

Darwin's Theory of Natural Selection

Story

Darwin was a naturalist who was on a voyage to collect specimens focused on south America.

It took 5 years.

He noticed that there were fossils of marine life high in the mountains.

He found giant fossil versions of smaller living animals.

He notices how earthquakes can lift rocks far and quickly.

There was a great variety of life on the Galapagos Islands.

Theorized that they migrated from the mainland to the islands.

Then they developed different beaks.

Darwin returned, had a conversation and hypothesized on why this happens.

Definition

Artificial Selection: Something intelligently chooses desirable traits, in hopes that offspring will have those traits.

Definition

Natural Selection: Over time, organisms will adapt to their environment.

Requirements:

1. Variation - They differ from each other
2. Heritability - Variations are inherited
3. Overproduction - Too many of a species, so they must compete to survive
4. Reproductive advantage - Have a higher chance of reproducing and living given the circumstances.

Lamarck's theory of Needs and Wants

- Noticed that animals are very suited to its environments

- Noticed that next generation were even better suited

Lamarck's theory

- Theorized that when you use something more often, it develops
- Also implied that if you don't use a part of your body, it will just slowly disappear