BOZEMAN BIOLOGY VIDEO GUIDE—Transcription and Translation

Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Date\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Per\_\_

1. Draw the structure of mRNA and include the 5’ cap and poly A tail:

1a. What is the function of the 5’ cap and poly A tail?

2. What is the process of going from DNA to mRNA called?

2a. Briefly describe how this process takes place:

2b. What base is replaced for Thymine (T) in RNA?

3. What is the process of going from mRNA to protein called?

3a. Briefly describe how this process takes place:

4. A codon is composed of \_\_\_\_\_\_\_\_\_\_bases.

5. T/F: It is not until after the chain of amino acids has folded up that we call it a protein. \_\_\_\_\_\_\_\_\_\_\_\_

6. T/F: Ribosomes are the structures that aid in translating the mRNA.\_\_\_\_\_\_\_\_\_\_\_\_\_

7. T/F: The Central Dogma describes how we go from RNA to DNA to Protein.\_\_\_\_\_\_\_\_\_\_\_\_\_