Name: _____
Mr. Willis
Biology: _____
Date: _____

Unit VIII
Biology – Protein Synthesis
Need extra help?
Check out *http://www.nwr1biology.com*

VIII

How to Understand DNA Without Really Trying

The table below lists some mRNA Codons and the "amino acids" they code for. The "amino acids" are attached to tRNA anticodon triplets (groups of three) that complement the mRNA strand. To illustrate the manner in which mRNA codes for specific protein chains words have been substituted so that when you decode the DNA you will produce a sentence instead of a protein. Write the mRNA sequence and the tRNA sequence for each of the following DNA molecules. Then, substitute the "amino acid" words to make a "protein" sentence.

When you have completed the 5 DNA molecules listed, make up one of your own using the words available. Your protein sentence must have at least **five** words. Give you new DNA sequence to your neighbor to decode.

mRNA Codons	**"amino acid"**	**mRNA Codons**	**"amino acid"**
AAA	Biology	GAC	ought
AAC	code	GCC	love
AAU	am	GCU	DNA
ACA	more	GGC	to
AUC	today	GGU	Student
CAA	often	GUG	Genetics
CAC	is	UAC	Fun
CAU	study	UCA	Go
CGC	class	UCU	I
CUC	will		

1.

DNA	AGACGGTTT
mRNA	UCUGCCAAA
tRNA	AGA CGG UUU
"protein"	I love Biology.

2.

DNA	AGACTGCCGGTATTTTGT
mRNA	
tRNA	
"protein"	

3.

DNA	AGAGAGAGTCCGTTTTAG
mRNA	
tRNA	
“protein”	

4.

DNA	AGAGAGAGTCCGGCGCCGGTATTTTAG
mRNA	
tRNA	
“protein”	

5.

DNA	TTTGTGGTTATG
mRNA	
tRNA	
“protein”	

6.

DNA	CACCACATGTAG
mRNA	
tRNA	
“protein”	

7.

DNA	
mRNA	
tRNA	
“protein”	