

Name _____

Limiting Factors Worksheet

For Questions 1-6, write "True" if the statement is true. If the statement is false, change the underlined word to make the statement true

- _____ 1. Limiting factors determine the immigration capacity of a population.
- _____ 2. A limiting factor controls the growth of a population.
- _____ 3. Limiting factors operate when growth is exponential.
- _____ 4. Populations grow too large in the absence of limiting factors.
- _____ 5. Competition is an example of a limiting factor.
- _____ 6. Population size can be limited by factors such as predation.

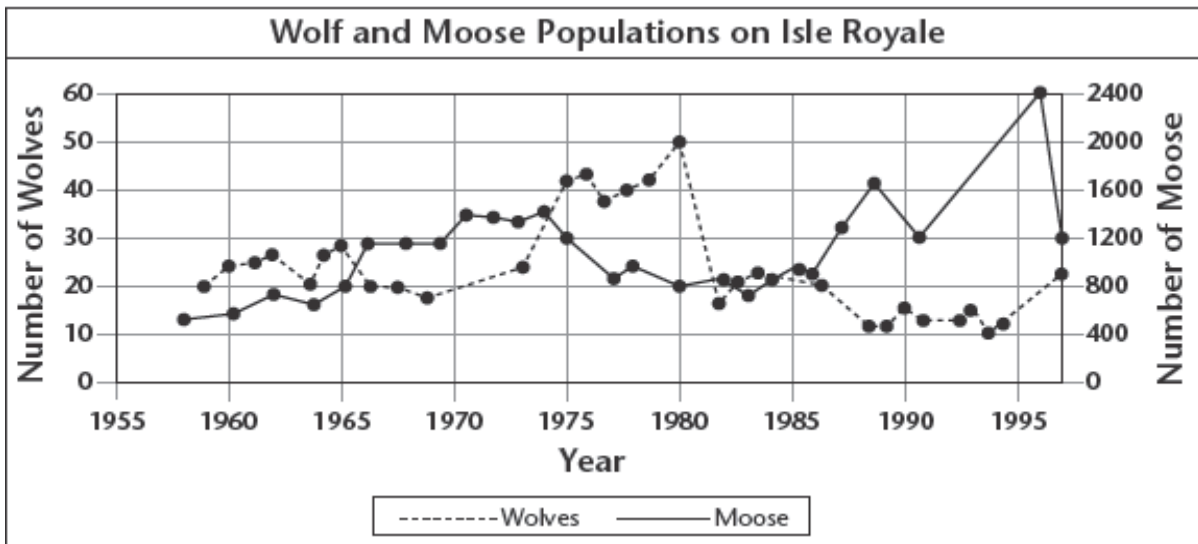
Density-Dependent Limiting Factors

7. What is a density-dependent limiting factor?

8. When do density-dependent factors operate most strongly?

9. List four density-dependent limiting factors?

Use the graph to answer Questions 10-13.



10. What happened to the number of wolves on Isle Royale between 1975 and 1985?

11. What happened to the moose population when the number of wolves was low?

12. What is the relationship between the moose and the wolves on Isle Royale?

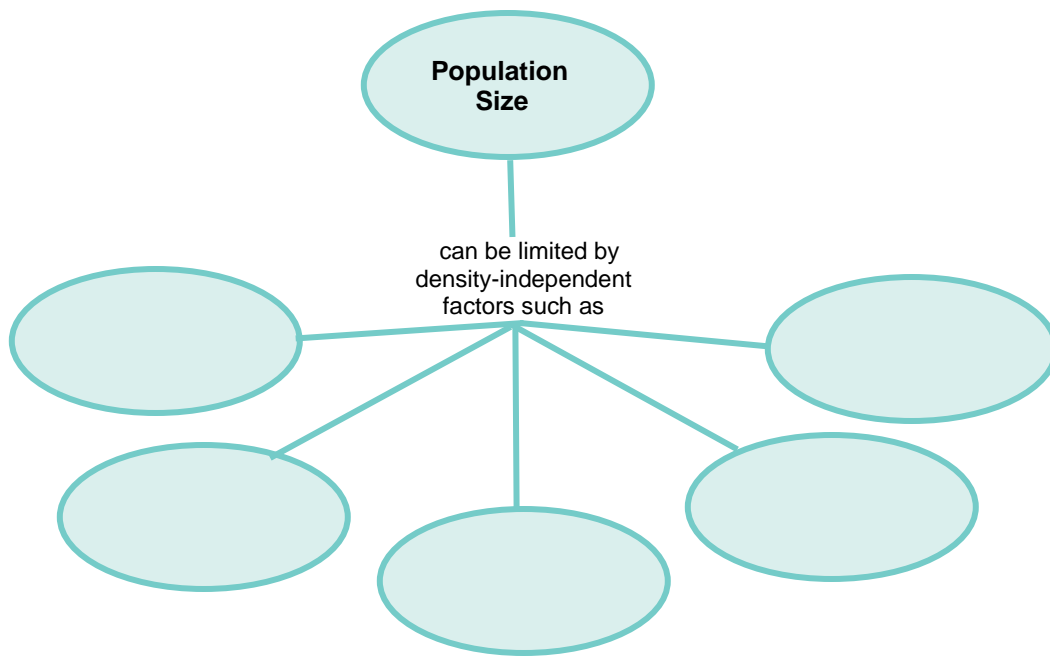
13. Is the number of moose on the island a density-dependent or density-independent limiting factor for the wolf? Explain your answer.

Density-Independent Limiting Factors

14. What term describes a limiting factor that affects all populations in similar ways, regardless of population size?

15. What is the usual response in the population size of many species to a density-independent limiting factor?

16. Complete the graphic organizer with examples of density-independent limiting factors.



17. A population continues at a stable size for many years. Suddenly, in a single season, the population size drops by half. Is the cause more likely to be density-dependent, density-independent, or both? Explain your answer.
