**Procedure**

1. Go to the following website: http://learn.genetics.utah.edu/content/basics/transcribe/ and follow the directions on the website.
2. Read the introduction on the page, and examine the diagram on the lower-right side of the page to review the transcription and translation process.
3. Then, near the top of the page, click the button to begin.
4. Read the instructions and use the Universal Genetic Code chart to complete the activity. Note that the instructions below the interactive part of the screen will change as you complete one task and move on to the next task.
5. Answer the following questions in your lab journal:

* Describe your task during the transcription portion of the activity. Cite a specific example to explain
* Describe your task during the translation process. Cite a specific example to explain.>/li>
* At what code triplet did you have to START the translation?
* At what code triplet did the translation STOP?
* Go to next website: <http://www.hhmi.org/biointeractive/rna-diversity>
* You should answer the following questions 5-8 in your lab journal after you have fully explored and read the above website images and information:
  + What are some of the various types of RNA that exist? List three specific ones with their full names and abbreviations.
  + Describe the nature and importance of mRNA.
  + Describe the nature and importance of tRNA.
  + What characteristics make RNA, in its variety of forms, important to biological function?
* Lastly, after completing the web quest, answer the following question, in scientific explanation format, with a partner in your science notebook:
  + What is the importance of transcription and translation in the inheritance of traits.