

HW3: Specific Heat in the Lab

Name: _____

Date: _____ Per: _____

Silver Data	
Mass of Silver + weighing paper	4.71g
Mass of weighing paper	0.70g
Mass of Silver	
Mass of foam cup + water	109.85g
Mass of foam cup	10.25g
Mass of water	
Final temperature of water and Silver	35.9°C
Initial temperature of water	25.5°C
Change in temperature, ΔT	

1. The table above shows the data for a calorimetry experiment using a small block of silver. Calculate the missing values.
2. How much heat energy is absorbed by the water? ($c_{\text{water}} = 4.18\text{J/g}^\circ\text{C}$)
3. How much energy is released by the silver block?
4. Calculate the temperature change for the silver block ($c_{\text{silver}} = 0.235\text{J/g}^\circ\text{C}$)
5. Calculate the initial temperature of the silver block.