Transcription and Translation Worksheet

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

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

   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 _____

   AA _____

3. DNA _____

   mRNA A U G G U G G G G G C A U A C C G A C C C U U A U A G

   AA _____

4. DNA _____

   mRNA _____

   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 _____ A A C _____

   AA _____ LEU _____ ALA _____ PRO _____ STOP

6. What are three differences between RNA and DNA?

7. Where is DNA found in the cell? _____ Where is RNA found in the cell? _____

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

DNA A A T T G C G G A T T C A C T A G C

RNA