“Genetic Diversity”

Directions: Read the article and answer the following questions. Give detailed answers!

1. What is genetic diversity?

2. Explain what happened to the cheetahs about 10,000 years ago.

3. What happened as a result of the mass extinction?

4. Describe some of the genetic variations found in the human population and how is this different in the current cheetah population.

5. What is inbreeding? What happened as a result of inbreeding in cheetahs?

6. Give three reasons why it is important that geneticists look at the amount of variations existing in genes within a species.

7. How does the amount of variation in the cheetahs compare with other mammals?

8. How could the lack of genetic diversity in cheetahs harm the species’ ability to survive?

9. How could the lack of genetic diversity in cheetahs benefit the species’ ability to survive?

10. Explain how genetic diversity can help the survival of a species.

11. List 2 methods that scientists are working on to enhance breeding in the cheetah population.