

1. How do decomposers benefit an ecosystem?  
**(They break down dead organisms).**
2. How does a system of high pressure help us get good weather?  
**(The air masses sink, making it difficult for clouds to form).**
3. What is precipitation?  
**When water (in liquid or solid form) falls from the atmosphere**
4. What is air pressure?  
**Pressure that a column of air exerts on the air below it**
5. Name the process by which water moves between the hydrosphere and the atmosphere.  
**Water cycle**
6. Define weather.  
**Atmospheric conditions, along with short-term changes, of a particular place at a particular time**
7. Describe how your skin might feel on a day of high humidity and high heat.  
**Sticky and sweaty**
8. During which months does the most solar radiation reach the northern hemisphere?  
**June, July, and August**
9. What is the source of energy for almost all living things?  
**Sunlight**
10. When might resources such as water, food, or sunlight most likely to be limiting factors?  
**When a population gets too large**
11. Define climate.  
**A pattern of weather that occurs over many years**

12. True or false. In a rain forest ecosystem, plant life provides food and shelter to a wide variety of animals.

**True**

13. Know that the order in a food chain is:

**1. Sun 2. Producers 3. Herbivores 4. Carnivores**

**5. Scavengers**

14. Are plants and algae scavengers? If no, what are they?

**Plants and algae are producers.**

15. Is a grasshopper an herbivore, carnivore, or omnivore?

**Herbivore**

16. Owls eat meat. They are\_\_\_\_\_.

**Carnivores**

17. Ecology is the study of \_\_\_\_\_.

**the interaction between living things and their environment**

18. Why is it summer in the northern hemisphere at the same time it is winter in the southern hemisphere and vice versa?

**The amount of solar radiation reaching different areas of Earth changes as Earth completes its revolution around the sun. This is the result of Earth's tilt on its axis. (See page 478)**

19. What is an abiotic factor?

**An abiotic factor is a nonliving part of an ecosystem. (Abiotic factors are NOT part of a community).**

20. What is a population?

**A population is the number of individuals of one species that occupy the same area. (For example, oak trees).**

21. What is a community?

**A community includes all of the species of plants and animals that occupy that area.**

22. What is humus?

**Humus is a dark colored layer of soil formed by decaying plants and animals.**

23. What is a biotic factor?

**A biotic factor is a living part of an ecosystem.**

24. Define species.

**A species is a group of organisms that share similar characteristics and can reproduce among themselves producing fertile offspring.**

25. Define consumers.

**Consumers are organisms that cannot create their own food.**

26. Define producers.

**Producers are organisms that use energy from the Sun or other chemical reactions to make their own food. They are at the base of an energy pyramid as seen on page 565.**

27. What are decomposers?

**Decomposers are organisms that break down dead organisms, animal droppings, leaves, and other wastes produced by living things. (Examples include bacteria and fungi).**

28. What are scavengers?

**Scavengers are organisms that feed on dead animals. (Example: Vultures are scavengers).**

29. What is nitrifying bacteria?

**Nitrifying bacteria is a type of soil bacteria that can change nitrogen in the atmosphere to a form that plants can take up through their roots.**

30. Why does the energy pyramid get smaller toward the top?

**Less energy is available to organisms in the upper levels because each organism releases some of the chemical energy in food to the air as thermal energy. Less total energy is available with each step up an energy pyramid.**

31. Know the differences among primary, secondary, and tertiary consumers.

**Primary consumers, such as insects, eat producers. Going up to the next level are secondary consumers, such as snakes, which eat herbivores. Tertiary consumers are at the top of the pyramid. These predators, such as hawks, prey on organisms in the level below.**

32. See page 563 and understand what a food web is. Understand how it works and how to identify producers, carnivores, herbivores, etc.

33. Temperature measures how fast \_\_\_\_\_ are moving.  
**(air molecules)**

34. Where does the El Nino climate event start?  
**(Pacific Ocean)**

35. When air pressure is \_\_\_\_\_, weather is usually cloudy.  
**(Low)**

36. What is a front?

**A front is the boundary between cold and warm air masses**

37. What is an air mass?

**It is a large body of air that has the same properties as the Earth's surface over which it develops.**

38. Know the symbols for warm fronts and cold fronts. **(See the symbols in Figure 10 – page 477).**

39. What provides the energy for the water cycle?  
**(The sun)**

40. What is condensation? Can you see it?  
**Condensation occurs when the water vapor changes from a gas back into a liquid.**

41. Define relative humidity.  
**Relative humidity is the amount of water vapor in air relative to the maximum amount of water vapor the air can hold at that temperature before becoming saturated.**