

Solutions

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

2.1

- Nuclear fission (splitting uranium atoms)

2.2

- Any one: no CO₂, high energy density, reliable

2.3

- Any one: radioactive waste, accident risk, high cost, thermal pollution

3.1 A

- produces no CO₂ during operation

3.2

(a)

- Benefit: low-carbon, energy-dense power; drawback: radioactive waste or accident risk

(b)

- The waste stays radioactive and dangerous for thousands of years, so it must be stored safely for a very long time

3.3

- It emits no CO₂ during operation, but its fuel (uranium) is a finite mined element, so it is nonrenewable