

Making of a Shmoo Form C

Name:
Period:

Directions: Shmoos are very simple animals having only one chromosome in their cells. This chromosome has 6 genes, each responsible for a certain trait. Determine what are these traits and then draw the Shmoo.

1. Determine the mRNA (**codon**) for each gene.
2. Determine the tRNA (**anticodon**) for each mRNA.
3. Determine the amino acid sequence for each enzyme formed (**determined by mRNA triplet**).
4. Find the trait of the particular amino acid sequence by using Chart 1 and Chart 2.

DNA	mRNA	tRNA
A	U	A
T	A	U
G	C	G
C	G	C

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Gene A

DNA: TGG CCT ATA amino acid sequence: _____
 mRNA: _____
 tRNA: _____ trait: _____

Gene B

DNA: TCG GCT amino acid sequence: _____
 mRNA: _____
 tRNA: _____ trait: _____

Gene C

DNA: AAA TTT amino acid sequence: _____
 mRNA: _____
 tRNA: _____ trait: _____

Gene D

DNA: CCT GCG GCT amino acid sequence: _____
 mRNA: _____
 tRNA: _____ trait: _____

Gene E

DNA: CCC TCC TTT GTC amino acid sequence: _____
 mRNA: _____
 tRNA: _____ trait: _____

Gene F

DNA: TAG TAG GAT amino acid sequence: _____
 mRNA: _____
 tRNA: _____ trait: _____