Chapter 26 Section 1 How Ecosystems Change

A. Ecological ____________________—normal, gradual changes that occur in the types of species that live in an area

1. Primary succession begins in a place without ________.
   a. Starts with __________________________ such as ________, that can grow on rock
   b. New ______________ forms as weather and erosion break down rock.
   c. Decaying plants add ________________________ to new soil.

2. ____________________________ begins in a place that has soil and once had living organisms
   a. Examples: after a ____________ or removal of buildings
   b. Occurs faster and has different pioneer species than primary succession

B. ____________________________—stable stage of ecological diversity and balance
Section 2 Biomes

A. Factors that affect biomes’ climates
1. temperature
2. ________

B. Major ________________—large areas with similar climates and ecosystems
1. ________________—cold, dry, treeless region
   a. Permanently frozen soil called ________________
   b. Average winter temperature: ________________
   c. Average precipitation is ________________ 25 cm per year.
   d. Plants: __________________, grasses, small shrubs, lichens
   e. Animals: insects, ducks, geese, other birds, mice, arctic ________________ , reindeer
2. ________________—cold forest of mostly evergreen trees
   a. Soil ________________ in the short summer.
   b. Precipitation: mostly snow, ________________ per year
3. __________________ forests—region with four seasons, mostly trees that lose their leaves in autumn
   a. Temperatures range from ________________ in winter to ________________ in summer.
   b. Precipitation: throughout the year, ________________ per year
4. __________________ forest—tall trees with needlelike leaves
   a. Average temperature: ________________
   b. Precipitation: ________________ per year
5. __________________ forests—the most biologically diverse of all biomes
   a. Average temperature: ________________
   b. Precipitation: ________________ per year
   c. Four ________________: forest floor, understory, canopy, emergents
   d. Human impact: habitats being ________________ by farmers and loggers
6. ________________—driest biome, supports little plant life
   a. Temperatures: vary from ________________ to ________________
   b. Precipitation: less than ______ cm per year
   c. Soil: thin, ________________, or gravelly
   d. Plant: cactus
   e. Animal: kangaroo ______
7. __________________—prairies or plains, dominated by grasses
   a. Temperatures: temperate or ________________
   b. Precipitation ______________________ per year; dry season
Section 3 Aquatic Ecosystems

A. ___________________ ecosystems—include flowing and standing water, low or no salt
1. Rivers and streams—______________ water
   a. Most ___________________ washed into water from land.
   b. The faster the flow, the greater the _________________ content.
2. Lakes and ponds—very little ___________________
   a. Sunlight warms and lights pond ___________________ supporting plant and animal life.
   b. Deeper lakes support life along ___________________ shoreline or surface
3. Water ___________________—a problem caused by fertilizer-filled runoff and sewage
4. ___________________—regions wet all or most of year
   a. Lie between ___________________ and water
   b. Very ___________________ ecosystems
B. Saltwater ecosystems—95% of Earth’s water contains high concentration of salt, or high ___________________.
1. Open oceans—divided into lighted and dark life ________________
   a. ________________—upper 200 m and home of plankton
   b. ________________—below 200 m where animals feed on material that floats down or prey on each other
2. ___________________—diverse and fragile ecosystems formed from coral shells of calcium carbonate
3. Seashores—along ___________________
   a. ________________—covered with water at high tide and exposed to air at low tide
   b. Drastic ________________ in temperature, moisture, salinity, and wave action
4. ___________________—where a river meets an ocean; called bays, lagoons, harbors, inlets, sounds
   a. Rich in ________________
   b. Changing ________________ of salt water and freshwater