



Name:  
Date:  
Period:

**CP2 ECOLOGY TEST REVIEW**  
My test is on: \_\_\_\_\_

This packet is due: \_\_\_\_\_

**What should I study for the test?**

Population, Symbiosis, Biological Magnification and Biodiversity Notes. \*Review food webs and equations for photosynthesis and cellular respiration

**How do I study?**

1. Use the notes! Highlight important terms and items you need to return to later
2. Make flash cards w/ definitions

**Vocab to know:**

community	species	consumer	population	producer
parasitism	symbiosis	predation	commensalism	competition
DDT	biodiversity	logistic growth	immigration	emigration
birthrate	death rate	invasive species	photosynthesis	biological magnification

**\*\*\*\*\*Directions\*\*\*\*\* Complete worksheet without using your notes and book. THEN, go back and look up answers.**

1. **Matching:** Use each word once.

Mutualism, Predation, Commensalism, Competition, Host-Parasite, Producer-Consumer

- a. Mosquitoes feed on dog's blood, taking materials needed by the dog. \_\_\_\_\_
- b. A goat eats ivy. \_\_\_\_\_
- c. A flower provides food for a bee, the bee helps the flower get pollinated. \_\_\_\_\_
- d. A cane toad eats a mouse. \_\_\_\_\_
- e. Squirrels live in nests on trees, not harming the trees. \_\_\_\_\_
- f. Crows and squirrels eat corn. \_\_\_\_\_

2. Draw an arrow (up or down) in the blank which show what happens to a given population size when...

___ birthrate increases	___ emigration increases	___ deathrate increases
___ higher competition	___ increased resources	___ immigration increases

3. What is biodiversity?

4. What are 4 things humans can do to reduce biodiversity?

5. Would the following human actions decrease or increase biodiversity? (Check off decrease or increase column)

	Decrease	Increase	
A			prohibiting (stopping) hunting in wildlife preserves
B			planting only red pine trees to replace native hardwood forests cut for lumber
C			planting only native grass species to prevent erosion beside highways
D			taking tissue samples from members of endangered species
E			destroy the wetland habitat to build houses
F			loss of trees from forest habitat
G			Hunting whales to extinction

6. What happens to the concentration of DDT as it moves up the food chain?

7. What is a non-native species and how can they be threats to biodiversity?

8. What are the 2 types of population growth?

\_\_\_\_\_ and \_\_\_\_\_

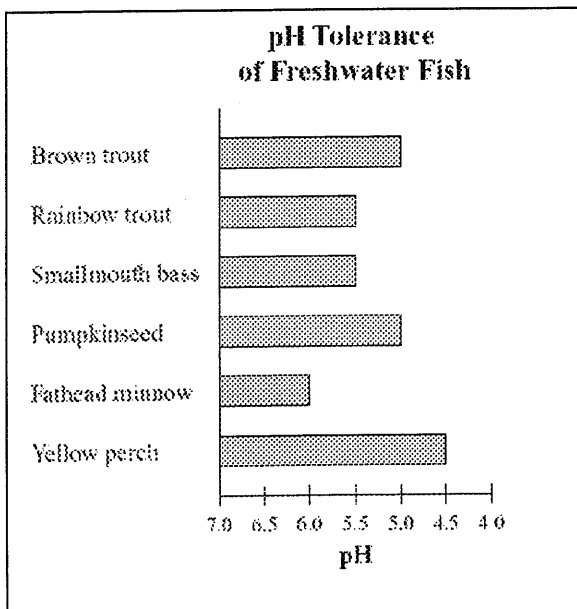
9. Which type of population growth happens when there are unlimited resources? \_\_\_\_\_

10. Why can't populations grow forever? \_\_\_\_\_

11. What occurs in a population as it grows?

- a. The birthrate becomes higher than the death rate.
- b. The birthrate stays the same and the death rate increases.
- c. The birthrate becomes lower than the death rate.
- d. The birthrate and the death rate remain the same.

12. What is DDT? \_\_\_\_\_

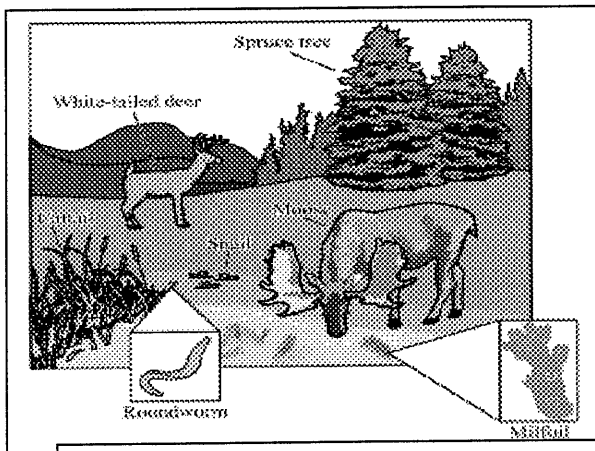


13. Based on the data, which of the following fish would **most likely** experience the largest population declines due to acid rain pollution?

- A. brown trout
- B. smallmouth bass
- C. fathead minnow
- D. yellow perch

Forest and wetland ecosystems in Canada and parts of the northern United States are home to moose, *Alces alces*. The illustration below shows a moose and some of the plants and other animals found in its typical habitat. One serious problem for moose is a disease called moose brainworm. Effects of the disease include aimless walking in circles, poor coordination and balance, weakness, and paralysis of the legs. Many cases of the disease result in death. The disease is caused by a parasitic roundworm, *Parelaphostrongylus tenuis*. The life cycle of this roundworm involves snails, white-tailed deer, and moose, as shown in the diagrams on the next page. Of these organisms, only the moose gets sick from infection by the roundworm.

- 14 A correlation exists between the number of cases of moose brainworm disease and the density of the deer population. Which of the following statements gives the best explanation for this relationship?
- A. High deer population density causes individual deer to reproduce more.
  - B. High deer population density speeds up the life cycle of the roundworm.
  - C. High deer population density attracts more moose to an area where they will become infected.
  - D. High deer population density results in more larvae-infected waste for snails to encounter in an area.

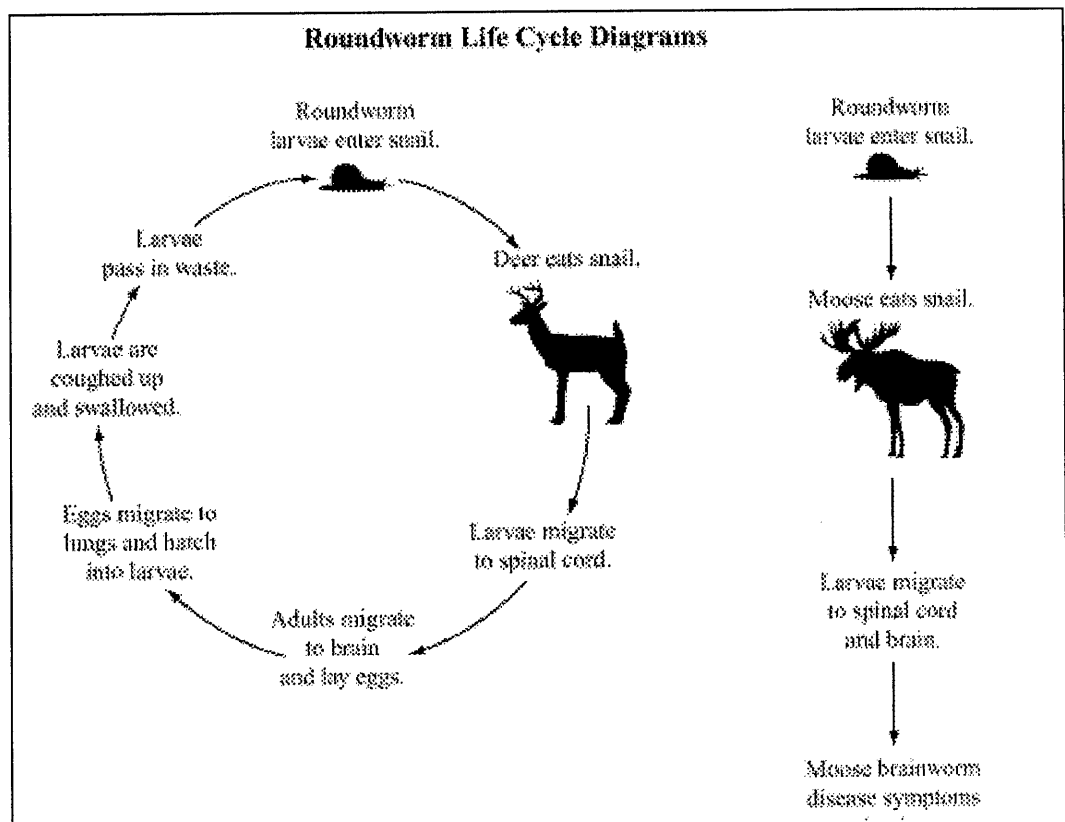


15 Which of the following has the least influence on the population size of the deer?

- A. annual birthrate
- B. amount of predation
- C. roundworm parasites
- D. emigration over winter

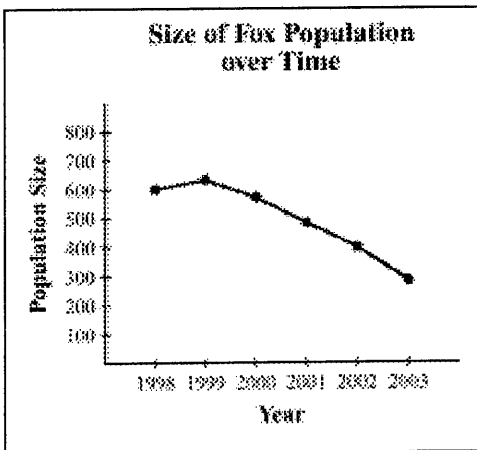
16 The introductory information describes one relationship between organisms in the illustration: parasitism. All the organisms pictured in this habitat interact in other ways as well.

**Describe one example of competition between the organisms in the illustration. Name the organisms involved, describe their interaction, and explain why their interaction is considered competition.**



17 Describe one example of commensalism between the organisms in the illustration on the previous page. Name the organisms involved, describe their interaction, and explain why their interaction is considered commensalism.

18 The graph below shows the changes in the size of a fox population over time.



A. Identify **three** different factors that could have caused the overall decrease in the fox population.

- 1.
- 2.
- 3.

B. Explain, in detail, how **each** factor you identified in part (a) would have caused the decrease.