REVIEW from before March Break...

REMINDER: Biome Brochure is due next Monday

Here is a good link to help you...

http://earthobservatory.nasa.gov/Experiments/Biome

Assignment - Biome Travel Brochure.doc

EXERCISE:

Can you identify the biome for each picture?

Arctic Tundra

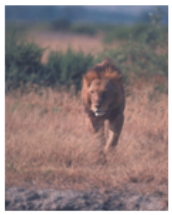
Northern Coniferous Forest or Taiga

Temperate Deciduous Forest

Temperate Grasslands or Prairie

Desert

Tropical Savanna



Tropical Rain Forest

Coniferous Forest vs Deciduous Forest

Deciduous = the dropping of a part that is no longer needed, in this case leaves

Coniferous = bearing pinecones, most of which are evergreen

Evergreen = retaining leaves year round, therefore remaining "forever green"

Broadleaf = a thin, broad leaf structure with a good deal of surface area

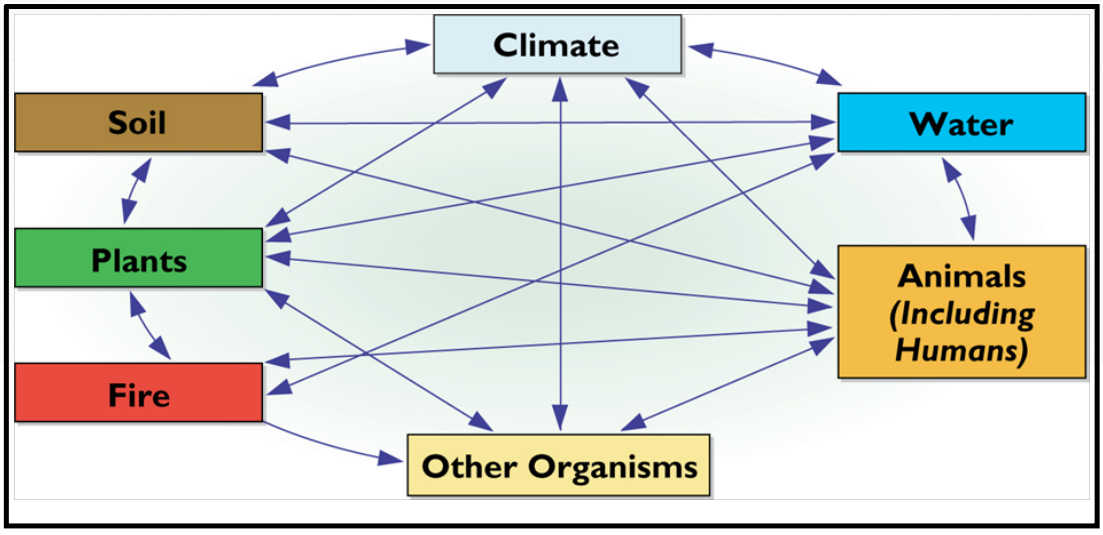
Needle = a thin, long modified leaf typical of conifers

Hardwood = another commonly used word for deciduous, broadleaf trees

Softwood = usually refers to coniferous trees

Ecosystems

- All of the organisms living in an area together with their physical environment.
  - There can be great variation from one ecosystem to another.
  - However, ecosystems overlap.
  - Requirements include energy, mineral nutrients, water, oxygen, and living organisms.



Components of an Ecosystem

- **Biotic** factors (living) include
  - Plants
  - Animals
  - Dead organisms
  - Waste products
- **Abiotic** factors (nonliving) include…
  - Air
  - Water
  - Rocks
  - Sand
  - Light
  - Temperature

Habitat

- The place where an organism lives.
- Specific characteristics that the organism needs to survive.
- Typically, a species cannot survive for very long if their habitat changes too drastically.

Do you see evidence of habitat fragmentation in this photo? If so, identify the human activities responsible for fragmenting the landscape.

Energy Flow

- The flow of energy through an ecosystem is one of the most important factors that determines the system's capacity to sustain life.

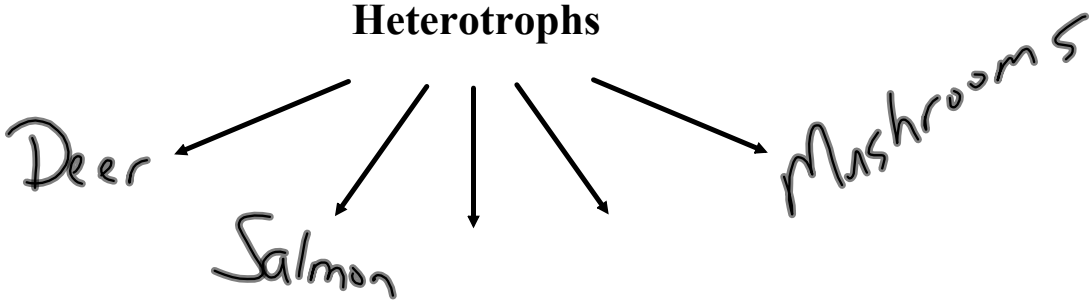
- **Sunlight** is the main energy source for life on Earth. Some organisms rely on energy stored in inorganic chemical compounds.

- **Autotrophs**(producers) capture energy from sunlight or chemicals to produce their own food.

carbon dioxide + water -------> carbohydrates + oxygen

- When organisms use chemical energy to produce carbohydrates, the process is called **chemosynthesis** The process is performed by several types of bacteria that live in volcanic vents, hot springs and tidal marshes.

- Organisms that rely on other organisms for their energy and food supply are called **heterotrophs** (consumers). These include animals, fungi and bacteria.



Feeding Relationships

Attachments

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