Answer on Question #77954, Chemistry / General Chemistry

If 2.5 kJ of energy are absorbed, how many grams of Silver are required if the temperature of the Silver was increased by 7.5 oC? (The specific heat of Silver is 0.2330 J/goC.)

A. 1.43 g
B. 14.3 g
C. 142.9 g
D. 1,428.6 g
E. None of the Above

Solution

Q = c×m×ΔT, where c – specific heat, Q – energy absorbed.

$m = \frac{Q}{C \times \Delta T} = \frac{2500}{0.233 \times 7.5}$ **= 1430,6 (g)**

Answer

D. 1,428.6 g