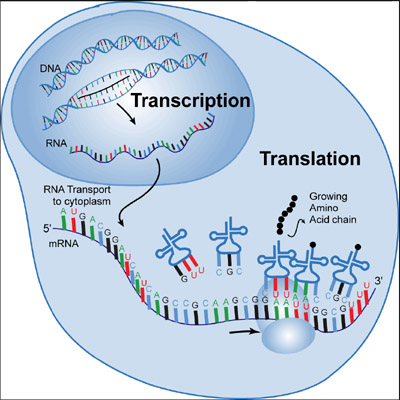
|  |
| --- |
| **GVC #3—I can identify and explain how the structure of DNA relates to its function.** |
| **Learning Target – c. I can apply principles of DNA Transcription and Translation to synthesize a protein**. |

**Book Notes – Transcription and Translation**

**p. 145-148**

# DNA vs. RNA (p. 146)

DNA RNA

1. 1.

2. 2.

# Complete the Base Pairs (p. 146)

# DNA RNA

1. A - \_\_\_\_\_, G - \_\_\_\_\_\_ 21. A - \_\_\_\_\_\_, G - \_\_\_\_\_\_

1. Complete the matching strand of mRNA

DNA Strand: A A T G C A C T G G A

RNA Strand:

1. Making an exact copy DNA is called \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (p. 145)
2. Changing DNA into mRNA is called \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (p. 146)
3. Changing mRNA into proteins is called \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (p. 146)
4. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ are the monomers of proteins. They bond together to form a protein. (p. 146)
5. Transcription happens in the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, while translation happens in the \_\_\_\_\_\_\_\_\_\_\_\_\_.
6. The organelles that read the mRNA code to make proteins are called \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
7. Which type of RNA:
   1. Is a copy of a segment of DNA \_\_\_\_\_\_\_\_\_\_\_\_\_
   2. Brings amino acids to the ribosome \_\_\_\_\_\_\_\_\_\_\_\_
8. The three letter bases of mRNA that code for one amino acid are called \_\_\_\_\_\_\_\_\_\_. (p. 146)
9. How does a strand of DNA code for a trait:

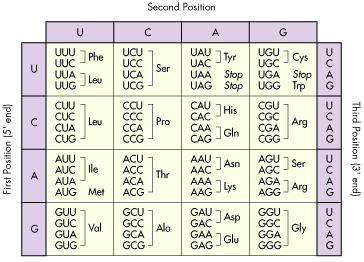
**Trait**

TRANSLATION

**RNA**

**DNA**

12. Use the chart to determine what amino acid would be coded by the following groups of **mRNA** codons



* 1. ACA \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
  2. CCG \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
  3. CAC \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
  4. GGG \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
  5. CGG \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
  6. CUG \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
  7. GUG \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
  8. UGG \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
  9. UAA \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
  10. CUU \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_