The Genetic Code

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Class: \_\_\_\_\_\_\_\_\_

 

1. The process of using DNA as a template to make RNA is called \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. The process of using the instructions in RNA to build a protein is called\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
3. These two processes together, going from DNA to protein, is known as \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
4. RNA is read in groups of 3 called \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
5. For each of the types of RNA listed below, write what the 1sdt letter stands for, and describe their role in protein synthesis
	1. mRNA
	2. tRNA
	3. rRNA
6. How many subunits are in a ribosome?\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
7. Label the 3 sites on the ribosome below.
8. For the following strand of DNA, write out the complementary DNA strand

ATTCGCTACGTGGGCCCGTATATATA

1. For the following strand of DNA, write out the complementary RNA strand

ATTCGCTACGTGGGCCCGTATATATA

1. For the following strand of RNA, circle where translation will start, and put a box around where it will stop. UCAUGCACGUGAGCAACGUUUGAGCACGG
2. How many amino acids will be incorporated into the protein\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
3. List all the amino acids in the correct order that will be in the protein