

## SCIENCE EVOLUTION AND INHERITANCE

## Variation and Inheritance

- All living things have offspring of the same kind.
- Features in offspring are inherited from the parents.
- Due to sexual reproduction, offspring are not identical to their parents and vary from each other.

## **Evolution**

- The process of change to animal and plant species over long periods of time, or how plant species and animals have developed from generation to generation.
- Fossils give us evidence of what lived on Earth millions of years ago and provide evidence to support the theory of evolution (they can show the evolution of species over time).

Equus (modern horse)		
Pliohippus (one-toed horse)	W DOG	
Merychippus	(C)	
Mesohippus	OFF B	
Eohippus (early horse)		377

## Adaptation

- The process by which animals and plants adapt or evolve to survive in their environment.
- A habitat is a home environment for plants and animals or other organisms.
- Most living things live in habitats to which they are suited.
- Plants and animals have characteristics that make them suited to their environment.
- If the environment changes rapidly, some variations of a species may not suit the new environment and will die.
- If the environment changes slowly, animals and plants with variations that are best suited survive in greater numbers to reproduce and pass their characteristics on to their young.

Vocabulary			
offspring	parent offspring parent offspring	The result of reproduction by a living organism.	
sexual reproduction	Figure Polymers Polym	A type of reproduction where new individuals come from the joining of sex cells from two parents (one male and one female).	
vary / variation		Differ / differences between individuals within a species.	
characteristics		The distinguishing features or qualities of something.	
suited		When organisms are suited to an environment, it means that they are better able to survive there.	
adapted		Changed over time to suit an environment.	
environment		The surroundings or conditions in which an organism lives.	
inherited		Genetically passed down from parent to offspring. Inherited traits are traits that you get from your parents, e.g. nose shape, eye colour, blood type, etc.	
species		A group of similar organisms that can breed with one another to produce fertile offspring. Individuals of the same species can reproduce to make more individuals of that same species.	
fossils		The remains or imprints of a prehistoric plant or animal, embedded in rock and preserved.	