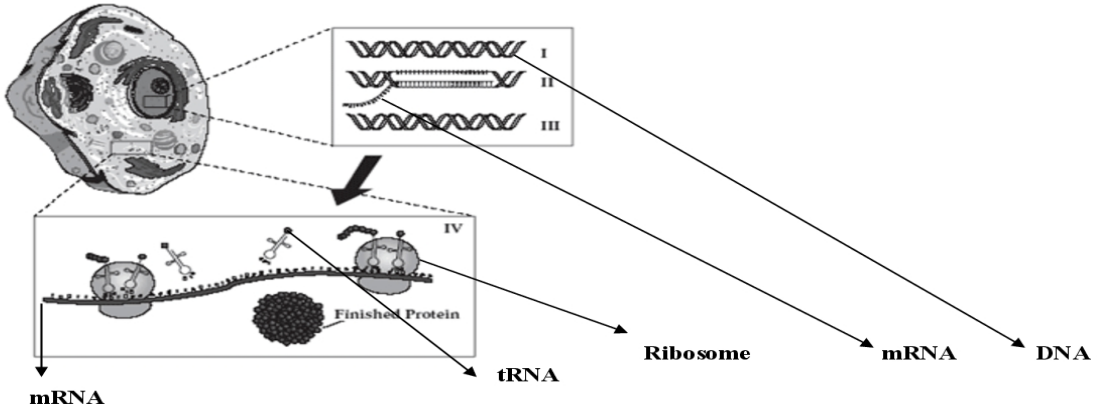
PROTEIN SYNTHESIS WORKSHEET

PART A. Read the following and take notes on your paper:

Protein synthesis is the process used by the body to make proteins. The first step of protein synthesis is called Transcription. It occurs in the nucleus. During transcription, mRNA transcribes (copies) DNA. DNA is "unzipped" and the mRNA strand copies a strand of DNA. Once it does this, mRNA leaves the nucleus and goes into the cytoplasm. mRNA will then attach itself to a ribosome. The strand of mRNA is then read in order to make protein. They are read 3 bases at a time. These bases are called codons. tRNA is the fetching puppy. It brings the amino acids to the ribosome to help make the protein. The 3 bases on tRNA are called anti-codons. Remember, amino acids are the building blocks for protein. On the mRNA strand, there are start and stop codons. Your body knows where to start and stop making certain proteins. Just like when we read a sentence, we know when to start reading by the capitalized word and when to stop by the period.



PART B. Answer the following questions on your paper:

1. What is the first step of protein synthesis?
2. What is the second step of protein synthesis?
3. Where does the first step of protein synthesis occur?
4. Where does the second step of protein synthesis occur?
5. Nitrogen bases are read _____ bases at a time.
6. The bases on the mRNA strand are called _____.
7. The bases on tRNA are called _____.
8. What is the start codon?
9. What are the stop codons?
10. A bunch of amino acids put together makes _____.