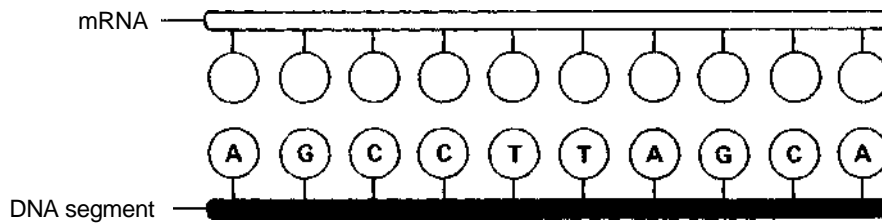


Name \_\_\_\_\_ Class period \_\_\_\_\_ Date \_\_\_\_\_

### Class work

1. The diagram below shows the sequence of bases in a segment of DNA. Fill in the bases for a complementary segment of mRNA.



2. Using the reference list below, determine the sequence of amino acids coded for by the mRNA shown below. (Start from the top of the mRNA.)

**mRNA      AMINO ACID SEQUENCE**

**C**  
**G**  
**U**  
**A**  
**A**  
**A**  
**U**  
**G**  
**G**  
**A**  
**G**  
**G**  
**U**  
**A**  
**G**  
**A**  
**A**  
**U**  
**U**  
**C**  
**A**  
**A**  
**G**

1. \_\_\_\_\_  
 2. \_\_\_\_\_  
 3. \_\_\_\_\_  
 4. \_\_\_\_\_  
 5. \_\_\_\_\_  
 6. \_\_\_\_\_  
 7. \_\_\_\_\_  
 8. \_\_\_\_\_

Reference: List:

AMINO ACID	RNA TRIPLET CODE
valine	GUA, GUG, GUC, GUU
arginine	AGA, AGG, CGA, AGA, CGC CGU
lysine	AAA, AAG
tryppohan	UGG
glutamic acid	GAG, GAA
phenyalanine	UUU, UUC

Second Letter

		Second Letter					
		U	C	A	G		
1st letter	U	UUU   Phe UUC   UUA   Leu UUG	UCU   UCC   Ser UCA   UCG	UAU   Tyr UAC   UAA   Stop UAG   Stop	UGU   Cys UGC   UGA   Stop UGG   Trp	U C A G	3rd letter
	C	CUU   CUC   Leu CUA   CUG	CCU   CCC   Pro CCA   CCG	CAU   His CAC   CAA   Gln CAG	CGU   CGC   Arg CGA   CGG	U C A G	
	A	AUU   AUC   Ile AUA   AUG   Met	ACU   ACC   Thr ACA   ACG	AAU   Asn AAC   AAA   Lys AAG	AGU   Ser AGC   AGA   Arg AGG	U C A G	
	G	GUU   GUC   Val GUA   GUG	GCU   GCC   Ala GCA   GCG	GAU   Asp GAC   GAA   Glu GAG	GGU   GGC   Gly GGA   GGG	U C A G	