

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°K? The initial temperature of the glass is 20.0°C.

2. How many joules of heat are needed to change 50.0 grams of ice at 15.0 °C to steam at 120.0 °C?

(Cp of H₂O = 4.184 J/g °C)

3. If it takes 41.72 joules to heat a piece of gold weighing 18.69 g from 10.0 °C to 37.0 °C, what is the specific heat of the gold?