

Q Problems-

1. What is the heat lost by 6.25 grams of water that starts at 15.0 °C and goes to 3.0 °C? The specific heat of water is 4.18 J/g°C
2. What is the heat gained by 35 grams of water that increases in temperature by 50.0 °C?
3. What is the change in temperature that must have taken place if 10 grams of water lost 376.2 Joules?
4. What is the specific heat of a substance that gains 1672 Joules when its temperature goes from 50°C to 95°C, and it has a mass of 100 grams?
5. How much heat does a 6 gram piece of aluminum lose if it goes from 16°C to -32°C? The specific heat of the aluminum is .89 J/g°C.
6. A 50.0 gram sample of a material requires 2758.8 J of heat to have its temperature raised from 20°C to 80°C. What is the specific heat of the material?
7. How much heat is required to raise the temperature of 5 grams of ice from -10°C to 0°C? The specific heat of ice is 2.09 J/g°C.
8. What amount of heat is required to heat 5 grams of liquid water from 0°C to 100°C?