

6th Grade Science Review
11/28/2004

Student Name: _____

Class: _____

Date: _____

Instructions: **Read each question carefully and circle the correct answer.**

1. Which of these is necessary for an ecosystem to be healthy?
 - A. pesticides
 - B. biodiversity
 - C. extinction
 - D. catastrophe

2. Which of the following best describes **biodiversity**?
 - A. the different kingdoms of organisms
 - B. the various uses for organisms
 - C. the differences between the individuals of a species
 - D. the variety of organisms found in an area

3. Which of the following is one reason that an animal may become extinct?
 - A. expansion of the animal's hunting area
 - B. abundance of the animal's food
 - C. loss of the animal's habitat
 - D. the animal's lack of predators

4. Fill in the blank.

Unlike extinctions millions of years ago, today's extinctions are mainly being caused by _____.

- A. humans
- B. meteors
- C. volcanoes
- D. sharks

5. Which item listed below would complete this food chain?

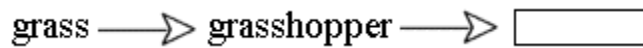


- A. tree leaves
- B. mice
- C. grasshopper
- D. cactus

6. Most food chains begin with _____ .

- A. an animal
- B. a mouse
- C. a plant
- D. the ocean

7. Which animal listed below would complete this food chain?



- A. fly
- B. lizard
- C. butterfly
- D. hummingbird

8. Look at the picture and then fill in the blank.



This picture shows _____ .

- A. an environment
- B. a growing animal
- C. a food chain
- D. a life cycle

9. Which of the following organisms is a bear's **prey**?

- A. a blackberry
- B. a tree
- C. another bear
- D. a fish

10. Which one of these animals is a predator?



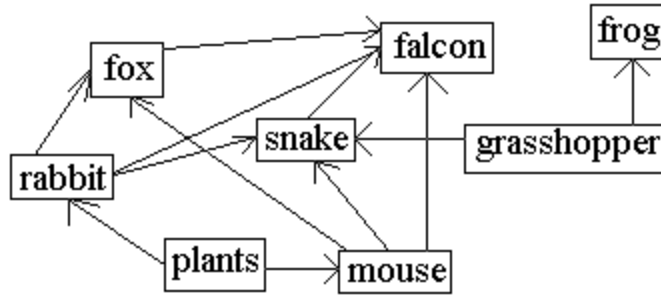
- A. the cow
- B. the rabbit
- C. the mouse
- D. the falcon

11. Fill in the blank.

Mice and rabbits eat plants. They are known as herbivores.
Mice, and rabbits are also called _____.

- A. consumers
- B. decomposers
- C. producers
- D. predators

12. Use this food web to answer the question.



Which herbivore listed below is eaten by the fox?

- A. rabbit
- B. frog
- C. snake
- D. grasshopper

13. Fill in the blank.

The osprey is a large bird of prey that feeds on fish. Small songbirds sometimes build their nests beneath the large osprey nests. The small birds are in no danger of the fish-eating osprey, but they are protected from enemies by living so close to the bird of prey. The osprey is not affected by the songbirds. This is an example of a _____ relationship.

- A. parasitic
- B. commensalistic
- C. mutualistic
- D. predatory

14. Fill in the blank.

Meerkats live in groups. At least one member of the group will stand guard while the others in the group look for food. This is an example of _____.

- A. competition
- B. commensalism
- C. cooperation
- D. symbiosis

15. Fill in the blank.

In the ocean there are many kinds of small fish that get their food by going inside the mouths of larger fish and cleaning out food particles. The small fish benefit by obtaining food and the large fish benefit by getting their teeth cleaned. This is an example of a _____ relationship.

- A. commensalistic
- B. parasitic
- C. mutualistic
- D. competitive

16. Fill in the blank.

Killer whales live in the cold waters off the coasts of North and South America. These whales sometimes come close to shore where seals rest on the beach. A whale waits until a seal comes very close to the water, then uses a breaking wave to ride up on the sand to catch the seal. This is an act of _____.

- A. competition
- B. cooperation
- C. hibernation
- D. predation

17. Fill in the blank.

During a rainstorm, chemicals from air pollution in the atmosphere may come back to the earth as _____.

- A. wastewater
- B. gasoline
- C. acid rain
- D. red rain

18. Which of these acts is NOT considered to be polluting?

- A. burning fossil fuels
- B. using solar power
- C. burying trash in a landfill
- D. using natural gas

19. How can toxic chemicals in the soil harm you?
- A. They change the weather.
 - B. They are absorbed by food grown in the soil.
 - C. They purify groundwater in the soil.
 - D. They cause more air pollution.
20. If phosphates and nitrates from detergents are allowed to enter a lake or pond, an abundance of algae may begin to grow. How does an increase in algae growth harm a lake or pond?
- A. Algae use much of the oxygen in the water.
 - B. Birds, fish, and turtles do not eat algae.
 - C. Algae act as sponges and soak up all the water.
 - D. Algae turn the phosphates into toxic wastes.
21. Fill in the blank.
- A population's _____ is the rate at which it would produce young if every new individual lived and reproduced at its maximum capacity.
- A. biotic potential
 - B. primary rate
 - C. limiting factor
 - D. ecological pyramid
22. Why would an ecosystem be unable to sustain an increase in carnivores?
- A. There is not enough prey.
 - B. The carnivores now have more space.
 - C. Plant growth increases.
 - D. It is a marine ecosystem.
23. Which abiotic factor in an ecosystem helps to control population size?
- A. plant growth
 - B. plenty of sunlight
 - C. species of animals
 - D. availability of space

24. Fill in the blank.

The maximum number of organisms an environment can support is called the _____.

- A. limiting factor
- B. carrying capacity
- C. biodiversity
- D. fertility rate

25. Which of the following do decomposers return to the environment?

- A. oxygen
- B. sugar
- C. hydrogen
- D. nitrogen

26. Fill in the blank.

Decomposers cause dead organisms to _____.

- A. germinate
- B. reproduce
- C. decay
- D. molt

27. Which of these organisms is NOT a decomposer?

- A. mold
- B. mushroom
- C. vulture
- D. bacterium

28. Fill in the blank.

After a living thing dies, it goes through the process of _____.

- A. hibernation
- B. decomposition
- C. reproduction
- D. respiration

29. Which of the following is the best example of an **adaptation**?

- A. zebra drinking walking in the desert
- B. trained dogs returning a ball when it is thrown
- C. owls having large eyes so they can see better at night
- D. hummingbirds having to eat once every three minutes

30. Which of the following is NOT an example of an **adaptation**?

- A. a seagull flying near the ocean
- B. a monkey's tail that helps it swing between trees
- C. a fox's large ears that help it hear well
- D. a koala's claws holding onto tree bark

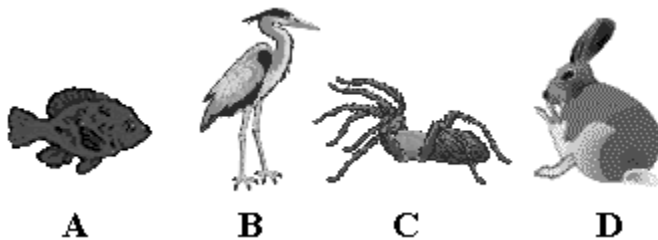
31. Which of the following is the best example of an **adaptation** of a cheetah?

- A. It lives in hot areas.
- B. It eats gazelle.
- C. It likes to hunt.
- D. It can run fast.

32. Some animals migrate, or move to a different area during a particular season, to find food or better living conditions. Why would this be considered an **adaptation**?

- A. because all animals must be able to find food
- B. because it is an activity that all animals of that same species participate in
- C. because it helps the animal survive
- D. because it is a change that occurs every year

33. Many scientists believe that some dinosaurs were most similar to what other animal living today?



- A. A
- B. B
- C. C
- D. D

34. In what way can humans stop other living things from becoming extinct?
- A. Hunt all of them.
 - B. Change their food supply.
 - C. Protect their habitat.
 - D. Help them have more predators.
35. "Extinct" means there is no more of a particular plant or animal anywhere in the world. What might be one reason that an animal becomes extinct?
- A. There is too much food available for them.
 - B. Their habitat is taken or changed by humans.
 - C. They have enough room to live in.
 - D. The environment is correct for them.
36. Which of the following is NOT true?
- A. Extinction is still happening today.
 - B. Extinct plants are very different from all plants living today.
 - C. Extinction can be caused by a disease.
 - D. Extinct animals can be studied using fossils.
37. A population of moths has wing patterns that look like tree bark. How could this affect the moths?
- A. The moth population would not be affected.
 - B. The population could decrease because male moths can't see the female moths.
 - C. The camouflaged moths probably would not be eaten by predators.
 - D. The predators could find the moths more easily and eat them.
38. Fill in the blank.
- As environments change, all organisms must _____ to survive, or face extinction.
- A. photosynthesize
 - B. adapt
 - C. hibernate
 - D. migrate

39. What could be said about an organism that CANNOT meet its needs within an ecosystem?
- A. It will produce more offspring.
 - B. It will become an herbivore.
 - C. It may become extinct.
 - D. It may change its coloring.
40. A tiger is born with white fur instead of fur that is brownish-orange with black stripes. How could this affect the tiger?
- A. It probably wouldn't affect the tiger at all.
 - B. A lack of camouflage could make capturing prey more difficult.
 - C. A lack of stripes could help the tiger be warmer.
 - D. A lack of camouflage could allow the tiger to get more prey.
41. Fill in the blank.
- "Survival of the fittest" means that _____.
- A. only the most powerful organisms in a species will survive
 - B. the faster the organism, the longer it will live
 - C. organisms that have the traits necessary to adapt will survive
 - D. the more offspring an organism has, the longer it will live
42. How can an organism's coloring aid in its survival?
- A. It makes it easier to tell species apart.
 - B. It helps the reproduction process.
 - C. It helps the organism escape predators.
 - D. It allows offspring to find their parents.
43. What would most likely happen to a tree squirrel that was born unable to climb trees?
- A. It would be eaten by a predator.
 - B. It would learn to fight off predators.
 - C. It would migrate to another habitat.
 - D. It would survive to reproduce.
44. Why would a smaller, faster cheetah survive better today than a larger, slower cheetah?
- A. They would be better at hunting.
 - B. They would not need as much water.
 - C. They would migrate more easily.
 - D. They would have more offspring.

45. Fill in the blank.

If a seed is dormant, it _____.

- A. has not sprouted
- B. is too large
- C. will never sprout
- D. is too small

46. Fill in the blank.

When environmental conditions are right, seeds will _____.

- A. photosynthesize
- B. pollinate
- C. germinate
- D. reproduce

47. Fill in the blank.

All seeds need _____ in order to begin growing.

- A. soil
- B. water
- C. sunlight
- D. air

48. Which of these events would NOT bring helpful nutrients to the soil for plants to use?

- A. a volcano erupting
- B. a river flooding
- C. a new highway
- D. a forest fire