



Name: _____ Date: _____

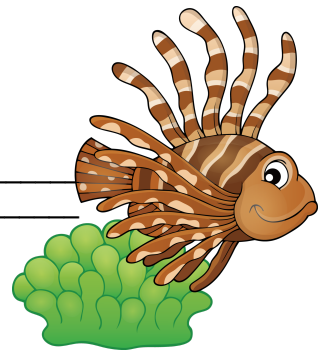
CASE STUDY

What can we learn from China?

1. How many people died due to the "Great Leap Forward" policy? _____
2. What policy was enacted in 1979 to slow population growth? _____
3. What outcome did the policy have? _____

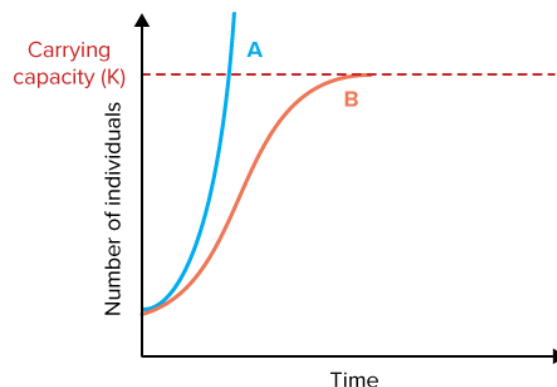
5.1 How Populations Grow

4. What nearly caused the extinction of sea otters? _____
5. Otters are important to the health of _____
6. Ecologists study populations by examining their geographic range, density and distribution, and _____
7. The places a population lives make up its _____
8. If the population stays about the same size, their growth rate is _____
9. A negative growth rate means that the numbers are _____
10. The number of individuals that can be found per unit area is called _____
11. Population distribution describes what? _____
12. Data that describes the number and ages of individuals: _____
13. If the birth rate equals the death rate, the population _____
14. Why is the lionfish death rate lower in the Atlantic? _____
15. _____ occurs when individuals move into a range from elsewhere.
16. _____ occurs when individuals move away from a range.
17. How did lionfish get into the Atlantic? _____
18. _____ occurs under ideal conditions with unlimited resources.
19. If you plot the population growth of a bacteria under ideal conditions, you get a curve shaped like a _____
20. What organism escaped from a laboratory near Boston has been devouring forests? _____
21. During phase 1 of logistic growth, population _____
22. During phase 2 of logistic growth, _____
23. During phase 3 of logistic growth, _____
24. Logistic growth is represented by an _____ - shaped curve.
25. The maximum number of individuals that an environment can support is the _____



26. On the graph shown, which area represents:

_____ Logistic Growth
 _____ Exponential Growth





Name: _____ Date: _____

5.2 Limits to Growth

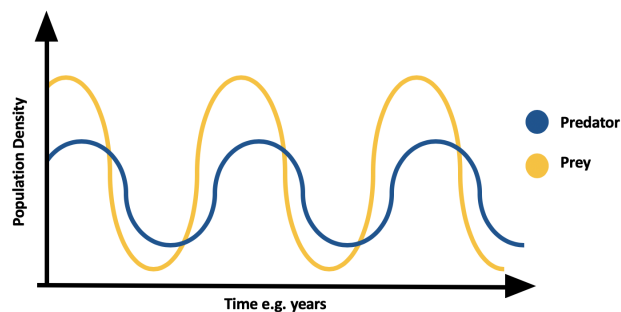
1. What limits warthog populations in Africa? _____
2. Any factor that controls the growth of a population is called a _____ factor.
3. These factors determine the _____ of an environment.
4. Ecological limiting factors produce the pressures of _____ that Charles Darwin described.
5. Competition is a limiting factor because the more individuals, _____ the sooner they use available _____
6. Many animals compete for _____ where they find food and shelter.
7. How does overcrowding limit populations? _____
8. (Fig 5-9) The graph shows how moose and wolf populations fluctuate over time. What does "fluctuate" mean? Describe the trend shown in the graph.



9. (Fig 5-9) What happened to the wolf population in 1980? _____
In what year was the moose population the highest? _____
What happened to the moose the following year? _____
10. The relationship between the wolf and moose is called a _____ relationship.
11. How does human activity limit populations? _____

Density Independent Limiting Factors

12. What weather phenomenon can affect coral reefs? _____
13. On Isle Royale, what caused the moose population crash? _____
14. What introduced species grew out of control in Australia? _____
15. How was the species eventually controlled? _____
16. What happens when the carrying capacity becomes too low? _____



5.3 Human Population Growth

1. Worldwide, how many babies are born every second? _____
2. What are limiting factors to human population growth? _____
3. What caused human populations to increase quickly? _____
4. How did Malthus believe human populations would be limited? _____
5. A decrease in growth rate means the population is growing _____



Patterns of Human Population Growth

6. The scientific study of human populations is called _____
7. In a demographic transition, what changed? _____
8. In state 2 of the transition, death rates fall but _____ remains high. (Fig 5-14)
9. Age structure diagrams compare the number of people at different _____
10. A greater percentage of young people indicate a _____ population.
11. (Fig 5-15) Which area has rapid growth? _____
Which area has negative growth? _____

CASE STUDY

Case Study Wrap Up

12. What are issues resulting from a growing human population?

13. Do you think China's one-child policy was justified? Why or why not?

14. Propose alternatives to the one-child policy that could have slowed population growth.