THE RAINFORESTS

1. INTRODUCTION.
2. Rainforests refer to ecosystems that primarily consist of evergreen trees that receive high amounts of rainfall, hence the origin of their name, "rain forests."
3. Two types of rainforests
   1. Tropical rainforests
   2. Temperate rainforests
4. LOCATION
5. Tropical Rainforests
   1. Tropical rainforests are majorly found between the latitudes of 23.5°N and 23.5°S. This region represents the area between the Tropic of Cancer and the Tropic of Capricorn (National Geographic, n.d)
6. Temperate Rainforests
   1. These rainforests are situated in the mid-latitude regions, which temperatures are milder than in the tropics.
   2. Temperate rainforests are majorly located in mountainous and coastal regions.
7. WEATHER AND CLIMATE
   1. Tropical Rainforests
8. Climate is typically warm and wet throughout the year.
9. Experience high temperatures ranging from 21° to 30°C (70° to 85°F)
10. Humidity ranging from 77% to 88%
11. Extreme rainfall ranging between 200-1000cm or 80-400 inches annually
    1. Temperate Rainforests
12. Temperate rainforests experience mild temperatures; hence they are much cooler than tropical rainforests. Extremely high or extremely low temperatures do not characterize temperate rainforests
13. SOILS
    1. Soil Characteristics
       1. Clay-like soils
       2. Rainforest soils are poor in nutrients
       3. They are also highly acidic.
    2. Why Rainforests Have Poor Soils
       1. The highly acidic soils hinder the absorption of plant nutrients
       2. The clay-like soils have poor ability to trap plant minerals
       3. Extreme rainfall washes away plant nutrients
    3. How Plants Survive in the Rainforests' Poor Soils
       1. Decaying foliage and animal matter is directly washed into plant roots without being absorbed into the soils
       2. Uptake of plant nutrients enhanced by mycorrhizae fungus
14. BIOGEOGRAPHY
15. Tropical Rainforest
16. Host approximately 50% of the world's fauna and flora species.
17. For example, the largest tropical rainforest in the world, the Amazon rainforest, contains about 4000 diverse plant species, approximately 3000 fish species, over 1300 diverse bird species, 427 mammal species, and over 2.5 million insect species
18. Temperate Rainforests
    1. The ecological systems in temperate rainforests are less diverse than in tropical rainforests.
    2. In Australia, wallabies, potoroos, and other ground dwellers such as bandicoots live on the rainforest's floor. In the Pacific Northwest, bobcats, black bears, and mountain lions are the major predators.