

Transcription and Translation Practice Worksheet

For each of the following sequences, fill in either the DNA, the mRNA sequence, the tRNA anticodons, or the amino acid sequences that have been left blank. If several sequences might work choose any one. Use page 338 in your textbook.

1. DNA _____
mRNA A U G A C U A G C U G G G G G U A U U A C U U U U A G
tRNA _____
AA _____

2. DNA T A C C G C T C C G C C G T C G A C A A T A C C A C T
mRNA _____
tRNA _____
AA _____

3. DNA _____
mRNA _____
tRNA U A C C A C C C C C G U A U G G C U G G G A A U A U C
AA _____

4. DNA _____
mRNA _____
tRNA _____
AA MET ARG GLY PHE PHE MET VAL GLY (STOP)

5. DNA T A C _____ A T G _____
mRNA _____ U G U G A U _____
tRNA _____ C U C _____ U U G _____ A U U
AA _____ ALA _____ PRO _____

6. What are the three differences between RNA and DNA?

7. Where is DNA found in the cell? _____

Where is RNA found in the cell(2 places)? _____

8. Fill in the below table.

Type of RNA	Function	Basic drawing

9. Draw an mRNA strand that is complementary to the DNA strand AATTGC. Circle a nucleotide.

10. Below is a drawing of a cell. Show where transcription and translation are occurring make sure to label the DNA and the RNA (all three types!):

