

Colney Heath School ~ Science

Topic: Evolution and adaptation

Year: 6

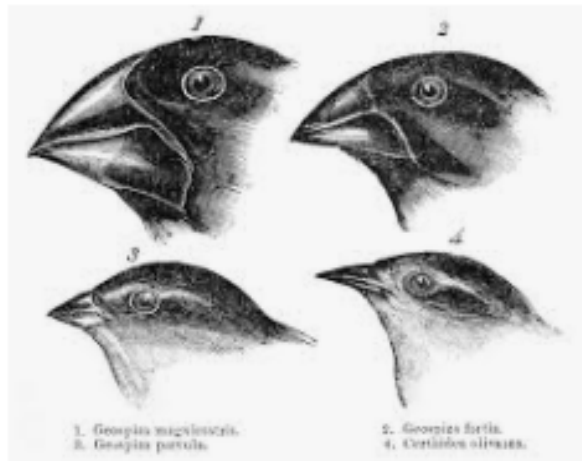
Biology

What should I already know?

Diagrams

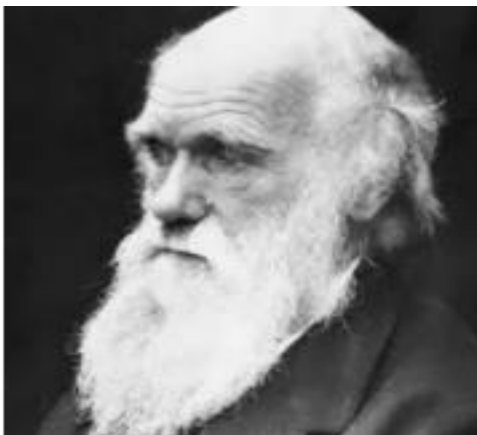
Vocabulary

Which things are living and which are not. Identifying animals (e.g. amphibians, reptiles, birds, fish, mammals, invertebrates) and plants using classification keys. Animals that are carnivores, herbivores and omnivores. Animals have offspring which grow into adults. The basic needs of animals for survival (water, food, air). Some animals have skeletons for support, protection and movement. Food chains, food webs and the role of predators and prey. Features of habitats and the animals and plants that exist there (biodiversity). Examples of different biomes. The life cycle of some animals and plants. Sometimes environments can change and this has an effect on the plants and animals that exist there. Living things breed to produce offspring which grow into adults. This is called reproduction. Palaeontology and the discovery of fossils. The features of some rocks and the role they play in the formation of fossils.



Key Scientist

Charles Darwin's Theory of Evolution



Evolution

Adaptation over a very long time

Inheritance

Characteristics that are passed on to offspring from their parents

Adaptation

A trait that changes to increase a living things chances of survival

Variations

The differences between individuals within a species

Habitat

A specific place where an animal or plant lives

Environment

An environment contains many habitats

The Big Picture	By the end of our project we will know that
<u>Biology</u> B1: Living things are special collections of matter that make copies of themselves, use energy and grow. B2: Living things on Earth come in a huge variety of different forms that are <u>all related</u> because they all came from the same starting point 4.5 billion years ago. B3: The different kinds of life, animals, plants and microorganisms, have evolved over millions of generations into different forms in order to survive in the environments in which they live.	Know that all life on Earth began from a single point around 4.5 billion years ago. Living things changes over time and this gradual change is called evolution. Natural selection is the cause of this change. Natural selection works as across a species there is natural variation within a species. There is also competition to survive and reproduce and members of a species with advantageous characteristics survive and reproduce - these characteristics are passed down to their offspring. Members of a species with less advantageous characteristics do not survive and reproduce – these characteristics are not passed down to offspring. Offspring vary and are not identical to their parents. Charles Darwin posited this theory of evolution by natural selection. Gradual change of species over millions of years can be observed by looking at examples of fossils.