

Genetics: The Science of Heredity ▪ 5.4 Review and Reinforce**Genes, DNA, and Proteins****Understanding Main Ideas**

Complete the table below by stating whether each mutation is helpful, harmful, or neutral to the organism.

Mutation	Effect
White kangaroo (in a zoo)	1. _____
White kangaroo (in the wild)	2. _____
Antibiotic resistance in bacteria	3. _____

Answer the following questions on the lines provided.

4. Describe what occurs during protein synthesis.

5. What is the genetic code?

Building Vocabulary

Fill in the blank to complete each statement.

6. A _____ is any change in a gene or chromosome.
7. A type of RNA that carries amino acids and adds them to the growing protein is called _____.
8. _____ is RNA that copies the coded message from the DNA in the nucleus and carries the message into the cytoplasm.