STORY OF LIFE





How can we educate children about evolution and inheritance effectively?

Lesson Sequence



1. Understand how offspring vary and are not identical to their parents



2. Learn about animal adaptations



3. Learn about plant adaptations



4. Explore what we can learn from fossils



5. Explore the theory of evolution by natural selection



6. Explore human evolution

Characteristics and Variation

A characteristic describes how something looks or how it behaves. Characteristics can be passed on from parents to their offspring, meaning that they can be inherited. They can include hair colour, eye colour and height. However, environmental factors are important too.





Charles Darwin, the Galapagos Islands and Human Evolution

Charles Darwin was a famous naturalist who studied finches and tortoises on the Galapagos Islands. He suggested that some species may share a common ancestor and evolve to suit their habitats. He called this process natural selection.

Australopithecus
Homo habilis
Homo erectus
Homo heidelbergensis/
neanderthalensis
Homo sapiens



Adaptations

Plants and animals have numerous adaptations which help them to survive in their habitats.

- Camels have humps to store food, two rows of eyelashes and small slits for nostrils
- Epiphytes are plants which can grow on the surface of another plant
- Some plants contain toxic minerals to protect themselves from predators
- Other plants can store water, trap insects and smother other plants



Fossils

Mary Anning was a palaeontologist who found and collected many fossils along the Jurassic Coast in Dorset. She was the first person to uncover a full ichthyosaurus skeleton.



Rocket Words		
0 6	inherit	when features are passed on from parents to offspring
	adaptation	changes or special features of a living thing to help it live in a habitat
	epiphytes	plants that grow on the surface of other plants
1	fossil	the remains or impression of a prehistoric plant or animal embedded in rock
	Mary Anning	A famous palaeontologist who discovered fossils on the Jurassic Coast
	palaeontologist	a scientist that studies the remains of plants and animals found as fossils
1	ichthyosaurus	a large marine reptile that lived 201-194 million years ago
Mun	Charles Darwin	an English naturalist, best known for his theory of evolution
13	evolved	how living things gradually change over time
	natural selection	survival and reproduction of the fittest
899	ancestor	a person/living thing an organism is descended from
	Homo sapiens	the scientific name for the human species

Killer Questions

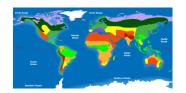
How do fossils form and what can they tell us about the past?

Why do animals adapt to their environments? What are the different features of biomes across the planet and how has climate change affected these biomes?

How is natural selection different to artificial selection?

Evolution is the process by which species adapt over time in response to their changing environment

Inheritance is the reception of genetic qualities by transmission from parent





BIOMES: There are five major types of biomes: aquatic, grassland, forest, desert, and tundra. They all have of various flora and fauna

An in-depth study of the Galapagos islands.

The Galapagos is an archipelago (group of islands) that lies in the Pacific Ocean off the coast of Ecuador, South America. There are 19 islands and over 100 islets (smaller islands). These pearls of the ocean are home to some of the most unique animals on Earth, and Fernandina is the most pristine of them all.

Mixed Media project using a range of formal elements inspired by evolution and inheritance

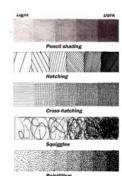
Mangrove Finch (bird)

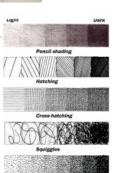








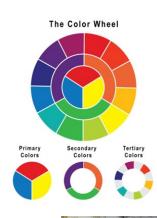






Textures





Shapes are Flat FORMS ARE FAT CACA SOLUTE PERSONAL SECTIONS CONT. ARTISTS USE SHADING TO MAKE FORMS LOOK 3-D ON PAPER.



Composition: The term composition means 'putting together,' and can apply to any work of art, from music to writing to photography, that is arranged or put together using conscious thought. In a 2D piece of Art, it is where you choose to put things on your page, the layout.



Jean Michel Basquiat - Painting/ **Printing**

Cathy Miles - Sculptures

Mike Goodwin-Drawing











Create and make a healthy salad. Healthy eating is about having a balance of different foods and nutrients in the diet for good health and wellbeing, including fruit and vegetables

