READING COMPREHENSION: Abiotic and Biotic Factors

In general, ecosystems can be divided into two types of factors, abiotic factors and biotic factors. Both types contribute to the type and number of organisms (living things), which can inhabit an ecosystem. But what is the difference between them? The term **biotic** means living or having lived. Biotic factors are basically organisms and the remains of organisms. Examples of biotic factors would include a frog, a leaf, a dead tree, or a piece of wood. The term **abiotic** means non-living, or never having lived; abiotic factors are non-living, non-cellular, and inorganic materials which contribute to an environment. Examples of abiotic factors would include gold, rock, bicycle, brick, and cement.



Both types of factors affect the types of organisms that exist in an environment. For instance, in the desert, the lack of water (an abiotic factor) prevents the existence of most trees, which need steady rainfall. On the other hand, the numerous rodents, (mice, etc) which live in the desert (a biotic factor) enable a population of predatory coyotes to survive in this harsh climate.

Comprehension Questions

1. According to the text, what is an abiotic factor?	
2. According to the text, what is a biotic factor?	
3. Based on the definitions above, identify each of the following as biotic (B) or abiotic (A).	
The sand in a desert	Pollen from a plant
The bacteria in a lake	Pollution from an oil refinery
	According to the text, what is a biotic factor? Based on the definitions above, identify each of the The sand in a desert

5. Predict: One ecosystem that has been studied a great deal in recent years is a coral reef, an undersea ecosystem rich in marine animals living in or around tropical corals. Name one abiotic and one biotic factor present in coral reefs (hint: look at the picture above). ______