

DNA/RNA/ AND PROTEIN SYNTHESIS
CLASS WORK v.1

Study Figures 8.23, 8.24, and 8.25 (on pages 201, 202, and 203) to help you complete this assignment. A quiz will follow which will be just like one of these problems. In each case you will copy and study the DNA base sequence. You will then fill in the mRNA(*codon*), tRNA(*anti-codon*), and the amino acid columns of the table. *Remember, use the *codon* (mRNA) information to find the corresponding amino acid. Finally, write out the amino acid sequence thus making the protein that DNA has called for.

EXAMPLE ONE: (WORK IN GROUPS)

1. The DNA sequence.

TAC,CTG,AAC,GGC,ACG,AAC,AGT,TGG,TGC,ATT

2. Fill out the table below.

DNA	TAC	CTG	AAC	GGC	ACG	AAC	AGT	TGG	TGC	ATT
mRNA	AUG									
tRNA	UAC									
AMINO ACID	METHIO NINE - START									

3. Below write out the amino acid sequence for this protein.

EXAMPLE TWO: (WORK INDIVIDUALLY)

1. The DNA base sequence.

TAC,TGG,TGG,TGC,CTT,CGC,TCT,CCC,ATC

2. Make a copy of the TABLE above and complete the table for example two.

3. Write out the amino acid sequence for this protein.

DNA/RNA/ AND PROTEIN SYNTHESIS
CLASS WORK v.2

Study Figures 8.23, 8.24, and 8.25 (on pages 201, 202, and 203) to help you complete this assignment. A quiz will follow which will be just like one of these problems. In each case you will copy and study the DNA base sequence. You will then fill in the mRNA(*codon*), tRNA(*anti-codon*), and the amino acid columns of the table.
*Remember, use the *codon* (mRNA) information to find the corresponding amino acid. Finally, write out the amino acid sequence thus making the protein that DNA has called for.

EXAMPLE ONE: (WORK IN GROUPS)

1. The DNA sequence.

TAC,GTG,CCA,CAG,TAT,CTT,AGA,AGG,CGC,ATC

2. Fill out the table below.

DNA	TAC	GTG	CCA	CAG	TAT	CTT	AGA	AGG	CGC	ATC
mRNA	AUG									
tRNA	UAC									
AMINO ACID	METHIO NINE - START									

3. Below write out the amino acid sequence for this protein.

EXAMPLE TWO: (WORK INDIVIDUALLY)

1. The DNA base sequence.

TAC,ACG,ACG,GTC,GGT,GGC,TGA,ATC

2. Make a copy of the TABLE above and complete the table for example two.

3. Write out the amino acid sequence for this protein.