



Objectives and Sticky Knowledge



Prior Knowledge Recap:

- The main stages in a life cycle for animals, (including humans), are birth, growth, reproduction and death
- The life cycle of different living things e.g. mammal, amphibian, insect and bird and know the differences between these life cycles
- The process of reproduction in animals and plants
- How living things have been classified – The Linnaeus System

Land Objectives/ Sticky Knowledge

<p>Know how fossils can be used to find out about the past.</p>	<p>Know about reproduction and offspring (recognising that offspring normally vary and are not identical to their parents)</p>	<p>Know how animals and plants are adapted to suit their environment</p>	<p>Know about evolution and can explain what it is</p>
<p>- Fossils are preserved remains of ancient animals and plants. Fossils let scientists know how animals used to look millions of years ago.</p>	<p>- Animals and plants produce offspring that are similar but not identical. - You can see variation in any species, including plants.</p>	<p>Characteristics that are influenced by the environment the living things live in. These adaptations can develop as a result of many things, such as food and climate.</p>	<p>Evolution is the process by which different kinds of living organism have developed from earlier forms over millions of years. - Natural selection is a way by which animals have evolved to survive in their environments.</p>

Sea:

Links with ‘Sustainability and Freedom’:

Links with CST and CKA Values Crown:



Year 6 Science Lent 2 and Pentecost 1 Knowledge Organiser Evolution & Inheritance



Key Vocabulary	
offspring	The young animal or plant that is produced by the reproduction of that species.
inheritance	This is when characteristics are passed on to offspring from their parents.
variations	The differences between individuals within a species.
characteristics	The distinguishing features or qualities that are specific to a species.
adaptation	An adaptation is a trait (or characteristic) changing to increase a living thing's chances of surviving and reproducing.
habitat	Refers to a specific area or place in which particular animals and plants can live.
environment	An environment contains many habitats and includes areas where there are both living and non-living things.
evolution	Adaptation over a very long time.
natural selection	The process where organisms that are better adapted to their environment tend to survive and produce more offspring .
fossil	The remains or imprint of a prehistoric plant or animal, embedded in rock and preserved.
adaptive traits	Genetic features that help a living thing to survive.
inherited traits	These are traits you get from your parents. Within a family, you will often see similar traits, e.g. curly hair.

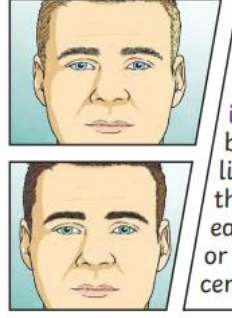


Offspring
Animals and plants produce **offspring** that are similar but not identical to them. **Offspring** often look like their parents because features are passed on.

Variation
In the same way that there is **variation** between parents and their **offspring**, you can see **variation** within any species, even plants.



Adaptive Traits
Characteristics that are influenced by the **environment** the living things live in. These **adaptations** can develop as a result of many things, such as food and climate.

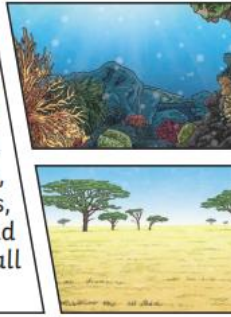


Inherited Traits
Eye colour is an example of an **inherited trait**, but so are things like hair colour, the shape of your earlobes and whether or not you can smell certain flowers.



Habitats
A good **habitat** should provide shelter, water, enough space and plenty of food.

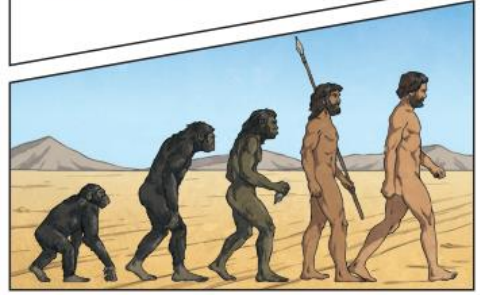
Environments
There are many types of **environment** around the world. Polar regions, deserts, rainforests, oceans, rivers, and grasslands are all **environments**.



Fossils are the preserved remains, or partial remains, of ancient animals and plants. **Fossils** let scientists know how plants and animals used to look millions of years ago. This is proof that living things have **evolved** over time.



Evolution is the gradual process by which different kinds of living organism have developed from earlier forms over millions of years. Scientists have proof that living things are continuously **evolving** - even today!



Living Things	Habitat	Adaptive Traits
polar bear	arctic	Its white fur enables it to camouflage in the snow.
camel	desert	It has wide feet to make it easier to walk in the sand.
cactus	desert	It stores water in its stem.
toucan	rainforest	Its narrow tongue allows it to eat small fruit and insects.

Sky objectives:

1. Ask well-considered questions that closely match personalised enquiries.
2. Skilfully plan and conduct child-led investigations, deciding which variables to control and what observations to make.
3. Use personal knowledge combined with accurate observations and data collection to draw a conclusion.