

Mutations Worksheet

Name _____ Per. _____

There are two main types of mutations: point mutation and frameshift mutations. In each of the following DNA sequences, you will use the mRNA and amino acid sequences to identify the mutation that occurred and the effects of each on, if any. Look and analyze carefully!

Original DNA Sequence: T A C A C C T T G G C G A C G A C T**mRNA Sequence:** _____**Amino Acid Sequence:** _____

Mutated DNA Sequence #1: T A C A T C T T G G C G A C G A C T

What's the mRNA sequence? (Circle the change) _____

What will be the amino acid sequence? _____

Will there likely be effects? _____

What kind of mutation is this? _____

Mutated DNA Sequence #2: T A C G A C C T T G G C G A C G A C T

What's the mRNA sequence? (Circle the change) _____

What will be the amino acid sequence? _____

Will there likely be effects? _____

What kind of mutation is this? _____

Mutated DNA Sequence #3: T A C A C C T T A G C G A C G A C T

What's the mRNA sequence? (Circle the change) _____

What will be the amino acid sequence? _____

Will there likely be effects? _____

What kind of mutation is this? _____

Mutated DNA Sequence #4: T A C A C C T T G G C G A C T A C T

What's the mRNA sequence? (Circle the change) _____

What will be the amino acid sequence? _____

Will there likely be effects? _____

What kind of mutation is this? _____

Mutated DNA Sequence #1: T A C A C C T T G G G A C G A C T

What will be the corresponding mRNA sequence? _____

What will be the amino acid sequence? _____

Will there likely be effects? _____

What kind of mutation is this? _____