

Name _____

Date _____

Land Biomes

Use the text to answer each question below.

1. A biome is a region characterized by a certain climate and plant and animal life. Scientists don't all agree on the number of biomes on Earth, but many of them count five: grassland, forest, tundra, desert, and aquatic. Each biome includes many different ecosystems, but they all have something in common that ties them together.

Different biomes develop because of different climate conditions. Climate is the typical weather in a particular place. The two main aspects of climate are temperature and precipitation. Climate is often influenced by latitude, or how far north or south a location is from the equator.

Which of these best illustrates climate?

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| A. Seattle is generally cool and rainy this time of year. | B. It was unusually hot and humid in Boston today. |
| C. New York City is usually crowded and noisy. | D. It didn't snow enough in Vermont to ski this year. |

2. There are grasslands on every continent except Antarctica, but they are called different things. In South America, they are known as pampas; in Asia, steppes; and in North America, prairies. Grasslands can be categorized as savannas, which are found in tropical areas, and temperate grasslands, which are found at mid-latitude. In both types, grass is the primary plant. Trees and other large plants are scarce or totally absent. The climate in grasslands is rainy for half the year and dry for the other half. During the dry season, most of the grass dies, often burning up in wildfires.

Which of these is true?

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| A. There are more trees than grasses in a grassland. | B. There are equal numbers of trees and grasses in a grassland. |
| C. There are more grasses than trees in a grassland. | D. There are never any trees in a grassland, only grass. |

3. Trees are the primary plant life in the forest biome. Forests can be divided into three major types: tropical (near the equator), temperate (mid-latitude), and taiga (subarctic latitudes). Each type is different, but they are all characterized by four basic layers. The emergent layer is at the tops of tallest trees. The canopy is the “roof” of the forest, where branches and leaves meet. The understory is at the height of smaller trees and plants, and the forest floor is the ground.

Which forest type is closest to the equator?

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| A. Tropical | B. Temperate |
| C. Taiga | D. Tiberian |

4. Deserts are characterized by extreme dryness. They receive less than 10 inches of precipitation per year. Deserts are usually very hot in the daytime and cooler at night. However, they are not always hot. For example, the Antarctic desert is covered in snow and ice year-round. Desert plants and animals have adapted to survive in the dry environment. Many plants have sprawling, shallow roots to absorb as much water as possible from the ground. Some animals stay in cool underground dens during the day and come out to hunt at night. Others, like birds, can soak up water in their feathers like a sponge.

Which of these best describes deserts?

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| A. Deserts are always hot and always dry. | B. Deserts are sometimes hot and always dry. |
| C. Deserts are always hot and sometimes dry. | D. Deserts are sometimes hot and sometimes dry. |

5. There are three types of tundra. Arctic tundra is found above the Arctic Circle, and Antarctic tundra is found below the Antarctic Circle. Alpine tundra is found above the tree line on mountaintops. All tundras are characterized by a cold, dry climate, flat terrain, and few to no trees. They are basically cold deserts, getting less than 10 inches of precipitation per year. Tundras have a layer of soil beneath the surface called permafrost, which stays frozen year-round. Animals in the tundra have adapted to the cold climate. Some have white coats that blend in with the snow, and others grow a second layer of fur to keep warm in winter.

Where is alpine tundra found?

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|---------------------------|-------------------------------|
| A. Near the Arctic Circle | B. Below the Antarctic Circle |
| C. On treetops | D. On mountains |