Transcription and Translation Web Activities

Biology

Complete the activities at the following web sites – make sure you read the information carefully, as it can help you understand the concepts we are looking at!

http://learn.genetics.utah.edu/content/basics/transcribe/

http://www.pbs.org/wgbh/aso/tryit/dna/index.html# (click on "DNA Workshop Activity", then "Protein Synthesis")

http://www.indiana.edu/~ensiweb/connections/genetics/dna.ws.pdf http://www.indiana.edu/~ensiweb/connections/genetics/dna.make.pdf

When you are done, answer the following questions in a Google Docs document. Submit your work through Showbie when you have completed your work.

- 1. How does the RNA sequence on an mRNA strand compare to the DNA sequence that was originally transcribed? How does the sequence on the mRNA strand compare to the complementary strand of DNA?
- 2. Why might it be important to create an mRNA strand to use in translation instead of creating a protein directly from a strand of DNA?
- 3. How do the RNA bases of a codon compare to the RNA bases of an anticodon?
- 4. In your own words, describe what tRNA does and how it is able to accomplish this set of tasks.