

**Multiple Choice (Write the question and full answer on your own sheet of paper)**

1. What effect do carbon dioxide and methane have on Earth's temperature?
  - a. They trap heat in the atmosphere.
  - b. They release heat from the atmosphere.
  - c. They block heat from entering the ocean.
  - d. They block heat from reaching Earth's surface.
2. How would the temperature on Earth change without the greenhouse effect?
  - a. The temperature at the equator would be warmer.
  - b. The temperature would stay the same.
  - c. It would be 30° warmer.
  - d. It would be 30° cooler
3. What causes solar radiation to strike different parts of Earth's surface at an angle that varies throughout the year?
  - a. Earth's tilted axis
  - b. Earth's erratic orbit
  - c. The moon's orbit around Earth
  - d. Solar flares on the sun's surface
4. A keystone species is one that
  - a. Eats a mixture of plants and animals
  - b. Is introduced into a community after a major disturbance
  - c. Causes the amount of diversity in a community to decrease
  - d. Helps to stabilize the populations of other species in the community
5. The series of predictable changes that occurs in a community over time is called
  - a. Ecology succession
  - b. Pioneer species
  - c. Climax community
  - d. Pioneer species
6. \_\_\_\_\_ begins in areas with no remnants of older community.
  - a. Primary succession
  - b. Secondary succession
  - c. Climax community
  - d. Pioneer species
7. \_\_\_\_\_ occurs when a disturbance changes a community without completely destroying it.
  - a. Primary succession
  - b. Secondary succession
  - c. Climax community
  - d. Pioneer species
8. The first species to live in an area of primary succession are called
  - a. Primary succession
  - b. Secondary succession
  - c. Climax community
  - d. Pioneer species
9. After a natural disaster occurs in a healthy ecosystem, secondary succession will cause the ecosystem to return to its original
  - a. Climax community
  - b. Human-caused disturbance
  - c. Climate
  - d. Biome
10. The clearing of rain forest is the example of a(n) \_\_\_\_\_ drastic enough to prevent the original climax community from reforming
  - a. Climax community
  - b. Human-caused disturbance
  - c. Climate
  - d. Biome
11. A(n) \_\_\_\_\_ is a group of terrestrial communities that covers a large area and is characterized by abiotic and biotic factors.
  - a. Climate
  - b. Canopy
  - c. Biome
  - d. Humus
12. Estuaries form where
  - a. A lake evaporates
  - b. A river meets the sea
  - c. A river becomes dammed
  - d. A wetland becomes filled in
13. Which is NOT a main category of freshwater ecosystems?
  - a. Rivers and streams
  - b. Lakes and ponds
  - c. Bogs and marshes
  - d. Freshwater wetlands
14. An ecosystem in which water either covers the soil or is present at or near the surface of the soil is called
  - a. Wetland
  - b. Freshwater bogs
  - c. phytoplankton
  - d. zooplankton
15. If the greenhouse effect decreases, the temperature would
  - a. Decrease
  - b. Increase
  - c. Be unaffected
  - d. None of the above

16. A symbiotic relationship in which both species benefit is
- Commensalism
  - Mutualism
  - Predation
  - Parasitism
17. Primary succession would most likely occur after
- A forest fire
  - A lava flow
  - Farm land is abandoned
  - A severe storm
18. Which biome is characterized by very low temperatures, little precipitation, and permafrost?
- Desert
  - Temperate Frost
  - Tundra
  - Tropical dry forest
19. How does an area's weather differ from the area's climate?
- Weather involves temperature and precipitation and climate involves only temperature.
  - An area's weather depends on where it is located on Earth and the area's climate does not.
  - An area's weather does not change very much and an area's climate changes many times.
  - Weather is the area's day-to-day conditions and climate is the area's average conditions.
20. What is one difference between primary and secondary succession?
- Primary succession is rapid and secondary succession is slow.
  - Secondary succession begins on soil and primary succession begins on newly exposed surfaces.
  - Primary succession modifies the environment and secondary succession does not.
  - Secondary succession begins with lichens and primary succession begins with trees.

**Fill in the blank (Write the full sentence and fill in the blank on your own sheet of paper)**

- The sun almost directly overhead at noon all year at the \_\_\_\_\_.
- A lion eating a zebra is an example of \_\_\_\_\_.
- A cow eating grass is an example of \_\_\_\_\_.
- \_\_\_\_\_ are landforms that are not classified into a major biome.
- An interaction in which an animal feeds on plants is called \_\_\_\_\_.
- A tick living on the body of a deer is an example of \_\_\_\_\_.
- A bee eating a flower's nectar and picking up the flower's pollen is an example of \_\_\_\_\_.
- A wetland that contains a mixture of fresh water and salt water is called \_\_\_\_\_.
- A symbiotic relationship in which one organism is harmed and another benefits is \_\_\_\_\_.
- Tundra is characterized by \_\_\_\_\_, a layer of permanently frozen subsoil.

**Write and define these words on your own sheet of paper:**

<ul style="list-style-type: none"> <li>• <b>Weather</b></li> <li>• <b>Climate</b></li> <li>• <b>Greenhouse Effect</b></li> <li>• <b>Niche</b></li> <li>• <b>Predation</b></li> <li>• <b>Herbivory</b></li> <li>• <b>Mutualism</b></li> <li>• <b>Parasitism</b></li> <li>• <b>Commensalism</b></li> </ul>	<ul style="list-style-type: none"> <li>• <b>Ecological Succession</b></li> <li>• <b>Primary Succession</b></li> <li>• <b>Pioneer Species</b></li> <li>• <b>Secondary Succession</b></li> <li>• <b>Permafrost</b></li> <li>• <b>Wetland</b></li> <li>• <b>Estuary</b></li> </ul>
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