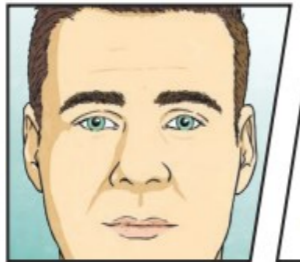
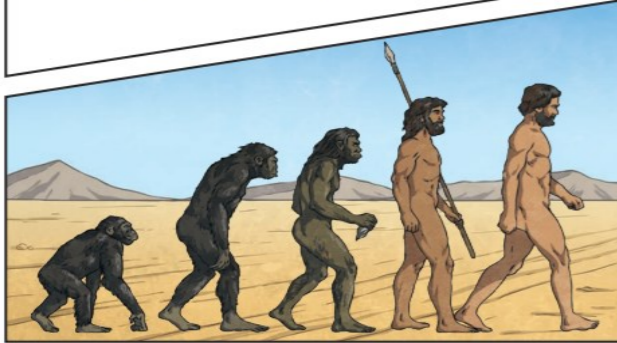


Evolution and Inheritance

Evolution is the gradual process by which different kinds of living organism have developed from earlier forms over millions of years. Scientists have proof that living things are continuously **evolving** - even today!



Inherited Traits
Eye colour is an example of an **inherited trait**, but so are things like hair colour, the shape of your earlobes and whether or not you can smell certain flowers.

Variation
In the same way that there is **variation** between parents and their **offspring**, you can see **variation** within any species, even plants.



Fossils are the preserved remains, or partial remains, of ancient animals and plants. **Fossils** let scientists know how plants and animals used to look millions of years ago. This is proof that living things have **evolved** over time.



The Peppered



Peppered moths adapted their colouring overtime in order to camouflage and avoid predators. This sparked Darwin to come up with the theory of evolution.

How do features of living things help them adapt to

Living Things	Habitat	Adaptive Traits
polar bear	arctic	Its white fur enables it to camouflage in the snow.
camel	desert	It has wide feet to make it easier to walk in the sand.
cactus	desert	It stores water in its stem.
toucan	rainforest	Its narrow tongue allows it to eat small fruit and insects.

Key vocabulary

Habitat	the natural home or environment of an animal, plant, or other organism.
Environment	The surrounding conditions in which a living thing lives.
Adapt	To change to become suitable for purpose.
Feature/ characteristic	distinctive attribute or aspect of something.
Protection	To be kept from harm or safe.
prey	n animal that is hunted and killed by another for food.
Predator	n animal that naturally preys on others.
Appearance	How somethings looks.
Variation	Differences between breeds and species
Offspring	Children or the next generation of an animal
Natural Selection	The process where offspring better adapted to their environment survive and go on to produce more offspring.

Selective Breeding in dogs-

Advantages

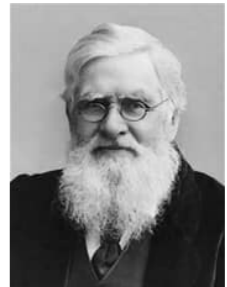
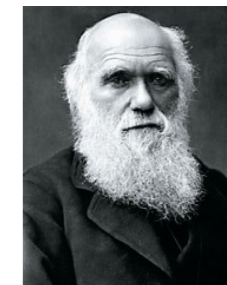
You can select desirable traits for pets.

You can create new fruits and vegetables.

Disadvantages

Offspring without desired traits may not be wanted.

Genetic mutations can occur with negative effects for the animal.



Charles Darwin and Alfred Wallace are two scientists who came up with the theory of natural selection and evolution around the same time.