**Bio**

10-4-12

# Biomes / Biotic Communities

- Depends on classification
- Scale matters
  - Biomes = global classifications
  - Biotic communities = state-wide (assemblages of specific plants, etc)

- Abiotic factors
  - Soil, Water, Temp, Phys. Geography, Laws of Physics
    Climate determinants

- Biome = large geo area w/ animal & plant groups and their subsets
- 2 Kinds of plants
  - Generalists: can grow/survive in a variety of conditions
  - Specialists: grow in specific area w/ specific requirements
    ○ Indicator species (a species that indicates what community you are in, esp. when more than 1 is avail.)
    ○ Figure out the indicator species for ea. community then find

- Physics of Atmosphere
  - Hot air rises / Cold air falls
  - As hot air rises it cools off / cool air heats up as it falls
  - When air = warm  it can hold a lot of water vapor; cold air can't

- Formation of Rain
  - Hot air (w/ $H_2O$) rises  due to warming of ground by the sun
  - Air cools in higher atmosphere and causes the moisture to fall

> Formation of Rain Shadows
- Warm air from oceans toward land, rises
- Rising air (w/ moisture) cools releases moisture on its way up mountains
- Once over mountain, air falls, warms, reduces rainfall ⇒ dry areas