

# Example of the processes of evolution essay

[Science](#), [Genetics](#)



## **Species**

A species is a group of organisms that have a similar origin and can interbreed. This refers to individuals that may look seemingly different but have the ability to interbreed and bring forth young ones. By having the ability to interbreed, this implies that the organs of the individuals are compatible and have the ability of mating and producing. This may result in a new breed, which will have a combination of both features from the parent individuals. When we talk of human as a species, it implies that two humans from different races have the ability of mating and bringing forth a young one that will have features of both races.

## **Population**

Population is a group of organisms living in a particular niche of environment. A population may consist of different animal species that may be living together for mutual benefits or simply because the environment is best suited for them. A population does not necessarily mean that the organisms live peacefully with each other but that they are found in an environment that suits their well-being (Bowler 84). For instance, the marine environment is composed of a population which includes different fish species and sea animals. The water becomes the most suitable environment where they get their livelihood.

## **The Four Forces**

The process of evolution took place courtesy of four forces namely,

- Natural selection: the organism that adapts well to the environment will bring forth more organisms of its kind and hence transferring such genes.

- Genetic drift: this is all about chance and where the stronger genes will survive and be carried forward to subsequent generations
- Gene flow: here, genes will migrate from one organism to another and hence increasing the chances of having more of such genes in a population.
- Mutations: genetic mutation' is a process where the DNA changes the component of cells and give them newer characters (Bowler 105). This will affect on the characters displayed in subsequent generations.

## **Variation (within and between populations)**

Variation is an evolution mechanism where different forces such as mutations, gene flow and sex determine the kind of breed that will be brought forth. This explains why there is advancement in the characters displayed by different populations. The environment or the kind of parent species that met may influence this.

## **Isolating Mechanisms**

This mechanism determines the kind of species that will mate basing on prevailing circumstances and situations. Such factors, which may be natural or artificial, play a big role in determining the characters that the individuals will bring forth. The organism may be isolated by nature through either poor climatic conditions or immigration. When the organisms are isolated, they have to adapt to the new environment by either finding other partners to met or stay without any reproduction.

## **Speciation**

This is a process where a particular species is likely to change its physical and morphological characteristics due to environmental change. When a

certain species are moved from its obvious environment and taken to a very different environment, nature will compel them to adapt to such a new environment (Bowler 97). When they produce young ones, they are likely to develop new features that will enable them to be compatible with the current situations. This will hence lead to a modification of the species, with new genetic makeup that will be transferred to other generations.

### **Work cited**

Bowler, Peter. *Evolution: The History of an Idea*. California: University of California Press, 1989.