

Biological Communities

Population and Species

A **population** is the collection of all members of a **species** (a single type of organism that can interbreed and produce offspring) in a given place and time. A biological **community** consists of multiple **populations** in an area.

Ecosystems

Ecosystems are biological communities consisting of living organisms, or **biotic factors**, and their environment, or **abiotic factors**. Examples of **biotic factors** are living organisms such as bacteria, algae, fungi, plants, and animals. **Abiotic factors** can be physical or chemical features such as light, nutrients, water, oxygen, and carbon dioxide.

Habitat and Niche

A **habitat** is where an individual lives. Climate, food, water, and weather are all important factors in an organism's habitat. A **niche** (pronounced *neesh*) is an organism's position within its environment. For example, a lion is a carnivore at the top of the food chain.

Concept Check

- What are biotic and abiotic factors?
- What is the difference between a species, population, community, and ecosystem?
- What is a niche?

Study Tip

To remember the different between biotic and abiotic factors, know that the prefix "a" before a word means *not*. So if biotic factors are living, then abiotic factors must be non-living.



A house is an example of a habitat for humans.