



Key Vocabulary

Lesson 1: Introduction

- Ecosystem (n):** web of interconnected organisms
- Biome (n):** a large community of plants and animals occupying a distinct region
- Climate (n):** weather patterns over a long period of time
- Food Web (n):** a system of interdependent food chains that shows the flow of energy through an ecosystem
- Producer (n):** an organism that creates its own food
- Photosynthesis (n):** the process through which most producers use sunlight to create their own food
- Consumer (n):** an organism that gets energy by eating other organisms
- Decomposer (n):** an organism that breaks down dead material for energy
- Herbivore (n):** an consumer that eats plants
- Carnivore (n):** a consumer that eats other consumers
- Equilibrium (n):** balance

Lesson 2: Energy and Ecosystems

- Chemical Reaction (n):** a process that rearranges the molecular or ionic structure of a substance
- Atoms (n):** the smallest building blocks of matter
- Molecules (n):** a group of atoms bonded together
- Oxygen (n):** a gas that supports life and is produced by plants
- Carbon Dioxide (n):** a gas that is absorbed by plants during photosynthesis
- Glucose (n):** a sugar molecule that can be broken apart to release energy
- Energy (n):** the power to do work
- Biomass (n):** the total mass of organisms available in a given area

Lesson 3: Limiting Factors in Ecosystems

- Population (n):** the total number of organisms in an environment
- Carrying capacity (n):** the maximum number of organisms that can be supported by an environment
- Limiting factor (n):** factors that limit the growth of a population
- Density (n):** the number of organisms per unit area
- Density-dependent factor (adj):** a factor that changes as the population density changes



- ❑ **Density-independent factor (adj):** a factor that does not change as the population density changes
- ❑ **Competition (n):** interaction between multiple organisms who depend on the same resources in order to survive
- ❑ **Niche (n):** the role an organism plays in its environment
- ❑ **Drought (n):** a long period with abnormally low rainfall

Lesson 4: Interspecies Relationships

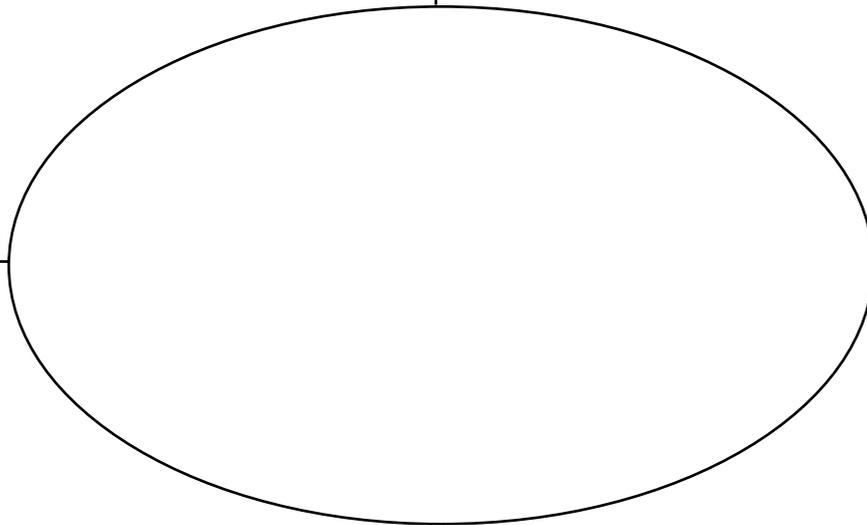
- ❑ **Predator (n):** an animal that hunts other animals
- ❑ **Prey (n):** an animal that is hunted by other animals
- ❑ **Trophic cascade (n):** the dramatic effect on a whole ecosystem that can result from the removal of a top predator
- ❑ **Co-evolution (n):** when two species evolve in response to one another

Lesson 5: Biodiversity

- ❑ **Biodiversity (n):** variety of species that exist in the world or in a particular ecosystem
- ❑ **Deforestation (n):** the removal of Earth's forest for human purposes
- ❑ **Urbanization (n):** the process of making an area more urban
- ❑ **Global warming (n):** the observed rise in the average temperature of Earth's climate system
- ❑ **Overpopulation (n):** a condition in which the members of a population exceed carrying capacity
- ❑ **Extinction (n):** when a species no longer exists
- ❑ **Ecosystem services (n):** the benefits that humans gain from the natural environment
- ❑ **Endangered species (n):** species that are in danger of dying out
- ❑ **Marine-based pollution (n):** the introduction of harmful substances into Earth's oceans

Definition:

Picture:



Examples:

Non-Examples: