

Long Sutton County Primary School - Knowledge Organiser



Topic: Evolution and Inheritance

Year: 6

Term: 6

Background Information

I can recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago.

I can recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their

I can identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution.

Interesting facts

- No two animals are the same, even if they belong to the same species.
- There are over 340 breeds of dog, yet they all come from one kind of wild wolf that existed many years ago.
- ♦ Humans share the same five-fingered bone structure in their hands with lots of other animals that have paws, wings or flippers, such as lemurs and bats.
- Fossils are evidence of extinct species. However, perfect conditions are needed for fossils to form.
- We are able to see from fossils that dinosaurs, woolly mammoths and dodos lived many years ago. But we'll never really know all of the weird and wonderful species that previously existed!
- Although they both live underwater, dolphins evolved from mammals whereas sharks evolved from fish ancestors.
- ♦ Humans, animals, plants, insects and even bacteria, all descend from the first living things that ever came to be.
- At one point in time, whales walked on land!



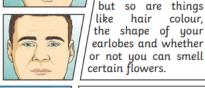
Did you know that Charles Darwin's theory of evolution caused quite a stir in the 19th century?

At the time, many still believed the world and everything in it was created all at once.

Diagrams / Timelines / Photos

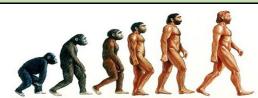


Inherited Traits Eye colour is an example of an inherited but so are things hair colour, the shape of your earlobes and whether



Natural Selection

Fossils of giraffes from millions of years ago show that they used to have shorter necks. They have gradually evolved through selection to have longer necks so that they can reach the top leaves on taller trees.



Living Things		Habitat		Adaptive Traits
polar bear		arctic		Its white fur enables it to camouflage in the snow.
camel		desert	5	It has wide feet to make it easier to walk in the sand.
cactus	W	desert		It stores water in its stem.
toucan	7	rainforest		Its narrow tongue allows it to eat small fruit and insects.

Key Vocabulary				
Adaptation	The process of change so that an organism or species can become better suited to their environment.			
Body fossil	Preserved remains of the body of the actual animal or plant itself.			
Breeding	The mating and production of offspring by animals.			
Environment	The surroundings or conditions in which a person, animal, or plant lives.			
Evolution	The process by which different kinds of living organism are believed to have developed from earlier forms during the history of the earth.			
Fossil	The remains or impression of a prehistoric plant or animal embedded in rock and preserved.			
Inherit	To gain a quality, characteristic or predisposition genetically from a parent or ancestor.			
Offspring	A person's child or an animal's young.			
Reproduction	The production of offspring by a sexual or asexual process.			
Selective breeding	The process by which humans use animal breeding and plant breeding to develop selective characteristics by choosing particular animals and plants.			
Inherited traits	These are traits you get from your parents. Within a family, you will often see similar traits, e.g. curly hair.			

Know how to / Activity

Make a poster about variation in one type of pet e.g. dog, cat, horse, guinea pig, snake, rabbit. Information you could include:

- Different types of this pet e.g. bulldog, beagle, collie.
- Variation between these breeds e.g. size, fur, colour, body shape.