

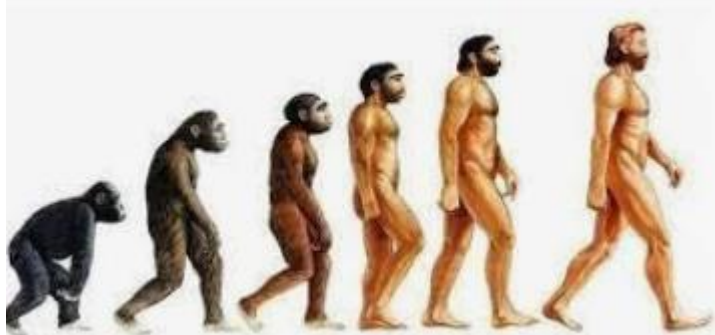




Year 6 - Evolution and Inheritance

Fossils	Evolution - change over time.	Inheritance
<p>Fossils are the remains of living things which inhabited the world millions of years ago. They are formed in sedimentary rock (sand, mud and pebbles squashed under layer, after layer over time) and plants/animals get trapped in these layers, revealing their shape.</p> 	<p>Evolution means change over time. It is the reason we have so many species on Earth. It happens when there is competition to survive (natural selection) and through differences within a species caused by inheritance and mutations.</p>	<p>Inheritance is when something is passed on to the next generation. Offspring are not identical to their parents and some characteristics are inherited (passed on from parents to off-spring). Other differences are new in offspring—these are called mutations.</p>
<p>Paleontologists study fossils. As they take a very long time to form, fossils are able to show how species have changed over time.</p> 		<p>Eye colour is an example of inheritance as is hair colour and even whether you can smell certain flowers!</p> 
<p>Charles Darwin 1809-1882</p>	<p>Adaptation</p>	<p>Example - Adaptation in polar Bears</p>
<p>He was best known for his "theory of evolution". He travelled the world in 1831 on the HMS Beagle. After studying plants and animals, he developed the idea of natural selection - the strongest survive and evolve. His book, "On the Origin of Species" caused much controversy as many believed it went against the church.</p>	<p>Adaptation is the action of a living things changing to suit the environment. If a species is well adapted it will survive and pass on successful genes to offspring. However, being highly adapted to one specific environment can be detrimental to a species' survival if there are sudden changes to that environment.</p>	 <p>Its white fur keeps it warm and also enables it to camouflage in the snow</p>
<p>Genes - part of a cell in a living thing that controls its characteristics</p>	<p>Mutation - permanent changes to genes which are passed on to off spring</p>	<p>Variation-differences in cells/organisms in any species that can be caused by genes changing or changes to the environment</p>
<p>Extinct - a species no longer existing</p>	<p>Paleontologist - someone who studies fossils</p>	<p>Pre-historic - the time before history was recorded (written down)</p>