

5 Enthalpy changes – Part 1 — Answers

Answers

Work through these after trying the questions yourself.

5.1 (a) negative \ (b) positive.

5.2 Lower.

5.3 The least (minimum) energy the particles need before they can react.

5.4 (a) breaking takes in energy \ (b) making gives out energy.

5.5 $\Delta H = (436 + 193) - (2 \times 366) = 629 - 732 = -103 \text{ kJ mol}^{-1}$.

5.6 A negative ΔH means the reaction is exothermic: more energy is *released* when the new bonds form than is *taken in* to break the old bonds, so there is a net release of energy to the surroundings.