

Evolution

Name:

Changes in Populations

Period:

Use Chapter 10, Section 3 of your textbook to answer the questions below.

Section 3: Natural Selection in Action (p.312)

1. Over time, a population may _____ new adaptations that let it survive in its environment.
2. The theory of evolution helps to explain how a population can change in _____ to its environment.

Changes in Populations

- _____ 3. Which of the following determine favorable and unfavorable traits in a population?
- a. environmental factors
 - b. genetic variation
 - c. selective breeding
 - d. random mutations

Genetic Variation

4. A measure how much individuals in a population differ genetically is called _____.
5. In a population with high genetic variation, members have many different _____ (forms of their genes).
6. High genetic variation results in a large _____ of traits. Low genetic variation results in a _____ variety of traits.
7. Cheetahs are endangered because they have a low _____. This makes it more difficult for them to resist a _____.

Environmental Factors (p.313)

8. Environmental factors decide if an organism's _____ will be favorable or unfavorable.
- _____ 9. Which of the following is NOT a kind of environmental factor?
 - a. water
 - b. food sources
 - c. predators
 - d. genes
- _____ 10. Which of the following environmental factors would be most likely to help a green snake survive?
 - a. flat, grey rocks
 - b. tall, green grass
 - c. dead leaves on a forest floor
 - d. cloudy skies

