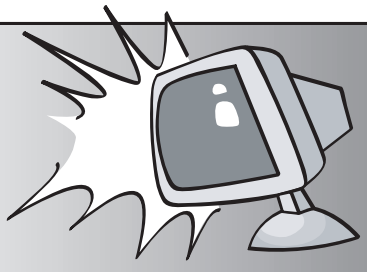
Name_____ Date_____

From Gene to Protein



Log on to http://gslc.genetics.utah.edu/units/basics/. Explore this module to find the answers to the questions below.

1. What are the base-pairing rules for DNA?

2. How is DNA replicated?

3. The two-step process by which cells read a gene and produce a string of amino acids that will eventually become a protein is called:

   _____ and _____

4. Transcribe and Translate a Gene.

   How is mRNA different from DNA? (Hint read the side-bar on this page for help)

   What is the correct starting position for translation?

   Write the amino acids used to assemble your protein in order below.

   Where does translation take place?

5. Once assembled, what is the key to a protein's unique function?

6. Explain What Makes a Firefly Glow using all of the words below:

RNA Polymerase	LUC gene	Transcription	mRNA
Luciferase Enzyme	Ribosome	Translation	Amino Acids
Three dimensional	Luciferin	Oxyluciferin	
Functional Luciferase Enzyme			