

Protein Synthesis Test Directions:

1. Fill in the **complementary DNA triplet** using DNA base pairing rules
2. Transcribe the **BOTTOM DNA strand (Use #1)** and Fill in the **mRNA codon (#2)**
3. Use the **Codon Chart & Write the 3 letter abbreviated Amino acid (#4)** and the correct **tRNA anticodon (#3)**

Codons Found in Messenger RNA

Second Base

		U	C	A	G		
<i>First Base</i>	U	Phe	Ser	Tyr	Cys	<i>Third Base</i>	U
		Phe	Ser	Tyr	Cys		C
		Leu	Ser	Stop	Stop		A
		Leu	Ser	Stop	Trp		G
	C	Leu	Pro	His	Arg		U
		Leu	Pro	His	Arg		C
		Leu	Pro	Gln	Arg		A
		Leu	Pro	Gln	Arg		G
	A	Ile	Thr	Asn	Ser		U
		Ile	Thr	Asn	Ser		C
		Ile	Thr	Lys	Arg		A
		Met	Thr	Lys	Arg		G
	G	Val	Ala	Asp	Gly		U
		Val	Ala	Asp	Gly		C
		Val	Ala	Glu	Gly		A
		Val	Ala	Glu	Gly		G

CFU Protein Synthesis

Carefully Read Directions

Complete #1, #2, #3, and #4

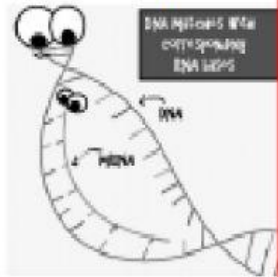

Answer Questions on next slide

Base Pairing Rules

Replication	Transcription	Step in Translation	
DNA	DNA	mRNA	tRNA
A	T	A	U
C	G	C	G
G	C	G	C
T	A	U	A

- DNA
- mRNA
- tRNA
- Amino Acids

Answer Questions

Name of process	Where is this process located?	Is DNA directly involved in this process?	Which types of RNA are involved? mRNA, rRNA, tRNA	End result and purpose.
Transcription 				
Translation 		No, as DNA remains in the nucleus and this process is not in the nucleus.		