**General Characteristics of Biomes**

1. Deciduous Forest
   * Climate
     1. 4 well defined seasons (Winter, Spring, Summer, Fall)
     2. 76cm-150cm precipitation per year
        + Precipitation is evenly distributed through the year (no season receives significantly more precipitation than another)
     3. Hot summers & cold winters
   * Plant adaptations
     1. Many may lose leaves in the winter
   * Animal adaptations
     1. Many may hibernate in winter
2. Chaparral
   * Climate
     1. Hot, dry summers & mild wet winters
     2. 50cm to 75 cm of precipitation per year
     3. Fires are common
   * Location
     1. Only found near coasts
     2. Would be a desert if it was not for the moisture from the oceans or the seas
   * Plant adaptations
     1. Drought tolerant
     2. Fire-resistant adaptations
        + Ex: plant can re-sprout up from roots after being burned
3. Tropical Rainforest
   * Climate
     1. Consistent warm temperatures year round
     2. Heavy annual rainfall
        + 200cm to 1,000cm of precipitation per year
   * Location
     1. Near the equator
        + Between the Tropic of Cancer and the Tropic of Capricorn
   * Plants and Animals
     1. Greatest amount of biodiversity found on Earth
        + Only covers 3% of the Earth’s surface but contains 50% of the Earth’s biodiversity
4. Desert
   * Climate
     1. Very little rain fall
        + Approx. 25cm of precipitation per year
     2. Typically warm or hot temperature, but some deserts may be cold
   * Plant Adaptations
     1. Small skinny leaves
     2. Store water for long periods of time
   * Animal adaptations
     1. Nocturnal behavior
     2. Light colored
     3. Small bodies with long appendages
5. Taiga (a.k.a. Boreal Forest)
   * Climate
     1. Long cold winters and short warm summers
     2. 30cm to 84 cm of precipitation per year
   * Plant adaptations
     1. Taiga is dominated by coniferous, evergreen trees (pine trees)
   * Animals
     1. Many migrate
     2. Many hibernate
     3. Thick fur or feathers
6. Tundra
   * Climate
     1. Long cold winters
     2. 15cm to 25cm of precipitation per year
   * Soil
     1. Permafrost
        + Permanent layer of frost found around 3 feet below the surface (this layer of the ground is frozen year round)
   * Plant adaptations
     1. Grow low to the ground
     2. Have shallow roots
   * Animal adaptations
     1. Compact bodies
     2. Thick fur or feathers
     3. Large fat deposits for insulation
7. Temperate grasslands
   * Climate
     1. 51 to 89 cm precipitation per yr
     2. Hot summers 100 degrees Fahrenheit; cold winters -40 degrees Fahrenheit
     3. Found in temperate zone

* Plant Adaptations
  + 1. Fire resistant adaptations
       - Ex: plant can re-sprout up from roots after being burned
    2. Deep roots for absorbing more water
* Animal adaptations
  + 1. Digestive systems and teeth made for grazing on grass
    2. Burrowing animals

1. Savanna/Tropical grasslands
   * Climate
     1. 50 to 127 cm precip per year
     2. Dry and rainy season
        + Rains only six to eight months per year; rest is dry

* Location
  + 1. Near the equator
       - Between the Tropic of Capricorn and the Tropic of Cancer
* Plant Adaptations
  + 1. Drought Tolerant
    2. Defenses against herbivores
       - Thorns or chemical defenses
* Animal Adaptations
  + 1. Reproduce during rainy season
    2. Migrate to find water