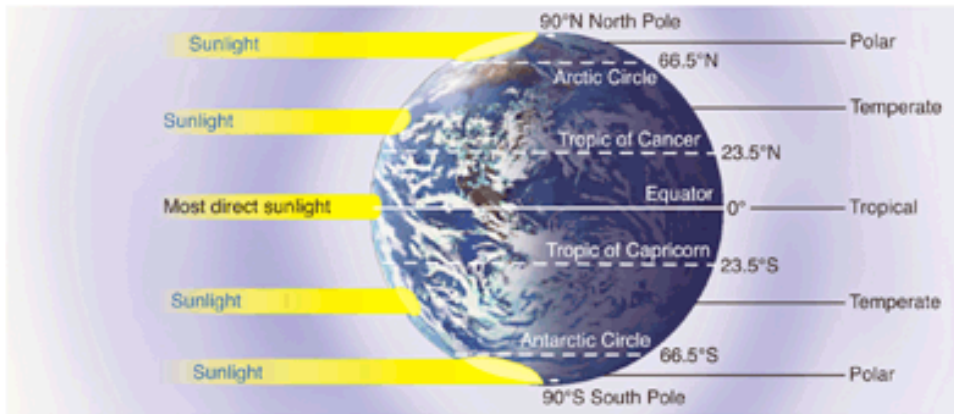


Name: _____ Period: _____ Date: _____

Chapter 4: Ecosystems & Communities

4-1 The Role of Climate

- Words you need to know:
 - Weather - Climate - The Greenhouse Effect
 - Climate Zones
 - _____ (66.5° and 90° North and South latitudes)
 - _____ (between the polar zones and the tropics)
 - _____ (23.5° North and 23.5° South latitudes)
- Heat Transport
- winds and ocean currents



4-2 What Shapes an Ecosystem?

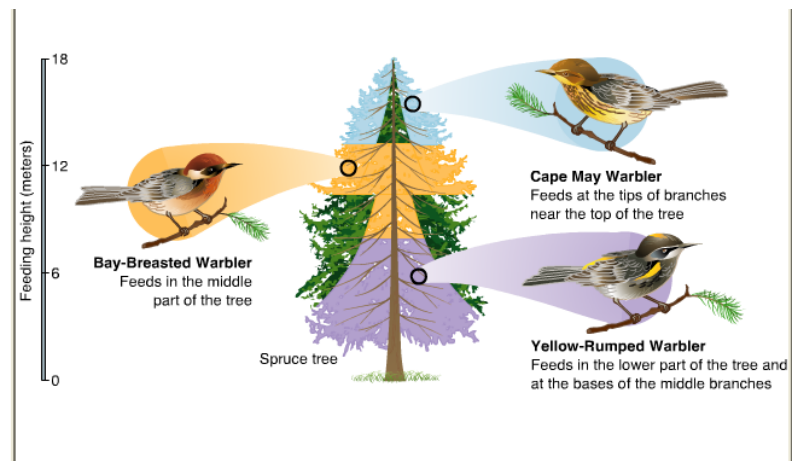
- Biotic & abiotic factors
- What's the difference between niche and habitat? Be specific.

- no two species can share the _____ in the _____

Community Interactions

- What is competition? What is a resource?

_____ = ecological rule that states that no two species can occupy the same exact niche in the same habitat at the same time



Warbler Niches Each of these warbler species has a different niche in its spruce tree habitat. By feeding in different areas of the tree, the birds avoid competing with one another for food. **Inferring** What would happen if two of the warbler species attempted to occupy the same niche?

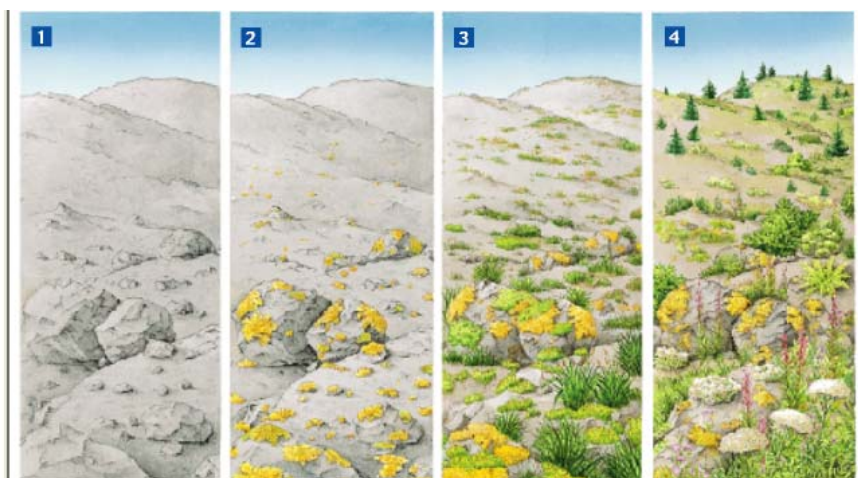
- Predation:
- _____ = Any relationship in which two species live closely together
 - mutualism
 - commensalism
 - parasitism
- Mutualism:
- Commensalism:
- Parasitism:
- What is Ecological Succession?

Primary Succession

- _____ = first species to populate an area during primary succession
 - Often _____

Secondary Succession

- _____ = mature, stable community that did not undergo further succession
 - _____



Primary Succession Primary succession occurs on newly exposed surfaces, such as this newly deposited volcanic rock and ash. A volcanic eruption destroys the previous ecosystem (1). The first organisms to appear are lichens (2). Mosses soon appear, and grasses take root in the thin layer of soil (3). Eventually, tree seedlings and shrubs sprout among the plant community (4). **Predicting** *What types of animals would you expect to appear at each stage, and why?*