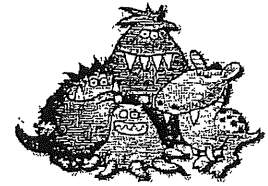


# MONSTER LAB

## TRANSCRIPTION TO TRANSLATION



Directions: Transcribe and Translate the *Monster* DNA below. Use the genetic code chart at the bottom of the page to determine the amino acid for each codon. The back of this page contains a chart that will help you match amino acid sequences to monster traits.

	Gene A	Gene B	Gene C	Gene D	Gene E
DNA	CAA CGC CGC	GGG AGG TAC GAT	ACC CAA TAT	TAT CGA	TAT AGC ACC
mRNA					
amino acid					
Trait					

Draw a picture of **Monster # 1**, using the traits above, on a separate sheet of paper.

	Gene A	Gene B	Gene C	Gene D	Gene E
DNA	TTT CGC CGC	AGG AGG AGC	CAT CGA TTC	CAA CGC TTT	TAT AGC TAA
mRNA					
amino acid					
Trait					

Draw a picture of **Monster #2**, using the traits above, on a separate sheet of paper.

	Gene A	Gene B	Gene C	Gene D	Gene E
DNA	CGT CGC CGA	GAC GGT TAT	GGT AGG AAA	GGG AGG TAC GAT	TTT AAC
mRNA					
amino acid					
Trait					

Draw a picture of **Monster # 3**, using the traits above, on a separate sheet of paper.  
Name your three monsters and be sure to add color to each of your monsters.

Second letter

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

## Monster Trait Chart

<u>Amino Acid Sequence</u>	<u>Trait</u>
Pro:Ser:Phe	beard
Ile:Ser:Ile	Curly Hair
Leu:Pro:Ile	1 leg
Val:Ala:Lys	3 legs
Ile: Ala	Fangs
Ser:Ser:Ser	3 mouths
Pro:Ser:Met:Leu	5 eyes
Lys:Leu	Tail
Ile:Ser:Trp	Scales
Val:Ala:Ala	Orange skin
Ala:Ala:Ala	Green skin
Trp:Val:Ile	Wings
Lys:Ala:Ala	1 Giant protruding eye

