Ecological Succession:

**What is Ecological Succession?**

***Change in an ecosystem over time. More specifically, a change in the types and numbers of species in an ecosystem.***

**What are the two main types of Ecological Succession?**

***Primary and Secondary Succession***

**\_\_\_ *Primary* \_\_\_\_\_ succession occurs in an area where there are no existing organisms and no soil.**

**Events that may lead to \_\_ *Primary* \_\_ succession include:**

***Volcanic eruption, Glacial retreat, Land slides***

**\_ *Secondary* \_\_\_\_ succession occurs in a region where some species remain, and soil is present.**

**Events that may lead to \_\_\_\_\_ *Secondary* \_\_\_ succession include:**

***Forest Fires, Floods, Tsunamis, Insect infestations***

**Generally \_\_\_\_ *Secondary* \_ succession is much faster than \_\_\_ *Primary* \_\_\_ succession.**

**Secondary succession can occur in as little as \_\_\_\_\_\_\_*10-20years*\_\_\_\_\_\_.**

**\_\_\_\_ *Secondary* \_\_\_\_ succession may still require \_\_\_\_*100-200 years*\_\_\_\_\_ to complete.**

**The first species to inhabit a region are known as \_*pioneer* \_ species. These species are generally very simple, and are key as they help create soil.**

**Examples of these species are \_*mosses*\_\_\_ and \_\_\_*lichens*\_\_\_.**

**The next species are typically \_\_\_*grasses*\_\_\_\_. Then small \_\_\_\_*shrubs*\_\_\_\_. Then larger \_\_\_*trees*\_\_\_\_\_.**

**Eventually the ecosystem stabilizes to form the \_\_\_*climax*\_\_\_ community.**

***Primary***  succession requires approximately \_***200-500 years*** to occur.

**It is important to recognize that ecosystems change over time without any human intervention. Over very long time frames (\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ or even \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ of years) climate changes, there are mass extinctions (so far \_\_\_*5*\_\_\_\_ )in which much of the life on the planet dies off.**

**As well, even without ecological catastrophes, over time species \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.**

* **What we will next begin to discuss is how the current situation on Earth is different, and why or if we should care)?**