Linked scientists

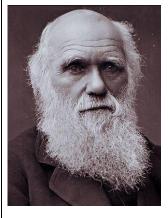
Charles Darwin and Alfred Russell Wallace (19th century naturalists who developed theories of evolution)
Telma Laurentino (Evolutionary Biologist <u>Evolutionary biologist</u> <u>— Telma_G. Laurentino.pdf</u> (pstt.org.uk)

Key Vocabulary				
adaptation	Change in structure or function that improves the chance			
'	of survival within an environment			
ancestor	An early type of animal or plant from which a later,			
	usually dissimilar, type has evolved			
biome	A naturally occurring community of animals and plants			
breeding	Process of producing plants or animals by reproduction			
characteristics	The qualities or features that belong to something and make			
	them recognisable			
environment	Circumstances, people, things and events around that			
	influence something's life			
evolution	Process of change that takes place over many generations,			
	during which different species slowly change some of their			
	physical characteristics			
extinct	No longer has any living members			
fossil	The hard remains of a prehistoric animal or plant that are			
	found inside a rock			
gene	Carries the characteristics passed on by parents or ancestors			
generation	Group of people or animals born and living during the same			
	time			
inherit	When characteristics are inherited you are born with them			
	because your parents or ancestors also had it			
mutation	Characteristics that aren't inherited from parents or			
	ancestors			
natural	Process by which species of animals and plants that are best			
selection	adapted to their environment survive and reproduce. Those			
	that are less well adapted die out			
offspring	A person's children or animal's young			
reproduction	When an animal or plant produces offspring similar to			
	itself			
survive	Continues to exist			
theory	an idea or set of ideas intended to explain something			
variation	A change or slight difference			

What I will know by the end of the unit

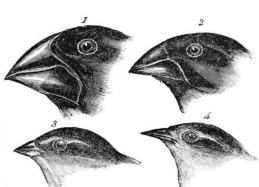
What is the Theory of Evolution?

Charles Darwin, an evolutionary Scientist, studied different plant & animal species. This allowed him to see how species had adapted to their environment.



He developed the **theory of evolution** in 1859. He said that **evolution** worked through **natural selection**. Some individuals in a **species** are better at surviving than others and will have more **offspring**.

Differences within species can be caused by inheritance and mutations



Evolution is a process of change that takes place over many **generations**, during which **species** of animals, plants or insects slowly change some of their **characteristics**.

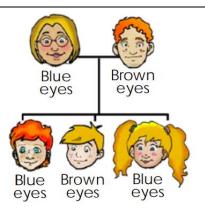
Living things have changed over time and **fossils** give us information

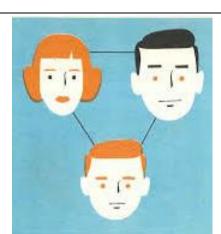
Evolution occurs when there is competition to survive. If an environment changes, species may die out.

Evidence of **evolution** comes from **fossils**. They are compared to creatures living today. Other evidence comes from living things — comparisons of some **species** may reveal common **ancestors**

Living things produce offspring. Normally they vary and are not identical to their parents

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





Animals and plants are adapted to suit their environment



Plants and animals have characteristics that are adapted to their environment. If an environment changes rapidly, some species may not suit the new environment and will die.

If the environment changes slowly, some species that are best suited survive to reproduce. Over time these inherited characteristics become more dominant within the population.