Question 31348

Heat needed to heat lead can be calculated according to formula $Q = cm\delta T$, where c is the heat capacitance of lead ($c = 130\frac{J}{kg \cdot C}$), m is the mass of the lead ($m = 2kg$) and $\delta T = T_2 - T_1$ is the difference between $T_2 = 350C$ and $T_1 = 20C$(room temperature). Perfoming the calculation, obtain $Q = 85800J = 85.8kJ$ of energy.