

Answer on question #58273, Physics / Other

Question Assuming you could warm 50g of gold to its boiling point, how much additional heat would you need to add to vaporize it?

Solution Latent heat of evaporation of gold is $L = 1.577 \cdot 10^6$ J/kg. So heat you need is

$$Q = mL = 0.05 \cdot 1.577 \cdot 10^6 = 78.85 \cdot 10^3 J$$