

56

Anchor Charts for

ECOSYSTEMS

Anchor Charts Cover:

- **ecosystems**
- **abiotic and biotic factors and their interactions**
- **characteristics of living things**
- **biomes: freshwater, marine, tropical grasslands (savannahs), temperate grasslands, temperate forests, tropical rainforests, boreal forests (taiga), desert, tundra**
- **biodiversity**
- **levels of organization in an ecosystem: organism, population, community, ecosystem, biome, biosphere**
- **population distribution**
- **limiting factors: density-dependent and density-independent**
- **ecosystem relationships: cooperation, predation, competition, symbiosis**
- **symbiotic relationships: parasitism, mutualism, commensalism**
- **producers and consumers**
- **food chain**
- **trophic levels**
- **food web**
- **ecological pyramids: energy, biomass, number**
- **Law of Conservation of Mass**
- **cycling of matter**
- **water cycle, nitrogen cycle, carbon cycle, and oxygen cycle**

Temperate Forests

has deciduous trees and
four seasons



- **Animals:** white-tailed deer, squirrels, birds, bears...
- **Plants:** deciduous trees like oak maple, and beech, shrubs...

lots of water and nutrients
available; lots of animals and plants

Tropical Rainforests

vast biodiversity; hot and humid



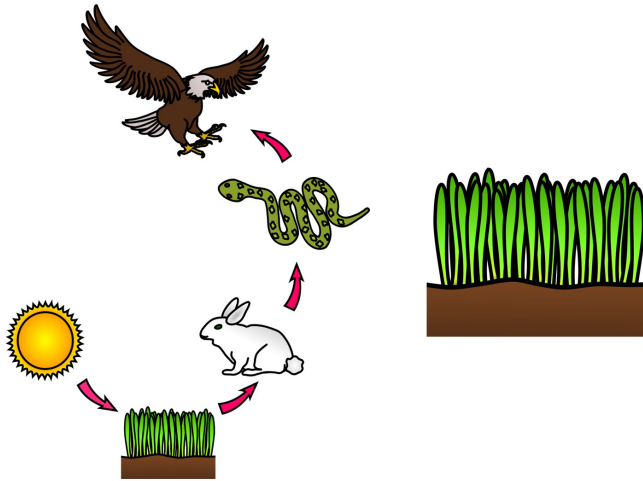
- **Animals:** monkey, birds, lizards, sloths, bats, jaguars...
- **Plants:** canopy trees, emergent trees, bamboo...

includes half of the world's species

Frame Size

First Trophic Level

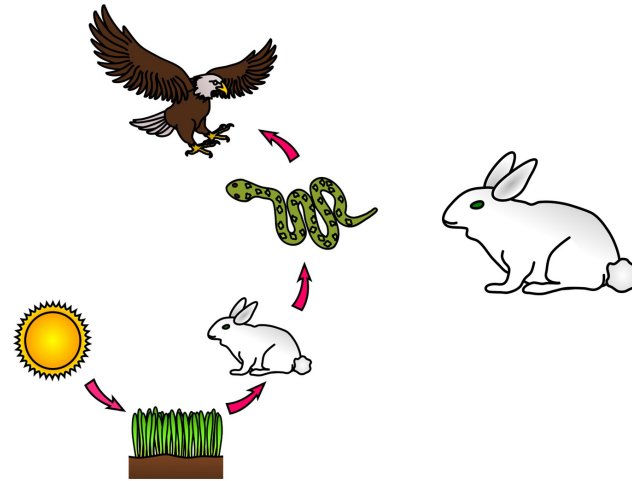
- producers
- use some of the sugars for energy and some of converted to carbohydrates, proteins, and fats
- examples: phytoplankton, plants



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Second Trophic Level

- primary consumers
- use some of the organic compounds for energy and some of converted to carbohydrates, proteins, and fats
- much of the energy consumed is lost, mainly as heat
- Example: rabbits, grasshoppers, zooplankton



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Half-Sheet Size

Abiotic Factors

non-living things in
an ecosystem

- “a” means without
- may be chemical or physical
- determines which living things can survive

Examples:

- light
- temperature
- weather
- soil
- pH



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Full-Sheet Size