Name: _____ Pd: _____ Date: _____

Homework: Due 12/3!

Part One: DNA Transcription Review

1. *Complete the following chart.*

DNA Nucleotide Base	Complementary RNA Base
Guanine	
Adenine	
Thymine	
Cytosine	

2. What are 3 ways in which the structure of RNA differs from that of DNA? (*Use your Class Notes to help you answer this question.*)

3. Where in the cell does transcription take place?

4. What is the end product of transcription?

Part Two: Protein Synthesis Review

Match each term with the correct description by writing the letters on the lines provided.

1. _____ group of 3 bases on tRNA
2. _____ group of 3 bases on mRNA
3. _____ building block of proteins
4. _____ site where DNA is transcribed
5. _____ organelle used in translation
6. _____ product of translation
7. _____ product of transcription

a. Ribosome
b. Anticodon
c. Nucleus
d. Codon
e. Amino acid
f. mRNA
g. protein

8. *Complete the following chart.*

Codon	Matching Anticodon
GCA	
UUU	
ACC	

9. Describe the role of tRNA in translation (What does tRNA do?)

Name: _____ Per. _____ Date: _____

CODING THE CODONS

Use the Universal Codon Chart to solve the following problems.

1. For each codon listed below, write the name of the amino acid that it matches.

ACA: _____ AAA: _____

CGU: _____ UAU: _____

GCU: _____ GUA: _____

AUG: _____ CUC: _____

UUA: _____ CAA: _____

CCG: _____ UGC: _____

GGA: _____ UCC: _____

GAC: _____ AGC: _____

2. List the three stop codons: _____

3. List the codon(s) for tryptophan: _____

4. List the codon(s) for isoleucine: _____

5. List the codon(s) for arginine: _____