Name	Class	Date
Chapter 5 Populations		
Section 5–1 How Po This section identifies the charact also describes factors that affect p exponential growth and logistic g	pulations Grow (pa eristics used to describe a population size and explains white rowth are.	ges 119–123) lation. It at
Characteristics of Popula	ations (page 119)	
1. What are the four main cha	racteristics of a population?	
a	C	
b	d	
2. What is a population's geog	graphic distribution?	
3. Another term for geograph	ic distribution is	
4. What is population density	?	
5. What is the equation with v	vhich you can calculate popu	ulation density?
Population Growth (page	2 120)	
6. Circle the letter of each sent	tence that is true about popu	lations.
a. They can grow rapidly.		
b. They can decrease in size	е.	
c. They may stay the same	size from year to year.	
d. They stay the same size	until they disappear.	
7. What three factors can affect	et population size?	
a		
b		
c		

- 8. If more individuals are born than die in any period of time, how will the population change?
- **9.** Complete the table about changes in population.

CHANGES IN POPULATION

Type of Change	Definition	Resulting Change in Size
Immigration		
Emigration		

Name Class Date	

Exponential Growth (page 121)

- **10.** How will a population change if there is abundant space and food and if the population is protected from predators and disease?
- 11. When does exponential growth occur? _____
- 12. What are three ways that a growth rate may be stated, or expressed? ______
- 13. Under ideal conditions with unlimited resources, how will a population grow?
- **14.** Complete the graph by drawing the characteristic shape of exponential population growth.



Exponential Growth of Bacterial Population

15. Is the following sentence true or false? Elephants never grow exponentially because their rate of reproduction is so slow. _____

Logistic Growth (page 122)

16. Circle each sentence that is true about exponential growth.

- **a.** It continues until the organism covers the planet.
- **b.** It continues at the same rate as resources become less available.
- c. It does not continue in natural populations for very long.

d. It continues in natural populations until the birthrate increases.

17. When resources become less available, how does population growth change?

Name	Class	Date
18. When does logistic growth occur?		

- **19.** Circle the letter of each instance when a population's growth will slow down.
 - **a.** The birthrate and death rate are the same.
 - **b.** The birthrate is greater than the death rate.
 - **c.** The rate of immigration is equal to the rate of emigration.
 - **d.** The rate of emigration is less than the rate of immigration.
- **20.** What is the carrying capacity of the environment for a particular species?
- **21.** Complete the graph by drawing the characteristic shape of logistic population growth.



Logistic Growth of Yeast Population