#### To understand a world biome, you need to know:

- What the climate of the region is like.
- Where each biome is found and what its geography is like.
- The special adaptations of the vegetation.
- The types of animals found in the biome and their physical and behavioral adaptations to their environment.



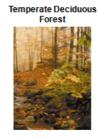
### **EXERCISE:**

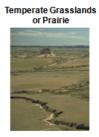
Can you identify the biome for each picture?

(ERASE to reveal)

Arctic Tundra

Northern Coniferous Forest or Taiga





Desert





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

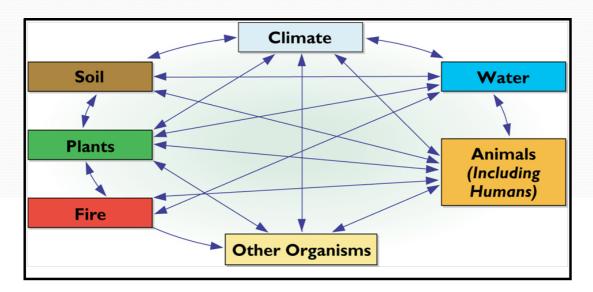
**Needle** = a thin, long modified leaf typical of conifers

**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 (came from living at one time)
- 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  $\underline{\text{habitat fragmentation}}$  in this photo? If so, identify the human activities responsible for fragmenting the landscape.

