

Solutions

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

2.1

- Negative ($\Delta H < 0$)

2.2

- Endothermic

2.3

- Absorbs energy

3.1 B

- $\Delta H > 0$ and absorbs heat

3.2

(a)

- Endothermic; $\Delta H > 0$

(b)

- Heat flows from the surroundings into the system

3.3

- Combustion forms strong bonds in CO_2 and H_2O , releasing more energy than is absorbed breaking the fuel and O_2 bonds, so the net ΔH is negative