

Specific Heat Capacity Practice Problems

1. How much heat must be added to a 50g sample of water, in order to increase its temperature by 25°C ? 5225J
2. A 250g sample of water is heated so that its temperature increases from 35° to 75°C . How much heat was added to the water to accomplish this? $41,800\text{J}$
3. Find the specific heat capacity of a 2.3g chunk of metal, if 150J of heat added to the metal causes its temperature to go up by 81°C . $0.81\text{J/g}^{\circ}\text{C}$
4. If the same amount of energy as in #3 was added to a 2.3g sample of water, would its temperature change by more or less than 81°C ?