

Genetic Mutations Practice

Using the codon Chart below.

1. Complete the NORMAL DNA Protein Synthesis.
2. Complete the Protein Synthesis for the mutated strands of DNA.
3. Determine the type of mutations that occurred on the next page. Ex. **Substitution, Insertion, Deletion**

Codons Found in Messenger RNA

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

Third Base

GENE Mutations Practice

Genetic Mutations Activity

Normal DNA	
DNA Normal	G G G A C A C C A T T C A C C C G T
mRNA Normal	CCC-
Protein Normal	Pro-

Mutation 1

Mutation 4	
Mutated DNA	GGG-ACA-CCA-TAT-CAC-CCG-T
Mutated mRNA	CCC-
Mutated Protein	Pro-
Type of Mutation	Type-

Mutation 2

Mutation 5	
Mutated DNA	GGT-ACA-CCA-TTC-ACC-CGT
Mutated mRNA	
Mutated Protein	
Type of Mutation	