

Chapter 13 Principles of Ecology

13.2 Biotic and Abiotic Factors

I. An ecosystem includes both biotic and abiotic factors-

A. **Biotic factors** are living things that play a role in the ecosystem

1. plants
2. fungi
3. animals
4. bacteria

B. **Abiotic factors** are nonliving factors:

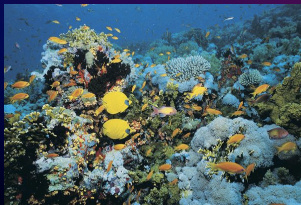
1. moisture
2. temperature
3. wind
4. sunlight
5. soil



II. Changing one factor in an environment in an ecosystem can affect many other factors-

A. **Biodiversity** is the variety of living things in an ecosystem.

1. The higher the biodiversity, the more stable an ecosystem is.



B. **Keystone species** are those organisms that have an unusually large effect on the ecosystem



Think – Pair – Share

3 minutes to think and write an answer

4 minutes to pair (2 minutes per partner)

5 minutes share with the class

1. Pick an ecosystem that is familiar to you and describe its abiotic and biotic factors.
2. How would the removal of a keystone species affect an ecosystem's biodiversity?
3. Explain how a change in an abiotic factor such as sunlight would affect biodiversity.
4. Humans are sometimes described as being a keystone species. Why does this label fit or not fit humans?

