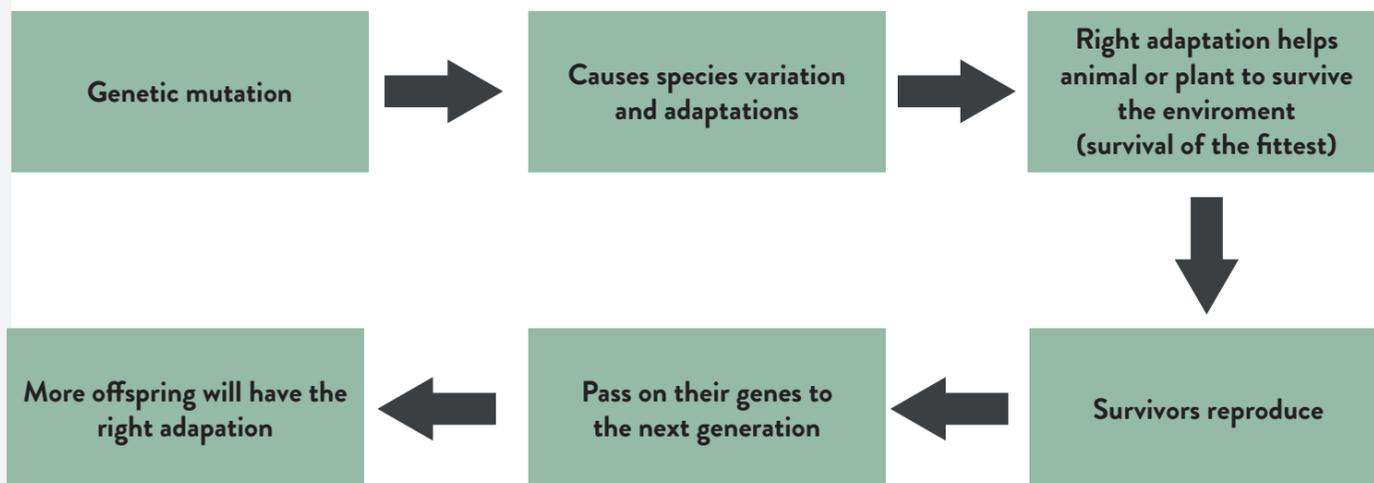
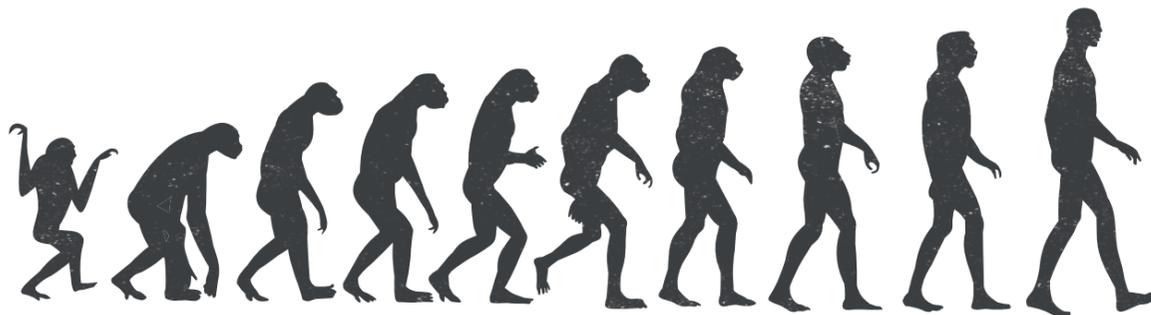


# EVOLUTION AND INHERITANCE

## KEY FACTS

- Living things have changed over time.
- Fossils provide information about living things that inhabited the Earth millions of years ago.
- Living things produce offspring of the same kind, but not identical to their parents.
- We inherit DNA from our parents, which controls aspects of our appearance eg eye colour.
- DNA is contained by structures called chromosomes.
- Genes are sections of DNA also contained within chromosomes.
- We inherit a set of 23 chromosomes from each of our parents, 46 in total.
- Animals and plants are adapted to suit their environment in different ways. For example, camels have long eyelashes which help to keep sand out of their eyes.
- The most successful adaptations mean that the animal is more likely to produce offspring.
- In this way the adaptation is passed on and the species evolves.
- Evolution takes a very long time. For example, the evolution of the polar bear from the brown bear took over 200,000 years.

## DARWIN'S THEORY OF NATURAL SELECTION



## WORKING SCIENTIFICALLY



OBSERVING



COLLECTING AND RECORDING DATA



PRESENTING FINDINGS

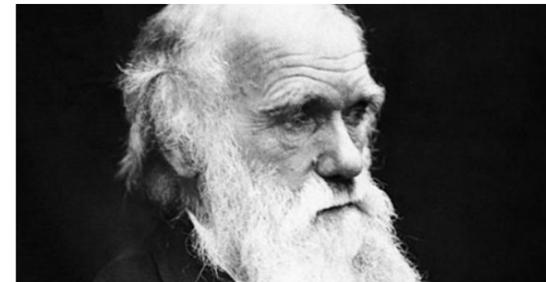


WRITING SCIENTIFICALLY



CONCLUDING

## SIGNIFICANT PEOPLE



**Charles Darwin (1809-1882)** was an English naturalist who first suggested the theory of evolution in his book *On the Origin of Species*, published in 1859



**Mary Anning (1749-1847)** was an English palaeontologist whose discovery of fossils contributed to Darwin's theory of evolution.

## KEY VOCABULARY



- Adaptation:** How living things are specialised to suit their environment.
- Evolution:** The process by which living things can gradually change over time.
- Chromosome:** a part found in the cells of all plants and animals. Chromosomes contain genes which pass on physical characteristics from parent to offspring.
- DNA:** a substance found in cells that contains information about the characteristics of a living thing.
- Fossil:** The record of living thing in stone.
- Gene:** a tiny section of a chromosome. A gene causes a particular characteristic, such as eye colour or hair colour, to be passed on from parent to offspring.
- Inheritance:** The process of passing on features from parents to offspring.
- Identical:** exactly the same.
- Natural selection:** A process in which living things adapt themselves in order to survive, that they don't have any control over.
- Offspring:** a child or animal in relation to its parent or parents.
- Prehistoric:** The time classed as 'before history' as it was so long ago it hasn't been recorded or written.
- Species:** A group of living things with very similar characteristics. They can breed together to make more living things of the same type.
- Variety:** The differences between living things in a species.