Using the Genetic Code

1. If the DNA template for an amino acid is ATA, what will the

   a) mRNA codon be? _____ b) tRNA anticodon be? _____

a. Which amino acid does this represent? _____

2. List the sequence of amino acids that would be formed from the following portion of mRNA: AAU GAA UAU GAA CCU

Base composition of DNA from a sample of pig cells			
X	**Guanine**	**Y**	**Z**
27%	21%	21%	27%

3. Using the table above, give the correct identification of the bases X, Y and Z.

4. a) Write the sequence of bases transcribed from the following strand of DNA: TACCATTGTACCGATGATAAC

a. Using the mRNA codon table, write the amino acid sequence that would be synthesized by this DNA strand?

b. Referring to questions 4a and 4b, what would be the sequence of tRNA anticodons?

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