**Science 10 Chapter 3 Review**

**3.1**

* An **\_\_\_\_\_\_\_\_\_\_\_\_\_\_** is a specific trait that will helps an organism survive in its environment.
* Adaptation
* Adaptive Radiation
* Natural Selection
* **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** is the process where a member of a species that has favorable traits will be in better condition to mate, and pass its traits on to its offspring.
* **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** is where one common ancestor will “radiate out” and inhabit different niches by obtaining different adaptations.

Explain how the Galapagos finches illustrate both natural selection and adaptive radiation.

* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is the changes that take place over time in the types of organisms that live in an area. Both primary succession and secondary succession are slow processes.
* Ecological Succession
* Older
* Secondary Succession
* No soil
* Retreating Glaciers
* Primary Succession
* Mature Community
* Volcanic Eruptions
* Soil exists
* Lichen
* **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** occurs when **\_\_\_\_\_\_\_\_\_** exists.
* During primary succession: **\_\_\_\_\_\_\_\_\_\_\_** come first and begin breaking down rocks to make soil, grasses then begin to populate the thin soil, then small plants arrive and last large plants arrive.
* Primary succession can be started by **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** or **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**.
* **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** occurs when some **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** after some disaster. Forest fires are a common way that secondary succession begins.
* **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** are the first lichens and plants to survive and reproduce in an area.
* **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** are older communities that usually remain stable until a large abiotic event/factor. The \_\_\_\_\_\_\_\_\_\_\_\_\_\_ an ecosystem, the more plant growth and biodiversity it will have.

How does primary succession compare to secondary succession?

What is the role of a pioneer species in an ecosystem?

* **\_\_\_\_\_\_\_\_\_\_\_\_\_\_** is caused by excessive melt, heavy rainfall or tsunamis.
* Drought
* Flooding
* Tsunami
* Insect Infestations
* **\_\_\_\_\_\_\_\_\_\_\_\_\_\_** is caused by earthquakes.
* **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** is when there is a below-average amount of precipitation in an area over many years or months.
* **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** are when insect populations are unusually high, usually due to mild winters and forest fire suppression. The young healthy lodgepole pines are better able to defend themselves from beetle infestations by producing resin to trap and flush adult beetles out of the tree.

**3.2**

* **\_\_\_\_\_\_\_\_\_\_\_\_\_\_** refers to the ways we use the land around us for urban development, agriculture, industry, mining, and forestry
* Habitat Fragmentation
* Deforestation
* Soil Degredation
* Contamination
* Land Use
* Aeration
* Habitat Loss
* Soil Compaction
* Overexploitation
* Contamination
* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is the destruction of habitats.
* **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** is when habitats get divided into smaller isolated fragments.
* **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** is the removal of forests without replanting the cut trees. Deforestation is a primary cause of **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**.
* **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** occurs when soil particles are squeezed together and air spaces between the soil particles are reduced. **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** is one method of improving movement of air and water through soil.
* **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** is the use of resources that may cause habitat loss and soil degradation.
* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is the introduction of chemicals, toxins, wastes, or micro-organisms into the environment in concentrations that are harmful to living things.
* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is the use of a resource until it is depleted.

How can overexploitation result in extinction?

How does deforestation result in soil degredation?

**3.3**

* **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** are plants and animals that naturally inhabit an area.
* Habitat Alteration
* Competition
* Predation
* Native Species
* Disease/Parasites
* Invasive Species
* **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** are plant and animals that can take over the habitat of native species or invade their bodies and weaken their immune systems.

How Invasive Species can harm an ecosystem.

* **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** – an invasive species will compete for resources and habitats with native species.
* **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** – Native prey populations may not have adaptations necessary to hide from or fight an introduced predator.
* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ – Invasion of these may compromise the immune responses of native plants and animals.
* **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ –** Introduced invasive species can make a habitat unsuitable for native species by changing the structure or composition of the habitat.

 Possible alterations to a habitat:

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Review on page 148-149