College Prep Chemistry of the Earth System

Assignment 2D 30 Points

Specific Heat Calculations

Solve the following specific heat problems

1. c_{water} = 4.186J/g°C, m = 3.62g,
   ΔT = 15.2°C, q = _____J
2. c_{ice} = 2.090J/g°C, m = 84.6g,
   ΔT = 95.1°C, q = _____J
3. q = 934.5J, m = 42.5g
   ΔT = 29.2°C, c = ____J/g°C
4. q = 254.9J, m = 28.8g
   ΔT = 15.0°C, c = ____J/g°C
5. q = 1943.5J, c = 0.482J/g°C
   ΔT = 35.2°C, m = ____g
6. q = 835.8J, c = 0.284J/g°C
   ΔT = 21.6°C, m = ____g
7. q = 913.5J, c = 0.834J/g°C
   m = 29.4g, ΔT = ____°C
8. q = 2184.2J, c = 0.184J/g°C
   m = 19.3g, ΔT = ____°C