

Solutions

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

2.1

- $Q = mc\Delta T = 0.50 \times 4200 \times 20 = 4.2 \times 10^4 \text{ J}$

2.2

- heat is transferred quickly (a fast rate)

2.3

- the one with the smaller specific heat

3.1 B

3.2 B

3.3

(a)

- $Q = 0.30 \times 900 \times 50 = 1.35 \times 10^4 \text{ J}$

(b)

- $2.7 \times 10^4 \text{ J}$ (double)