

Solutions

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

2.1

- Hydrogen and oxygen

2.2

- Water

2.3

- The hydrogen may be made using fossil fuels, which emit CO_2

3.1 B

- water

3.2

(a)

- At the point of use it only produces water, no CO_2

(b)

- Making the hydrogen often uses fossil-fuel energy, so CO_2 is emitted during production — the emissions are shifted, not removed

3.3

- Use renewable electricity (solar, wind) to split water into hydrogen and oxygen, so no fossil fuels are burned and there are no net carbon emissions