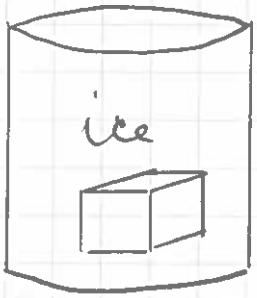
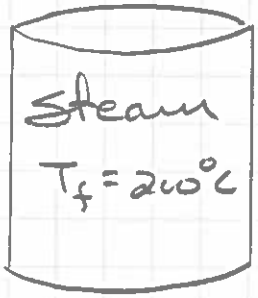
Initial



$M = 5g = 0.005\,kg$

$T_i = -20°C$

Final



Total Heat = heat to raise temp of ice $-20°C \rightarrow 0°C$
+ heat to melt ice at $0°C$
+ heat to raise temp of water $0° \rightarrow 100°C$
+ heat to vaporize water at $100°C$
+ heat to raise temp of steam $100°C \rightarrow 200°C$

So:

$$Q = (MC_i\Delta T)_{ice} + ML_f + \underbrace{(MC_w\Delta T)}_{water} + ML_v + \underbrace{(MC_s\Delta T)}_{steam}$$

$$= MC_i(20°C) + ML_f + MC_w(100°C) + ML_v + MC_s(100°C)$$

where: $C_i = 2090\ \frac{J}{kg\,°C}$; $C_w = 4190\ \frac{J}{kg\,°C}$; $C_s = 2009\ \frac{J}{kg\,°C}$

$L_f = 3.33\times10^5\ \frac{J}{kg}$; $L_v = 22.6\times10^5\ \frac{J}{kg}$

$\therefore$ $Q = 16,273\ J.$