

Codons & Anticodons

Name _____ Date _____ Hour _____

1. What are the 4 possible codons for the amino acid Valine? _____
2. What are the 3 possible stop codons? _____
3. What are the 2 possible codons for Histidine? _____
4. What type of RNA carries amino acids? _____
5. What is the anticodon for tryptophan? _____
6. What type of bond holds together amino acids? _____
7. The anticodon CUU will carry what amino acid? _____
8. What is the start codon? _____
9. What amino acid always forms first in a polypeptide chain? _____ Why? _____

ACGAAUGCACGUCUAAAAUCCACCUGGCCCGCCGGGUCCACCAGGUACAAGGAGUAGAGC

10. What is the above strand? DNA or RNA
11. What is the first codon that will form an amino acid? _____
12. List all of the CODONS that will form a polypeptide chain. Start at the "start" codon. Put them in order. *(There may not be 20.)*

_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
1	2	3	4	5	6	7	8	9	10
_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
11	12	13	14	15	16	17	18	19	20

13. List all of the ANTICODONS that will be found on the tRNA.

_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
1	2	3	4	5	6	7	8	9	10
_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
11	12	13	14	15	16	17	18	19	20

14. Identify the amino acids that will form a polypeptide chain. *(Keep them in the correct order!)*

_____ -	_____ -	_____ -	_____ -	_____ -	_____ -	_____ -	_____ -	_____ -	_____ -
1	2	3	4	5	6	7	8	9	10
_____ -	_____ -	_____ -	_____ -	_____ -	_____ -	_____ -	_____ -	_____ -	_____ -
11	12	13	14	15	16	17	18	19	20

All About Amino Acids

- Refer to p. 338 (Zebra book)

	DNA (code)	mRNA (codon)	tRNA (anticodon)	<i><u>Amino Acid</u></i>
1.		UUG		
2.	GTC			
3.		GGA		
4.				Methionine
5.	GAT			
6.		GUG		
7.			ACU	
8.	AGC			
9.			CCU	
10.		AAG		
11.	GGG			
12.		GUC		
13.	ACT			
14.		ACC		
15.				Tryptophan
16.			ACA	
17.	ACG			
18.		CAC		
19.			AAA	
20.	ATT			
21.		AGU		