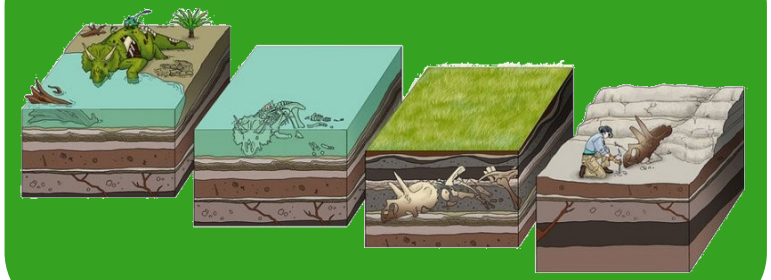
Year 6— Evolution and Inheritance

Fossil Formation



Variation

What does variation mean?

What causes variation?

Inheritance

These are characteristics that are passed on to offspring from their parents.

Adaptation

Over many generations, a species will adapt to its environment because the animals with the most successful characteristics are more likely to survive and pass on these characteristics to their offspring.

Cells—What makes up a cell?

Chromosomes

The nucleus of a cell contains chromosomes, which are made up of DNA.

DNA

DNA carries the characteristics that we inherit. It is located in two places in the cell: the nucleus and the mitochondria. DNA can replicate and make copies of itself. When cells divide, each cell needs to have an exact copy of the DNA in the old cell.

Genes

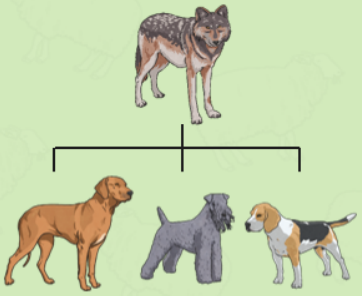
Genes are short sections of DNA that contain specific information. This is often called the genetic code. All the genes in the whole cell are called the genome.

Selective Breeding

Process of Selective Breeding:

1. Decide which characteristic is important e.g. amount of milk produced.
2. Find parents who show this characteristic.
3. From their offspring, choose the ones who share this characteristic and only let them reproduce.
4. Repeat the process continuously.

Selective breeding produces new varieties of an existing species, not new species.



Key Vocabulary

inheritance,

parent,

offspring,

characteristics,

variation,

adaptation,

mutation,

traits,

ancestor,

intervention,

selective,

dominant,

hostile

Year 6— Will you ever see the water you drink again?

Key Vocabulary

Precipitation

Evaporation

Condensation

Collection

Drought

Hostile

Environment

Sustainability

Impact

Necessity

Tropics

Equator

Tectonic Plate