



Year 6 Evolution and Inheritance

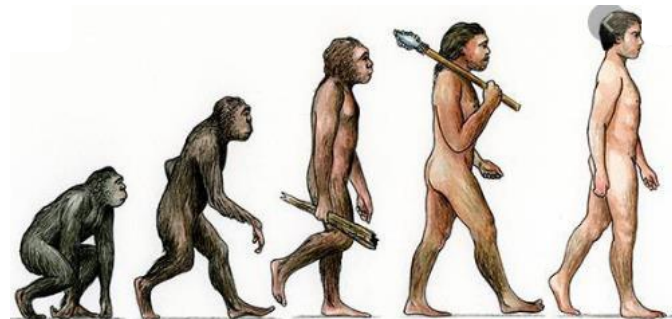
Strand: Biology

Big idea: The different kinds of life, animals, plants and microorganisms, have evolved over millions of generations into different forms in order to survive in the environments in which they live.

Big questions: Why did the Galapagos finches have different shaped beaks?

Topic vocabulary

evolution	the process by which different kinds of living organisms are believed to have developed from earlier forms during the history of the Earth.
natural selection	The process by which forms of life having traits that better enable them to adapt will tend to survive and reproduce in greater numbers.
variation	A change or slight difference.
advantageous	creating favourable circumstances that increase the chances of success or effectiveness



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.

Natural Selection

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

FOSSILS



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.

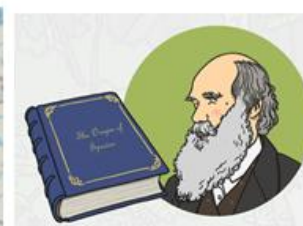


Inheritance is when something is passed on to the next generation. Offspring are not identical to their parents and some characteristics are inherited (carried in offspring from parents) and other differences are new in the offspring - these are called mutations

Offspring

Animals and plants produce offspring that are similar but not identical to them. Offspring often look like their parents because features are passed on.

Charles Darwin visited the Galapagos Islands and discovered that the finches had different shaped beaks. He worked out that they had adapted to the food around them and those that had adapted the best had survived. This was evolution



HMS Beagle

