**Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period: \_\_\_\_ Date:\_\_\_\_\_\_\_\_**

**Notes Organizer for PPT presentation The Theory of Evolution: Natural Selection and Artificial Selection**

* Charles \_\_\_\_\_\_\_\_\_\_\_\_ English scientist (1809 – 1882)
* Took the \_\_\_\_ \_\_\_\_\_\_\_\_\_ to South America
	+ At the age of 21 took a job on HMS Beagle
	+ Five year journey
	+ Collected specimens
* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Islands
	+ As ship’s naturalist, Darwin studied and collected biological specimens (including fossils) at each port
* **Darwin and Natural Selection**
* For the next \_\_\_\_ \_\_\_\_\_\_\_\_\_, Darwin developed his theory.
	+ Other scientists’ findings influenced Darwin….
		- Charles \_\_\_\_\_\_\_l
			* Geologic processes are result of gradual changes that happen over time
		- \_\_\_\_\_\_\_\_\_
			* Animals produce more offspring that can survive
			* Animals must struggle to survive
* **Darwin’s Conclusions:**
	+ - \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ possess an enormous reproductive potential
		- Population sizes remain \_\_\_\_\_\_\_\_ (Malthus)
		- \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ are limited
		- Individuals \_\_\_\_\_\_\_\_\_\_\_\_ for survival
		- There is \_\_\_\_\_\_\_\_\_\_\_\_\_\_ among individuals in a population
		- Only the most fit individuals survive to \_\_\_\_\_\_\_\_\_\_\_\_\_\_
		- Evolution occurs as \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_ accumulate over time
* **Adaptations** An \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is any \_\_\_\_\_\_\_\_\_\_\_\_\_ that aids in an organism’s chance for survival.
* Types of adaptations:
	+ **\_\_\_\_\_\_\_\_\_\_\_\_** – structural adaptation that enables one species to resemble another species
	+ \_\_\_\_\_\_\_\_\_\_\_\_ -blending with surroundings
* **\_\_\_\_\_\_\_\_\_\_\_\_\_: Blending in with the environment to \_\_\_\_\_\_\_\_\_\_ from predators or prey.
Seasonal Color Changes**
* **Artificial Selection**
* Definition: breeding organisms with specific traits for those traits
* Selective Breeding
	+ Most of the time occurs because of human preferences or needs.
	+ Shows that organisms can change through breeding.
* Evolution is…

**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

* Natural Selection

Definition: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ for change in a population

* + **Favorable traits are chosen**
	+ Change in *genotype* 🡪 genetics
	+ a force in nature that works like artificial selection
	+ Who or what has a better chance of survival long enough to \_\_\_\_\_\_\_\_\_\_\_\_\_\_.