** The equation for the overall reaction is $\text{H}_2 + \text{O}_2 \rightarrow \text{H}_2\text{O}_2$.
- B** The only chemical products are water and carbon dioxide.
- C** Chemical energy in the fuel is converted into electrical energy.
- D** The hydrogen used in hydrogen–oxygen fuel cells is a fossil fuel.

15 Which statements about hydrogen–oxygen fuel cells are correct?

- 1 They convert chemical energy into electrical energy.
- 2 Hydrogen is reduced in the fuel cells.
- 3 They do **not** produce any atmospheric pollutants.

- A** 1, 2 and 3 **B** 1 and 2 only **C** 1 and 3 only **D** 2 and 3 only