

Name: _____ Period: _____

Gene Mutations Activity

Background: There are two types of mutations, small-scale gene mutations and large-scale chromosomal mutations. In this activity you will be learning about gene mutations. There are two basic types of gene mutations, point (base substitution) and frameshift (insertions and deletions). In frameshift mutations, an insertion or deletion of a base changes the reading frame of the sequence since mRNA is read in groups of three nitrogen bases (codons). This causes several amino acids to be affected unless the deletion or insertion is a group of three. There are very few examples of frameshift mutations in nature.

dominant to

Tt _____

tt _____

Round seeds are dominant to wrinkled seeds

RR _____

Rr _____

rr _____

pp _____

Brown eyes are dominant to blue eyes

BB _____

Bb _____

bb _____

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