

Competition Corner: Energy Boundary

Fictional paper cards only; no experimental procedure.

1. For 40.0 g, $c = 4.00$, $\Delta T = -2.50^\circ\text{C}$, calculate q_{surr} and q_{sys} .
2. Use 0.0800 mol and -250 kJ mol^{-1} ; explain scaling.
3. Why does a temperature change not prove mechanism?