## Quiz: Changes in Species

**Read each question. Circle the letter of the correct answer.**

**1.** What term describes a group of similar organisms that can breed and produce fertile offspring?

**A.** hybrids

**B.** species

**C.** founders

**D.** community

**2.** How can geography lead to reproductive isolation?

**A.** Some populations may have a milder habitat than other populations.

**B.** Subspecies may choose to occupy different areas for competitive reasons.

**C.** Extremes of temperatures may reduce the breeding opportunities for some.

**D.** A physical barrier may arise and separate a population, preventing interbreeding.

**3.** The caterpillars of monarch butterflies are the only insects that can eat milkweed plants because they _____.

**A.** are parasites while in this stage of development

**B.** are not yet able to fly to find other sources of food

**C.** are the only organism that can find the plant in nature

**D.** have evolved to use the plants' toxins as defense against predators

**4.** Which of these is a major cause of extinction?

**A.** biodiversity

**B.** loss of habitat

**C.** the greenhouse effect

**D.** use of plants for medicine

**5.** When a species no longer exists in a specific portion of their range but can be found elsewhere, it is called _____.

**A.** extinction

**B.** speciation

**C.** extirpation

**D.** hybridization

**6.** When a species fails to produce any more descendants, it is said to _____.

**A.** be extinct

**B.** be divergent

**C.** have speciated

**D.** have become isolated

**7.** An earthquake causes an ocean channel to open up on an island where a low area previously existed. The island's lizard population is now separated on the two parts of the island, providing an example of _____.

**A.** temporal isolation

**B.** disruptive selection

**C.** behavioral isolation

**D.** geographic isolation

**8.** The Galápagos Islands in the Pacific Ocean have varied habitats. Adaptive radiation occurred on these islands in finch populations, meaning that the finch species that live there _____.

**A.** have lived unchanged through long periods of stability

**B.** have become more like each other in response to their habitats

**C.** changed rapidly from an ancestral species into many new forms

**D.** changed in response to changes in other species they interact with

**9.** Which of these is the final step in speciation?

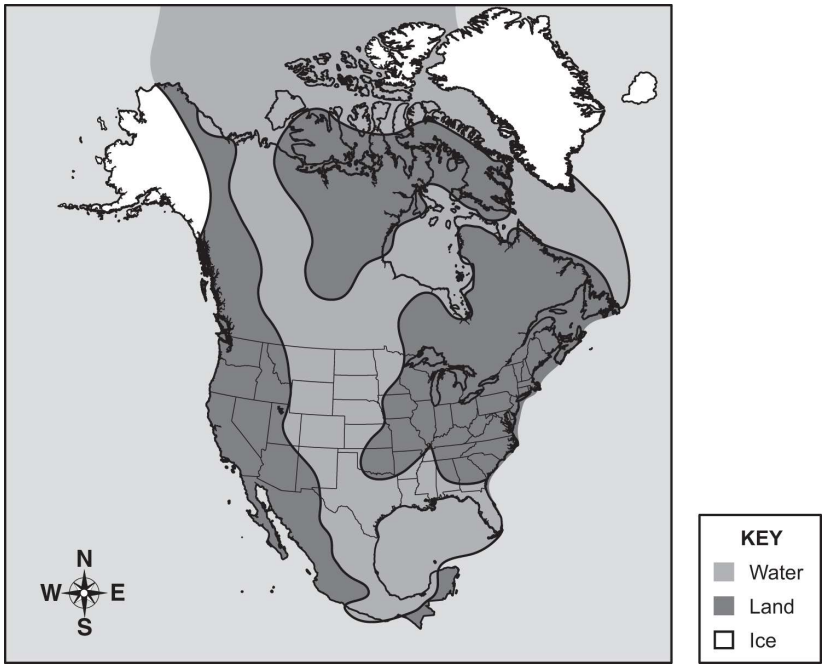
**A.** genetic drift

**B.** hybridization

**C.** species expansion

**D.** reproductive isolation

**10.** The map shows the seas that covered North America during part of the Cretaceous period.




Which of the following would best explain the differences between closely related species found on each of the four landmasses.

**A.** hybridization

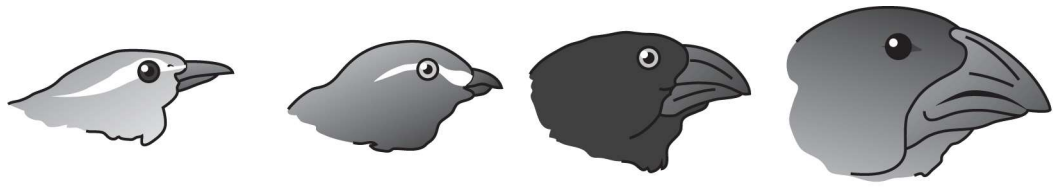
**B.** temporal isolation

**C.** behavioral isolation

**D.** geographic isolation

**Read each statement. Write your answer on the lines.**

**11.** The illustration shows four finch populations.



**small insect eater** **cactus eater** **seed eater** **bud, leaf and fruit eater**
**A** **B** **C** **D**

Refer to the illustration. What evidence indicates that each type of finch evolved in a different area of the islands, each with different environmental conditions?

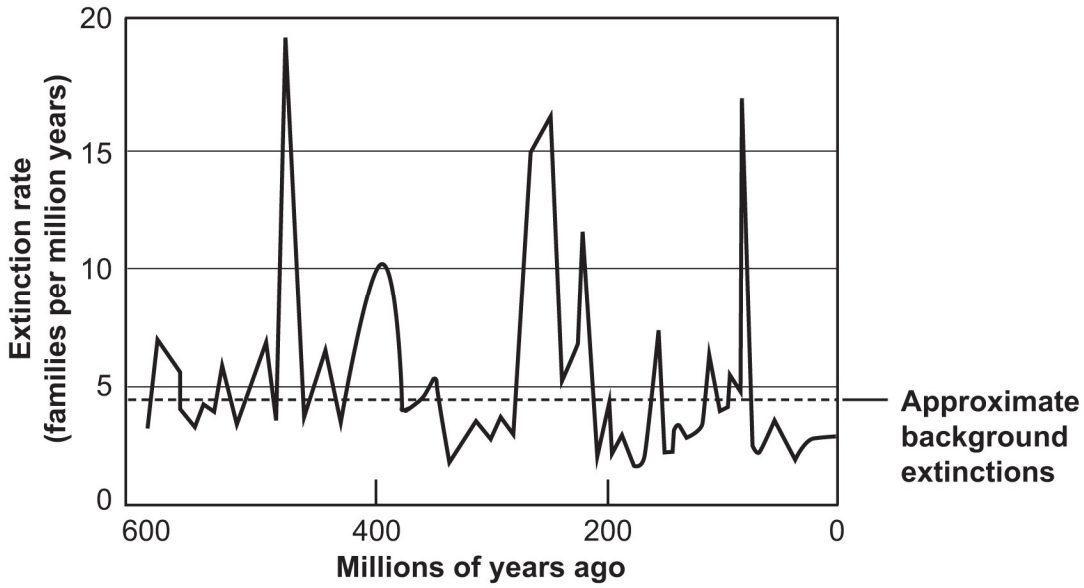
**12.** Suppose a population of squirrels became separated by a flooding river that carved a deep canyon between the two groups. Sequence the events of speciation that might occur.

**13.** How can environmental changes bring about the extinction of a species?

**Directions:** Read the passage, then answer the questions that follow.

## Extinction Rate

The graph shows the number of families of organisms that became extinct during a given time period over the past 600 million years.




**14.** Describe the types of changes in organisms that take place after the events represented by very tall peaks.

**15.** What causes the very tall peaks shown on the graph?