Protein Synthesis Study Guide

Define the following....

- 1. Ribosomes
- 2. Transcription
- 3. Translation
- 4. Mutation
- 5. Protein Synthesis
- 6. RNA
- 7. Codon
- 8. Anticodon
- 9. Amino Acid
- 10. DNA

What is DNA responsible for?

How would the following be in "order"? - Protein RNA DNA

Where are ribosomes found?

What makes up an RNA strand?

How is RNA different than DNA?

What are the 3 types of RNA and function of each?

How does transcription happen?

How do bases bind in DNA?

How do bases bind in RNA?

What are the 4 steps of translation?

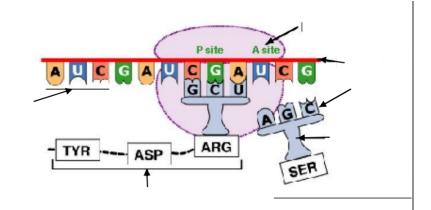
What are the types of mutations and their subunits?

What RNA strand determines the amino acid sequence?

How many amino acids are there?

Label the following...

- a) ribosome
- b) mRNA
- c) tRNA
- d) codon
- e) anticodon
- f) amino acid chain



*******Be able to code DNA to RNA, and label the amino acids******

Complete the following chart using your codon chart:

- a. Complete the mRNA codon column by writing the correct **mRNA** codon for each DNA base sequence given
- b. Write the correct tRNA anticodon that binds to each mRNA codon.
- c. Using your mRNA code chart, identify the name of the correct amino acid

| DNA Base | mRNA Codon | tRNA Codon | Amino Acid |
|-----------------|---------------|---------------|---------------|
| CCC | | | |
| TAT | | | |
| GAG | | | |
| GCG | | | |
| AAC | | | |
| TTG | | | |
| CTC | | | |
| GGA | | | |
| TTT | | | |
| CGC | | | |