

TEST NAME: **Ecology**
TEST ID: **194748**
GRADE: **06**
SUBJECT: **Life and Physical Sciences**
TEST CATEGORY: **School Assessment**

Student: _____

Class: _____

Date: _____

1. Which of these is a waste product of plant cells?

- A. minerals
- B. oxygen
- C. heat
- D. water

2. Ryan learned that some organisms use sunlight to make their own food. Which organism is able to make its own food?

A.



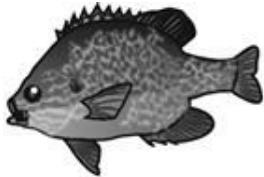
Flamingo

B.



Luna Moth

C.



Sunfish

D.



Sunflower Plant

3. Pat is learning how energy flows through an ecosystem. Pat understands that animals get energy from plants. What do plants do that allow animals to get energy from them?

- A. Plants keep water in their roots.
- B. Plants release nitrogen into the soil.
- C. Plants provide shelter from the weather.
- D. Plants make sugar in the presence of light.

4. A student must explain the role of dead leaves in the ecosystem. Which statement will the student most likely provide to explain the importance of these leaves?

- A. The leaves provide shelter to growing seeds.
- B. The decay of the leaves provides nutrients to other plants.
- C. The leaves release chlorophyll into the grass as they decay.
- D. The leaves prevent fungus from growing at the base of the tree.

5. In one area, a large source of prey for eagles is rabbits. If the number of rabbits suddenly decreases, what effect will it most likely have on the eagles?

- A. Their numbers will increase.
- B. Their numbers will decrease.
- C. They will adapt new behaviors.
- D. They will migrate to new locations.

6. Which diagram best shows how energy flows through a simple food chain?

- A. Leaves → Caterpillar → Bird
- B. Tree → Bird → Caterpillar
- C. Leaves → Tree → Caterpillar
- D. Caterpillar → Leaves → Bird

7. Some students studied four Florida mammals. The students listed the diets of the animals in the table.

Florida Mammals

Type	Diet
Beaver	acorns, plants, roots, tree bark, twigs
Fox	birds, crickets, caterpillars, fish, rabbits, rats, mice
Mink	crayfish, fish, frogs, insects, salamanders, snails
Otter	birds, crayfish, fish, frogs, fruit, salamanders, snakes

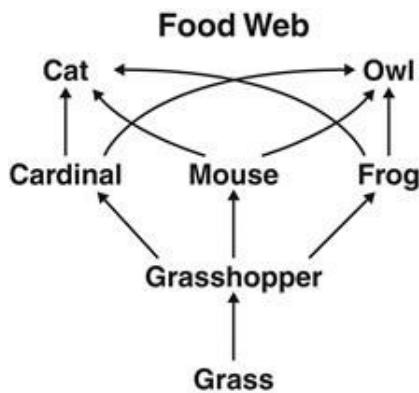
Which mammals compete with each other the most for food?

- A. beaver and fox
- B. beaver and mink
- C. fox and otter
- D. mink and otter

8. Students kept some crickets in a classroom tank. The tank was kept in an area where it would get several hours of sunlight a day. The tank contained one area with water, and another area with soil where plants were growing. From which source did the crickets gain all of their energy?

- A. the soil
- B. the water
- C. the plants
- D. the sunlight

9. The diagram shows a typical food web.



In this food web, which animal has the role of the tertiary (third) consumer?

- A. Owl
- B. Frog
- C. Cardinal
- D. Grasshopper

10. Plant growth is affected by environmental factors such as gravity. If a seed is allowed to sprout and grow while it is turned sideways, which will most likely occur?

- A. roots will grow downward, stems will grow downward
- B. roots will grow downward, stems will grow upward
- C. roots will grow upward, stems will grow downward
- D. roots will grow upward, stems will grow upward

11. Which environmental factor will cause a plant shoot to grow in a direction other than straight up?

- A. temperature
- B. amount of top soil
- C. amount of water
- D. location of the light

12. When a plant wilts, the stomata close. How does this help the plant?

- A. It increases photosynthesis.
- B. It reduces further water loss.
- C. It increases cellular respiration.
- D. It reduces water intake by roots.

13. Which external stimulus causes a plant to bend toward it?

- A. a light source
- B. a magnetic field
- C. a spray of water
- D. a source of wind

14. In which direction do the roots of plants grow?

- A. in the direction of moisture only
- B. in the direction of the pull of gravity only
- C. in the direction of water and the pull of gravity
- D. in the direction of water and away from the pull of gravity

15. Why does it usually take desert cacti longer to recover from a fire than it does for wildflowers in a meadow?

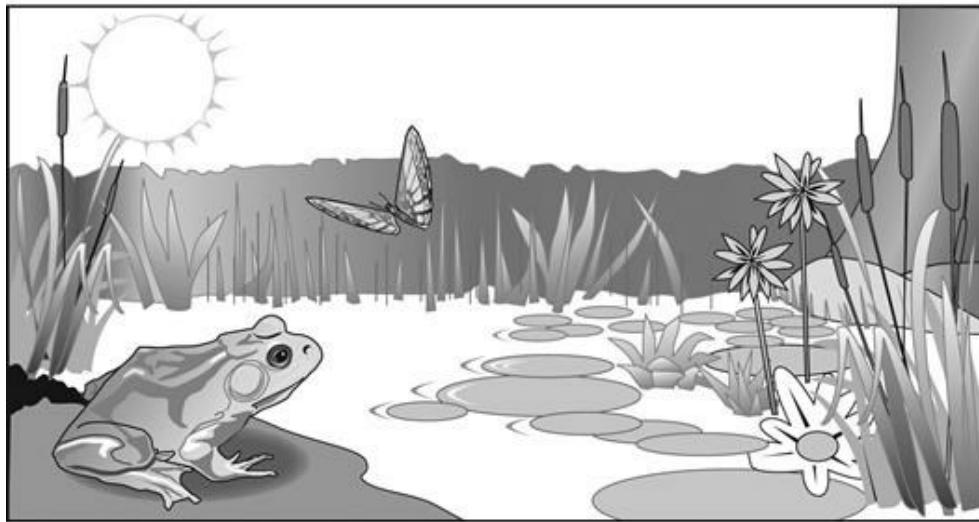
- A. Desert cacti grow more slowly than wildflowers.
- B. Wildflowers produce seeds with a seed coat for protection.
- C. There are more desert animals eating the young cacti plants.
- D. There are more wildflowers in a meadow than cactus plants in a desert.

16. A tulip growing in a pot is placed at the center of a table. Which of these nearby objects will the tulip grow toward?

- A. a sunny window
- B. an electric heater
- C. a large bowl of water
- D. a fan blowing gently

17. The picture shows a pond ecosystem.

Pond Ecosystem



Which abiotic factor is the basis for this ecosystem?

- A. insects
- B. frogs
- C. water
- D. wind

18. An abiotic factor that most influences the organisms living in a salt marsh is

- A. fish.
- B. water.
- C. predators.
- D. grasses.

19. In the geologic past, abiotic factors such as volcanic eruptions have had an impact on the availability of resources. How can volcanic eruptions impact the availability of resources?

- A. by decreasing the thickness of soil
- B. by causing more heavy rains to erode topsoil
- C. by disrupting the sunlight from reaching producers
- D. by causing the surface of Earth to be warmer than usual

20. Plants that can live in sandy soils most likely have the ability to withstand

- A. fires.
- B. salt.
- C. cold temperatures.
- D. dry conditions.

21. Which conclusion is best supported by a tree-growth ring that is much narrower than the other growth rings?

- A. Crops grew well that year.
- B. One year was unusually dry.
- C. The tree was planted long ago.
- D. The area used to have more trees.

22. An ecosystem is described below.

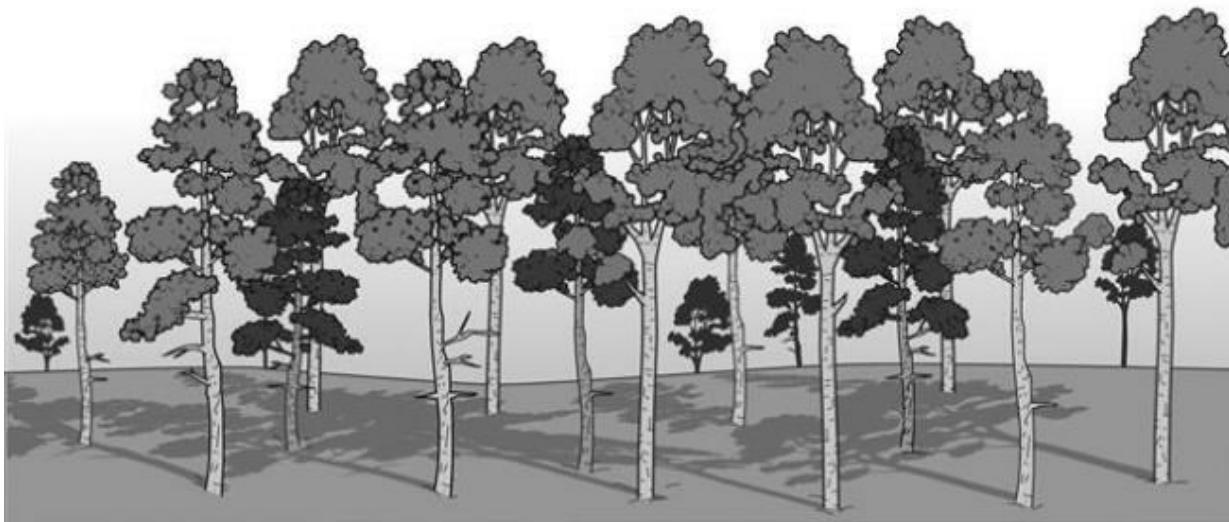
Marsh Ecosystem

1	Snails, mussels, insects
2	Bacteria, fungi, algae
3	Herbaceous plants, marsh grasses
4	Low elevation, high salinity (salt)

Which row contains abiotic factors?

- A. 1
- B. 2
- C. 3
- D. 4

23. A student group sees a group of trees in a field. They notice that all of the trees are the same height except for a few.



What is most likely affecting the growth of the shorter trees?

- A. The taller trees are blocking most of the wind.
- B. The taller trees are using up most of the water.
- C. The taller trees are blocking most of the sunlight.
- D. The taller trees are using up most of the carbon dioxide.

24. The nitrogen cycle is important to plants because

- A. nitrogen in the water is healthy.
- B. plants cannot use nitrogen as it is.
- C. plants need ammonia to photosynthesize.
- D. most nitrogen comes from rocks in the soil.

25. When a volcano erupts, dust and ash are blown into the atmosphere. The eruption directly reduces the transfer of energy from

- A. the ground to bacteria.
- B. the Sun to plants.
- C. plants to animals.
- D. animals to air.