**Unit 10, Lesson 1 & 2 Review Quiz**

**Multiple Choice**

*Identify the choice that best completes the statement or answers the question.*

**\_\_\_\_ 1.** Hurricanes that strike Florida are considered natural disasters. What type of environmental change to hurricanes cause?

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| --- | --- |
| **A** | slow change |
| **B** | rapid change |
| **C** | both rapid change and slow change |
| **D** | Hurricanes don’t cause environmental change |

**\_\_\_\_ 2.** Althoughit is now extinct, the Carolina parakeet was last seen in Florida in 1920. Back then, large areas of habitat were logged and converted to agricultural fields. Honeybees evicted the parakeets from hollow trees where they nested. Many parakeets were shot for food and their feathers. In addition, farmers shot the parakeets to keep them from eating their seeds. What can you conclude from these observations about why the Carolina parakeet became extinct?

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| --- | --- |
| **A** | Extinction may be the result of several factors. |
| **B** | Extinction is always the result of human activity. |
| **C** | Extinction occurs when an organism adapts to changes in its environment. |
| **D** | Extinction can be reversed if conservation measures are immediately put in place. |

**\_\_\_\_ 3.** Organisms that live in coral reefs need warm, shallow seas to survive. Which of these environmental changes would be the **greatest** threat to coral reefs?

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| --- | --- |
| **A** | a beaver dam |
| **B** | open-pit mining |
| **C** | rising sea water level |
| **D** | using land for farming |

**\_\_\_\_ 4.** Carrotwood is a fast-growing landscape tree native to Australia. It became popular throughout southern Florida in the late 1970s. Today, this tree is found in a variety of habitats, including dunes, coastal areas, freshwater marshes, and riverbanks. It crowds out native plants and competes for light and resources. Which of these statements describes carrotwood trees in Florida?

|  |  |
| --- | --- |
| **A** | It is a native tree. |
| **B** | It is a migrant tree. |
| **C** | It is an invasive tree. |
| **D** | It is a predatory tree. |

**\_\_\_\_ 5.** Central Florida mines supply the United States with 75% of the phosphate used. A main use of phosphate is to produce fertilizers. The phosphate is obtained in Florida by a process called open-pit mining, in which the phosphate is removed from an open pit in the earth. Which of these answers **best** describes open-pit mining?

|  |  |
| --- | --- |
| **A** | how humans can change an ecosystem |
| **B** | how organisms can change an ecosystem |
| **C** | how cyclic changes can change an ecosystem |
| **D** | how natural disasters can change an ecosystem |

**\_\_\_\_ 6.** When the environment changes, differences between individuals allow some plants and animals to survive while others die or move to new locations. Which of these statements **best** describes how this happens?

|  |  |
| --- | --- |
| **A** | Environmental changes variations in animals that lead to adaptations. |
| **B** | All animals are able to survive when the environment changes, which leads to their variations and adaptations. |
| **C** | Animals have variations, and when the environment changes, these variations allow populations to adapt and survive. |
| **D** | Animals have different adaptations that allow them to survive when the environment changes, which leads to variation. |

**\_\_\_\_ 7.** In which of these ways would doubling a region’s human population **most likely** change the environment?

|  |  |
| --- | --- |
| **A** | People will use fewer resources. |
| **B** | People will protect more organism than they did before the population boom. |
| **C** | People will set aside more land for conserving organism. |
| **D** | People will destroy more habitat by building homes and buildings. |

**\_\_\_\_ 8.** Think about changes to environments. Which of these statements is most accurate?

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| --- | --- |
| **A** | People cause all the changes in environments. |
| **B** | Environmental change is always harmful to living things. |
| **C** | All environments change in drastic ways every few months. |
| **D** | Living things are affected when their environments change. |

**\_\_\_\_ 9.** In 2008, the water in canals along Alligator Alley in Florida spilled over banks and onto roads, driving deer from flooded islands to strips of dry ground. Which of these answers describes the **most likely** cause of this change in the Florida Everglades?

|  |  |
| --- | --- |
| **A** | an invasive organism |
| **B** | a change in temperature |
| **C** | a very dry summer season |
| **D** | large amounts of rain from a tropical storm |

**\_\_\_\_ 10.** Beach mice live on the Gulf coast of Florida’s barrier islands. Despite their name, these beach mice are found in inland areas as well as along the beach. However, the beach mice that live inland are usually darker in color than those that live on the sandy beaches along the coast. Which of these statements explains this color difference?

|  |  |
| --- | --- |
| **A** | The mice are not related to each other. |
| **B** | The mice that live inland are colored by the mud. |
| **C** | The mice have adapted to living in their specific environment. |
| **D** | The mice on the sandy beaches have become lighter in the sun. |

**\_\_\_\_ 11.** Flamingos have several unusual features. Which of these features of a flamingo helps them to survive in marshes?

|  |  |
| --- | --- |
| **A** | They are pink in color. |
| **B** | They can stand on one leg. |
| **C** | They run before taking off to fly. |
| **D** | They have glands that help them excrete excess salt. |

**\_\_\_\_ 12.** A plain on one side of a river once flooded regularly. During the last ten years, the river has not flooded and the plain is drier and there are fewer nutrients in the soil. A scientist compares the plant life on the plain now to the plant life ten years ago. What would the scientist **most likely** find?

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| --- | --- |
| **A** | There is no longer any plant life on the plain. |
| **B** | The plant life is about the same as ten years ago. |
| **C** | The number of plants of each type greatly increased. |
| **D** | The plants are mainly those suited to the new conditions. |

**\_\_\_\_ 13.** Baxter went on a trip to a marsh. A marsh is an area of land that is almost always flooded. Although Baxter expected to see few plants there, he observed a large number of plants. Which of the following **best** explains why plants are able to survive in the flooded conditions of a marsh?

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| --- | --- |
| **A** | Plants that grow in marshes have adapted to survive there. |
| **B** | Plants can grow in a marsh for a short time before dying out. |
| **C** | Plants need water, so all plants grow well in marsh conditions. |
| **D** | Plants can grow in all conditions as long as they have sunlight. |

**\_\_\_\_ 14.** Tabatha was making a clay pot in which to grow a plant. She made holes in the bottom of the pot so that the water could drain away. Which of the following statements is the **most likely** reason why it is important that the water can drain away?

|  |  |
| --- | --- |
| **A** | Plants grow too quickly in wet soil. |
| **B** | Plants are unable to grow in damp soil. |
| **C** | Plants grow poorly if the soil is too wet. |
| **D** | Plants need to be given fresh water daily. |

**\_\_\_\_ 15.** An area of land near a river used to be almost constantly flooded. After a dam was placed upstream, the flooding stopped, and the area of land is now mainly dry. If the conditions remain dry for several years, which of the following changes is **most likely** to happen?

|  |  |
| --- | --- |
| **A** | The plants will die out until there are no plants left in the area. |
| **B** | The plants will remain the same as when the land was flooded. |
| **C** | The same plants will grow in the area, but they will grow faster. |
| **D** | The types of plants will change to those plants better suited to drier conditions. |

**Unit 10, Lesson 1 & 2 Review Quiz**

**Answer Section**

**MULTIPLE CHOICE**

**1.** ANS: B

• A is incorrect because slow environmental change takes place over many years. Hurricanes happen very quickly.

• B is correct. Hurricanes cause rapid drastic change to the environment.

• C is incorrect. Hurricanes only cause rapid environmental change.

• D is incorrect. Hurricanes are natural disasters that cause rapid and drastic environmental change.

**2.** ANS: A

• A is correct because several factors, including human activity and honeybees, were responsible.

• B is incorrect because honeybees were also a part of the reason for extinction.

• C is incorrect because extinction may occur when a type of organism cannot adapt to environmental changes.

• D is incorrect because extinction of an organism can never be reversed.

**3.** ANS: C

• A is incorrect because a beaver dam affects organisms in a river, not in the ocean.

• B is incorrect open-pit mining directly affects land, not water, ecosystems.

• C is correct because a rise in the sea level would make put the coral reefs deeper under water and they might not survive.

• D is incorrect because using land for farming would not directly affect reef systems.

**4.** ANS: C

• A is incorrect because carrotwood trees are an invasive plant, not a native plant.

• B is incorrect because *migrant* is not a word used to describe trees.

• C is correct because carrotwood trees are an invasive plant.

• D is incorrect because only a few types of plants are *predatory,* and carrotwood trees are not among them.

**5.** ANS: A

• A is correct because open-pit mining is done by humans.

• B is incorrect because open-pit mining is an example of how humans, not organisms, can change an ecosystem.

• C is incorrect because open-pit mining is not a cyclic change.

• D is incorrect because open-pit mining is not a natural disaster.

**6.** ANS: C

• A is incorrect because variations are present among the members of a population before any environmental changes occur.

• B is incorrect because not all organisms survive, and survival depends on variations that the organisms already have.

• C is correct because animals naturally have variations that allow some members of a population to survive environmental changes and that allows the population to adapt.

• D is incorrect because animals have variations that allow populations to adapt in response to environmental changes.

**7.** ANS: D

• A is incorrect because a larger population will use more resources than the current population uses now.

• B is incorrect because it is unlikely that more organism will be protected when the population expands. Instead, more organism will have to compete for space.

• C is incorrect because although people may set aside land for conservation, they are more likely to destroy habitat by building.

• D is correct because more people will need more homes and buildings, which will lead to habitat destruction.

**8.** ANS: D

• A is incorrect because other living things can cause environmental change, as can natural events.

• B is incorrect because environmental changes can be beneficial to some organisms, such as small plants that grow on the forest floor after a forest fire.

• C is incorrect because most environmental changes are local and occur on a small scale.

• D is correct because environmental changes help some organisms and harm others.

**9.** ANS: D

• A is incorrect because an invasive organism would not cause flooding.

• B is incorrect because a change in temperature would not result in the sudden flooding of an area.

• C is incorrect because a dry summer season would cause a drought, not a flood.

• D is correct because a tropical storm would bring in heavy rains that could cause flooding.

**10.** ANS: C

• A is incorrect because the mice are related—they are both beach mice.

• B is incorrect because the mice that live inland naturally have a darker pigmentation, which is not caused by the mud in their environment.

• C is correct because the mice have adapted to their environments by developing colors that better protect them in their habitats.

• D is incorrect because the lighter color is due to an adaptation, not the sun.

**11.** ANS: D

• A is incorrect because the pink color, which comes from the food they eat, does not help camouflage flamingos.

• B is incorrect because the ability to stand on one leg does not help in surviving in different environments.

• C is incorrect because needing to run before taking off actually has a negative effect on the flamingo’s survival.

• D is correct. Because flamingos can drink salt water, they can live near either fresh water or salt water.

**12.** ANS: D

• A is incorrect because the changed conditions would not remove all plant life, but would change the type of plants growing there.

• B is incorrect because the conditions on the plain have changed significantly, so there would be a change in the types of plants growing there.

• C is incorrect because the number of plants of each type would not be expected to increase with drier conditions.

• D is correct because the types of plants would change over time and the plant life would mainly be made up of plants that are suited to the new drier conditions.

**13.** ANS: A

• A is correct because the plants that grow in the flooded conditions of a marsh have adaptations that allow them to survive there.

• B is incorrect because plants that have adapted to marsh conditions can continue to grow there and will not die out.

• C is incorrect because only plants suited to marsh conditions grow well there.

• D is incorrect because plants need the right amount of water as well as sunlight to survive.

**14.** ANS: C

• A is incorrect because it is likely that the plants will grow poorly, not quickly, if there is too much water.

• B is incorrect because plants are able to grow in damp soil.

• C is correct because plants need water to grow, but they grow poorly if the soil is too wet.

• D is incorrect because plants do not need fresh water every day, but they do need the right amount of water.

**15.** ANS: D

• A is incorrect because the types and number of plants would change, but it is unlikely that all the plants would die out.

• B is incorrect because if the same plants did continue to grow in the area, they would probably grow slower in the drier conditions.

• C is incorrect because a change in the conditions would likely result in changes to the number and types of plants.

• D is correct because the conditions have changed, so the plants will change to those plants better suited to the new, drier conditions.