Genetic Mutation Worksheet

Name_____Date_____ Period_____

1. There are several types of genetic mutations. List two. What do they have in common? How are they different? Give an example of each.

2. A geneticist found that a particular mutation had no effect on the protein coded by a gene. What do you think is the most likely type of mutation in this gene? Why?

3.What is the definition of a genetic mutation?

4.   Look at the following sequence: THE FAT CAT ATE THE RAT. Delete the first H and regroup the letters in groups of three- write out the new groups of three. Does the sentence still make sense? What type of mutation is this an example of?

5. You have a DNA sequence that codes for a protein and is 105 nucleotides long. A frameshift mutation occurs at the 85th base- how many amino acids will be correct in this protein?

6. **Define:**

Repeat expansion mutation:

Frameshift mutation:

Missense mutation:

Nonsense mutation:

Insertion mutation:

Deletion mutation: