

1. A student wants to study the behavior of a salamander. Which is the **best** procedure for the student to follow?

- A. Catch one, kill it, and dissect it.
 - B. Observe them in their natural environment.
 - C. Trap one, keep it in a box, and watch it.
 - D. See if they respond to bright lights or loud noises.
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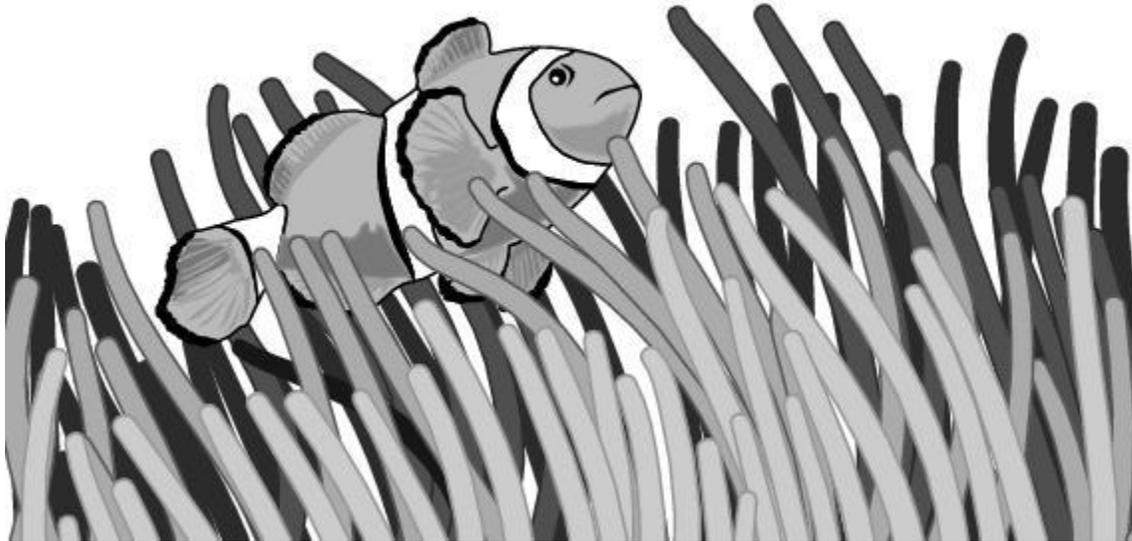
2. Which ocean organism is considered a producer?

- A. phytoplankton
 - B. zooplankton
 - C. small fish
 - D. whales
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3. Maria and her classmates are observing animals at the pond. They notice that wood storks and ibises both feed on fish. Which of these describes the relationship between these two birds?

- A. parasitism
 - B. competition
 - C. predator and prey
 - D. producer and consumer
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4. This picture shows a clownfish finding protection as it hides in sea anemones in the ocean.



Clownfish help provide food for anemones. Which of these describes the relationship between clownfish and sea anemones?

- A. competition
- B. mutualism
- C. parasitism
- D. predation

5. Which of these describes a mutually beneficial relationship between two organisms?

- A. a dog with worms in its intestines
- B. a turtle and a snail that both eat grass live in a river
- C. a honeybee pollinating a plant and receiving nectar for food
- D. a small fish attached to a shark, eating tiny pieces of the shark's food as it floats by

6.

Which pair of organisms listed below are competitors for the same natural resources?

- A. ticks and dogs
 - B. lions and leopards
 - C. honeybees and flowers
 - D. salmon and brown bears
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7.

A small island in the Pacific Island is colonized by birds. The birds find that there is plenty of water and food and that the predators on the island cannot kill healthy adult birds. Which of these things will probably be true in the future?

- A. The bird population will not increase but remain stable.
 - B. The bird population will increase without limits, since the island has lots of food and water.
 - C. The bird population will increase until competition limits the bird population after a few generations.
 - D. The predators on the island will rapidly evolve and begin killing the birds, lowering their population.
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8.

Coyotes and bobcats are natural competitors in many ecosystems in the United States. In the desert regions of the American Southwest, jackrabbits are the primary prey of both animals. What type of relationship does the jackrabbit population have to coyotes and bobcats?

- A. It is an abiotic factor.
 - B. It is a competitor.
 - C. It is a limiting factor.
 - D. It is the carrying capacity.
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9.

Which of the examples below can BEST be described as mutualism between animals?

- A. a tapeworm lives in the intestine of a bird and consumes the food that the bird has eaten
 - B. mountain lions and wolves fight each other for the same deer
 - C. a bird eats parasites off of a rhinoceros while the rhinoceros provides protection to the bird
 - D. rats live in the garbage dump of a town and rarely interact with people
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10. The black widow spider is common to Virginia's ledges, rocks, and plants. Why are these spiders important to the balance in nature?

- A. They poison other animals.
- B. They are harmless to people.
- C. They eat plants.
- D. They help control some insects.

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11. Which biome is characterized by low temperatures and low amounts of rainfall?

- A. tundra
 - B. desert
 - C. temperate deciduous forest
 - D. tropical rain forest
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12. Which biome covers most of the land mass near Earth's equator?

- A. tundra
 - B. desert
 - C. grassland
 - D. tropical forest
-

13. Which biome is found on mountains above the tree line?

- A. grassland
 - B. deciduous forest
 - C. tundra
 - D. tropical forest
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14. Which biome, because of its climate, has the largest number of species of plants and animals?

- A. tundra
 - B. desert
 - C. rain forest
 - D. pine forest
-

15. One characteristic feature of tundra is that only the surface thaws in the summer and refreezes in the winter, leaving a layer of permanently frozen subsoil. This characteristic is known as

- A. hoarfrost.
 - B. glaciation.
 - C. permafrost.
 - D. crystallization.
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16. Groves of trees that are 20 meters tall and have many leafy branches would be a characteristic of which region?

- A. tropical latitudes
 - B. tall grass prairies
 - C. alpine tundras
 - D. dry shrublands
-

17. Which type of trees is found in a temperate forest?

- A. deciduous
 - B. evergreen
 - C. ginkgo
 - D. palm
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18. Which major biome is home to cacti, mesquite, white thorn, pack rats, small reptiles, and coyotes?

- A. desert
 - B. taiga
 - C. tundra
 - D. grassland
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19. Most of the organisms in the oceans exist in the shallow waters over the continental shelves. Why is this true?

- A. Producers, the beginning of all food chains, can only exist where there is sunlight.
 - B. Sea predators can easily catch their prey where the water is shallow.
 - C. Water over the continental shelves has more minerals than deep ocean water.
 - D. Ocean storms destroy organisms living in deep water.
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20. Taiga is a biome consisting of evergreen trees (conifers). Where is taiga found?

- A. northern parts of Mexico
- B. midwestern states such as Kansas
- C. northeastern states such as Massachusetts
- D. southwestern parts of Canada

Answer Key

1. B) Observe them in their natural environment.
 2. A) phytoplankton
 3. B) competition
 4. B) mutualism
 5. C) a honeybee pollinating a plant and receiving nectar for food
 6. B) lions and leopards
 7. C) The bird population will increase until competition limits the bird population after a few generations.
 8. C) It is a limiting factor.
 9. C) a bird eats parasites off of a rhinoceros while the rhinoceros provides protection to the bird
 10. D) They help control some insects.

 11. A) tundra
 12. D) tropical forest
 13. C) tundra
 14. C) rain forest
 15. C) permafrost.
 16. A) tropical latitudes
 17. A) deciduous
 18. A) desert
 19. A) Producers, the beginning of all food chains, can only exist where there is sunlight.
 20. D) southwestern parts of Canada
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