

Name _____ Date _____

Instructions: Read each question carefully and choose the best answer.

1. A group of living things that is physically similar and can reproduce is called a _____.
 - Ⓐ herd
 - Ⓑ species
 - Ⓒ gene
 - Ⓓ habitat
2. Which of the following is an example of successful animal hybridization?
 - Ⓐ mules
 - Ⓑ pandas
 - Ⓒ cheetahs
 - Ⓓ sheep
3. What is the effect of zoos not conducting genetic research?
 - Ⓐ People will no longer visit zoos.
 - Ⓑ Habitats for rare animals will increase.
 - Ⓒ Endangered species will die out.
 - Ⓓ Rare animals will stay healthy and alive in the wild.
4. What is **genetics**?
 - Ⓐ the study of plants and animals
 - Ⓑ the study of how living things pass on traits
 - Ⓒ the study of how crimes can be solved using science
 - Ⓓ the study of ways to create new types of animals
5. Why do law enforcement agencies want to build databases of DNA?
 - Ⓐ to help accurately identify criminals
 - Ⓑ to help keep fingerprinting records organized
 - Ⓒ to help solve crimes that occurred before 1985
 - Ⓓ to help keep evidence from becoming contaminated

Quick Check continued on following page

Name _____ Date _____

6. Researchers are using the technique of _____ when they attempt to reproduce tomatoes for large size and early ripening ability.
 - Ⓐ genetic diversity
 - Ⓑ captive breeding
 - Ⓒ selective breeding
 - Ⓓ DNA fingerprinting
7. How are fingerprints and DNA similar?
 - Ⓐ Both are difficult to find.
 - Ⓑ Both are unique to each individual.
 - Ⓒ Both are needed to solve a crime.
 - Ⓓ Both are identical for members of the same family.
8. Why are some scientists concerned about the effect of genetically modified foods?
 - Ⓐ Genetically modified foods may not be able to provide more nutrition.
 - Ⓑ Genetically modified foods may become too expensive for people to buy them.
 - Ⓒ Scientists cannot predict how foreign genes will react in an organism.
 - Ⓓ Genetically modified foods may not be available in all countries.
9. Breeding in captivity is considered to be truly successful when _____.
 - Ⓐ animals reproduce in an environment where they are protected
 - Ⓑ animals can no longer reproduce
 - Ⓒ animals reproduce on their own once released into the wild
 - Ⓓ animals reproduce with the help of scientists and animal researchers

Quick Check continued on following page

Name _____ Date _____

10. What is the author's purpose in writing *Genetics at Work*?
 - Ⓐ to inform the reader about job opportunities involving genetics
 - Ⓑ to inform the reader about how to breed endangered animals
 - Ⓒ to explain the effect of genetics on plants and animals
 - Ⓓ to explain how scientists use genetics to create better food
11. **Extended Response:** What are the benefits of selective breeding? What are the problems? Use details from the book to support your response.
12. **Extended Response:** In what ways does the field of genetics offer many job opportunities?

Quick Check Answer Sheet

Genetics at Work

Main Comprehension Skill: Main Idea and Details

1. Ⓑ Vocabulary
2. Ⓐ Main Idea and Details
3. Ⓒ Cause and Effect
4. Ⓑ Vocabulary
5. Ⓐ Cause and Effect
6. Ⓒ Vocabulary
7. Ⓑ Compare and Contrast
8. Ⓒ Main Idea and Details
9. Ⓒ Main Idea and Details
10. Ⓐ Author's Purpose
11. Answers will vary but should include the following information:
Benefits: plants that grow faster, animals that produce more, and meat that is low in fat. Problems: traits will be lost forever, a species could be wiped out by a virus, and scientists cannot predict how foreign genes will react.
12. Answers will vary but should include the fact that the field of genetics is ever-growing and is a part of farming, medicine, law enforcement, and so on. Students should note that any profession among these fields includes the study and understanding of genetics.