**AP Biology Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Chapter 52 Guided Reading**

1. Define the following terms:
	1. Population
	2. Density
	3. Dispersion
	4. Mark-recapture method
	5. Immigration
	6. Emigration
	7. Territoriality
2. What are the three patterns of dispersion and what conclusions can you draw from these patterns?
3. Define the following terms:
	1. Demography
	2. Life tables
	3. Survivorship curves
	4. Reproductive table
	5. Life history
4. Use the diagram below – label the three different survivorship curves – give an example of an animal that fits the curve and an explanation of why they fit the curve.

5. Compare and contrast semelparity and iteroparity – give advantages of each as they apply to an example organism – focus on the adaptive benefit of the life history. Are there any disadvantages? This is a core concept.
6. What is zero population growth?
7. What is exponential population growth? What kind of graph would you expect to see?
8. Read section 52.4 slowly – we are not focusing on all of the math but the concepts – explain the logistical population growth model. Studying the graph below – what does it tell you and why? How does “K” fit in to all of this?


9. Compare and contrast r and k selection – this is a key concept – do some additional research and try to come up with at lease six points of comparison.
10. What is the difference between density-dependent and density-independent factors as a general term?
11. What generalizations can be made by the graphs below?

12. Describe six density-dependent factors in population regulation.
13. What is population dynamics?
14. Describe human population growth after studying figures 52.22 and 52.23.
15. What kinds of information do age structure pyramids provide and what inferences can be made from these?
16. How can an ecological footprint be useful?