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| **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 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_