## Reading Guide Packet: Chapter 3: The Biosphere

Biology B

	Name	Period	
Ch 3.1: Introduction to Global Systems			
1.	What is <i>ecology</i> ? With what parts of the Earth is <i>ecology</i> concerned?		
2.	What is a compelling reason to study ecology?		
3.	List and define 6 levels of ecological organization.		
4.	What are 3 main approaches that ecologists use to gather ecological data?		
5.	Compare and contrast <i>biotic</i> and <i>abiotic</i> factors.		
6.	Give an example of an <i>abiotic</i> factor that is strongly influenced by <i>biotic</i> fact	ors.	

## **Reading Guide Packet: Chapter 3: The Biosphere** Biology B

	7.	What are the 4 global systems that are considered in the Model of Earth Systems?
	8.	What is the purpose of the Model of Earth Systems?
Ch	3.2	: Climate, Weather and Life
	9.	Compare and contrast climate and weather.
	10.	What powers and shapes the global climate system?
	11.	What determines Earth's average temperature?
	12.	What would result on Earth from an absence of the greenhouse effect?
	13.	Why does latitude affect the amount of solar energy received at that location?

Reading Guide Packet: Chapter 3: The Biosphere Biology B		
14. What are the 3 climate zones on Earth? Where are they located?		
15. What does the differential heating of the Earth cause?		
16. What factors shape regional climates?		
17. What measurable changes in the Earth system result from climate change?		
18. What nonhuman factors can change the Earth's climate?		
19. What has been the result of rapid climate change in the Earth's past?		

## Ch 3.3: Biomes and Aquatic Ecosystems

20. How are *biomes* described?

ology B
21. How many major <i>biomes</i> are described on Earth?
22. What 2 factors largely determine the plant and animal life found in a particular biome?
23. How are aquatic ecosystems described ecologically?
24. Compare and contrast the <i>photic zone</i> and the <i>aphotic zone</i> .

Reading Guide Packet: Chapter 3: The Biosphere

25. Why are *estuaries* important?