

1. To what temperature will a 50.0 g piece of glass raise if it absorbs 5275 kilojoules of heat and its specific heat capacity is 0.50 J/g $^{\circ}$ K? The initial temperature of the glass is 20.0 $^{\circ}$ C.
2. How many joules of heat are needed to change 50.0 grams of ice at 15.0  $^{\circ}$ C to steam at 120.0  $^{\circ}$ C?  
(Cp of H<sub>2</sub>O = 4.184 J/g  $^{\circ}$ C)
3. If it takes 41.72 joules to heat a piece of gold weighing 18.69 g from 10.0  $^{\circ}$ C to 37.0  $^{\circ}$ C, what is the specific heat of the gold?