

Evolution essay

Business



Darwin is considered the “father of evolutionary biology.” He published, *On the Origin of Species by Means of Natural Selection* in 1859 in which he makes many contributions to the field of evolutionary biology. A few of his contributions are variations within species, evolution as gradual change over long periods of time and natural selection as the mechanism of evolution. Within the same species, individual organisms can look very different. Variation within species is caused by the inheritance of different alleles in sexual reproduction.

Genetic variation is reflected in the phenotype and reflected in unseen genetic makeup. Then selective advantage occurs which is the characteristic of an organism that enables it to survive and reproduce better than other organisms in a population in a given environment. An example of variation within species would be the finches in the Galapagos Islands the variations of finches. Their beaks were all different so they could eat the different nuts and foods on each island. Evolution occurs over a long period of time.

When a trait isn't beneficial to the organism or species, over a course of course of thousands of years the species adapt a new trait or die off. An example of that would be the evolution of horses. Over time the Equimolar became longer and squarer. They have also become taller and faster to view and escape their predators. They didn't acquire these new traits and adaptations over hundreds of years; they do it through millions of years. Natural Selection is the result of nature selecting organisms that are better adapted to their environment because they have characteristics that allow them to survive and reproduce more than other organisms.

Since these adaptations are genetic, they are passed on to future generations. Eventually the entire population changes or evolves. An example of natural selection would be the Rat Snake. Rat snakes come in a wide variety of colors. This is because rat snakes are found all over Eastern and Midwestern States in the United States and are subjected to all types of weather and terrain. They are common in urban areas but are also found in wooded areas, mountains or coastal regions.

As a result, rat snakes have had to adapt to their local environments in an effort to avoid detection and hunt more effectively. Their color is based on their environment so they can blend in. Without natural selection, unhelpful traits will kill off entire species.