Energy flows through ecosystems

Ecology - study of interactions of living organism with one another and their physician environment

Ecosystem - a largely self sustaining collection of organism and their physical environment

Biosphere - the entire earth (including atmosphere) and all living organisms inhabiting it

WATER, CARBON PHOSPHORUS A

The biogeochemical cycles

Physical components of ecosystems are passed around and reused through recycling or cycling in each cycle the chemical resides for a time in an organism, then returns to the non-living environment

- Carbon cycle
- Nitrogen cycle
- Phosphorus cycle

Water cycles within ecosystems

- water cycle also called hydrologic cycle

Is energy in the system in a cycle?

The carbon cycle

- The carbon cycle begins with the plan who use co2 to build organic molecules
  - Respiration
  - Combustion
  - Erosion

The nitrogen cycle

The atmosphere is 78& nitrogen gas (N)

Some solid bacteria can form ammonia (Na3)

- This process is termed nitrogen fixation (soybeans, alfalfa can do this)

Animals eat plans

Population ecology

Population structure: characteristic of a population

- DISTRIBUTION
- ABUNDANCE

ECOLOGIST explain distribution and abundance of individuals

Population dispersion
Population dispersion: how organisms are distributed

1. Clumped distribution

2. Uniform distribution
3. Random distribution