

Humans are 99.9% all the same, but the other 0.1% contains enough DNA information to make us all different!

Some animals are bred to make products and others for scientific research.

Animals can also be bred for cultural or ethical reasons, or to be kept as pets.



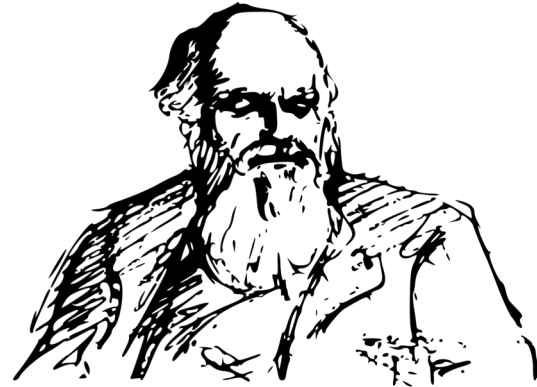
ROCKET WORDS

Learn these words and their definitions.

Key Word	Definition
evolution	A process of formation, growth or development.
inheritance	A quality, characteristic or trait which is passed down generations.
DNA	The material in chromosomes that transfers genetic information in all life forms (Deoxyribonucleic acid).
natural selection	Coined by Charles Darwin, it means the survival and reproduction of the fittest species.
ancestor	A person from whom one is descended.
husbandry	The care, cultivation and breeding of crops and animals.
generation	A group of individuals belonging together at the same time period.
fossilisation	The process of an animal or plant being turned to stone.

Charles Darwin and Natural Selection

- Different species of animal had evolved from one shared ancestor.
- Animals had adapted to suit the habitats and environments they live in.
- Those animals that didn't adapt had become extinct. Called the 'Survival of the Fittest.'
- Many religious people were angry at his theory to start with.



Genetic Modification

Pros

- Can protect crops and mean the produce has less disease.
- The produce can be bigger and tastier
- Can mean lower cost to consumer.

Cons

- We don't know the long-term effects of safety
- Research isn't yet finished
- Could cause more allergies or diseases for consumers



FACTOIDS:

Can you find out more?

Q1. What is a GM crop?

A1. This means 'genetically modified' and is one which scientists have altered to protect against disease.

Q2. Who was Mary Anning?

A famous palaeontologist who discovered lots of fossils.

Q3. What are fossils?

Casts of dead organisms who were alive millions of years ago.

Lesson Sequence

1

Explain why animals can look different to the parents.

2

Describe the process of natural selection

3

Explain what fossils can tell us

4

Explore the work of paleontologist Mary Anning

5

Describe the process of genetic modification

6

Explain how animals can be bred for a specific purpose

Unit: Evolution and Inheritance

This unit is designed to help you learn about the history of organisms (animals and plants) and how they need to adapt to survive. From Darwin's theory of natural selection, to genetic modification and cloning today, you will gain an understanding of how inheritance and genetics works.

You will also gain an understanding of what history tells us, such as fossils and geology. It really is a fascinating subject to see how life on earth has evolved over all these years!

