ACTIVITY: DECODE THE MESSAGE! | PART I. DECODE THE CODONS!

Directions: Use the Genetic Code Chart below to identify the amino acid represented by each mRNA codon. Write your answer in the space provided. If the codon signals the end of translation, write STOP CODON.

mRNA Codon Chart

Genetic Code: mRNA Codons and Their Correspdnding Amino Acids

1st Letter (5' end)	2nd Letter of Codon (Middle Base)				3rd Letter (3' end)
	U	C	A	G	
U	Phenylalanine (Phe) Phenylalanine (Phe) Leucine (Leu) Leucine (Leu)	Serine (Ser) Serine (Ser) Serine (Ser) Serine (Ser)	Tyrosine (Tyr) Tyrosine (Tyr) Stop Stop	Cysteine (Cys) Cysteine (Cys) Stop Tryptophan (Trp)	U C A G
C	Leucine (Leu) Leucine (Leu) Leucine (Leu) Leucine (Leu)	Proline (Pro) Proline (Pro) Proline (Pro) Proline (Pro)	Histidine (His) Histidine (His) Glutamine (Gln) Glutamine (Gln)	Arginine (Arg) Arginine (Arg) Arginine (Arg) Arginine (Arg)	U C A G
A	Isoleucine (Ile) Isoleucine (Ile) Isoleucine (Ile) Methionine (Met)	Threonine (Thr) Threonine (Thr) Threonine (Thr) Threonine (Thr)	Asparagine (Asn) Asparagine (Asn) Lysine (Lys) Lysine (Lys)	Serine (Ser) Serine (Ser) Arginine (Arg) Arginine (Arg)	U C A G
G	Valine (Val) Valine (Val) Valine (Val) Valine (Val)	Alanine (Ala) Alanine (Ala) Alanine (Ala) Alanine (Ala)	Aspartic acid (Asp) Aspartic acid (Asp) Glutamic acid (Glu) Glutamic acid (Glu)	Glycine (Gly) Glycine (Gly) Glycine (Gly) Glycine (Gly)	U C A G

Legend: **Methionine (Met)** = Start codon (AUG codes for Methionine) | **Stop** = Stop codons (UAA, UAG, UGA end translation) | **Amino Acid Abbreviation Format:** Full name (3-letter abbreviation, e.g., Leucine (Leu))

No.	mRNA Codon	Amino Acid
1	AUG	
2	UUU	
3	GGU	
4	CAA	
5	UGG	
6	AAA	
7	GCU	
8	UGA	
9	CUC	
10	CGA	
11	ACU	
12	GAG	
13	UAC	
14	CCU	
15	UAG	

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