

# DNA Book

## Replication, Transcription, Translation, Mutations

The goal of this assignment is to create a study guide for the processes described in Chapters 13 and 14 in your text book. The front page is a labeled cover page. It should have the title, your name, and a colored picture related to DNA. Each page in your book will contain 4 squares. Please include the information listed below the page topic in each square. Be creative and colorful!

1. DNA Replication:
  - a. What is it and how does it happen?
  - b. Where in the Cell does this occur?
  - c. What enzymes are involved and what do they do?
  - d. Draw a picture of DNA replication
2. Transcription
  - a. What is it and how does it happen?
  - b. Where in the Cell does this occur?
  - c. What enzymes are involved and what do they do?
  - d. Draw a picture of Transcription.
3. Translation
  - a. What is it and how does it happen?
  - b. Where in the Cell does this occur?
  - c. What enzymes are involved and what do they do?
  - d. Draw a picture of Translation
4. Base Pair Substitution
  - a. What is it and how does it happen?
  - b. When can this occur?
  - c. What effect will this have on a protein?
  - d. Draw a picture of this type of mutation.
5. Insertion Mutations
  - a. What is it and how does it happen?
  - b. When can this occur?
  - c. What effect will this have on a protein?
  - d. Draw a picture of this type of mutation.
6. Deletion Mutations
  - a. What is it and how does it happen?
  - b. When can this occur?
  - c. What effect will this have on a protein?
  - d. Draw a picture of this type of mutation.

7. Your last page: Draw, label and describe Chromatin packaging in Eukaryotes (pg. 260-261)