Quiz 11   NAME:_____

Lump all the nucleotide triphosphates into one pile and call them NTPs (i.e. ATP, GTP, UTP, CTP, dTTP). The gene for bacterial alkaline phosphatase contains 1842 basepairs. The process of transcribing the alkaline phosphatase gene requires a minimum of 1842 NTPs to be utilized; one NTP for each base added to the mRNA chain. **What is the minimum number of NTPs required to convert the mRNA of alkaline phosphatase into a protein? Show how you came to this estimate.**