Year 6 Science Summer 1 Unit
Evolution and Inheritance

Key Scientific Skills	Year 6 Evolution and Inheritance
Plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary	
Take measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate	
Record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs	
Use test results to make predictions to set up further comparative and fair tests	
Report and present findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations	
Identify scientific evidence that has been used to support or refute ideas or arguments	

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

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

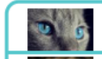
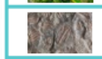
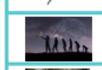
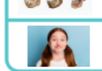
Fossils

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.

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.

Rocket Words

	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
	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
	ichthyosaurus	a large marine reptile that lived 201-194 million years ago
	Charles Darwin	an English naturalist, best known for his theory of evolution
	evolved	how living things gradually change over time
	natural selection	survival and reproduction of the fittest
	ancestor	a person/living thing an organism is descended from
	Homo sapiens	the scientific name for the human species

Progression of Knowledge

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

3.6 million years ago
↓
Human Evolution
↓
Today

Unit	YEAR 6
Evolution and Inheritance	Recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago. Recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents. Identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution.