



Knowledge Bank: Year 6 Science – Life as we know it

How has **biology** shaped life as we know it?

Key Vocabulary:

fossil	The remains of a once-living organism preserved as rock.
palaeontology	Branch of science concerned with fossil animals and plants.
extinct	An animal or plant species that has died out and is no longer present in the world population.
species	Living organisms which reproduce to make offspring of the same type.
inheritance	The process of passing on characteristics from parents to their offspring.
characteristics	a special quality or trait that can make a person, thing, or group different from others.
offspring	The product of the reproductive process of a person, animal or plant.
genes	Genes carry the information that determines your features and characteristics
variation	Natural differences between living things in a species.
naturalist	A person who studies the natural world.
natural world	The animals and plants that exist in natural and are not made or caused by people.
adaptation	A characteristic of a living thing that makes it suited to its environment.
evolution	The process by which living things gradually change over time.

Diagrams:

Fossil types:



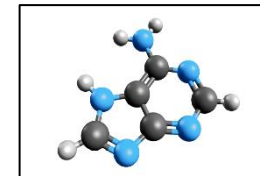
Trace

Fossil of anything made by an organism or left behind by one.



Body

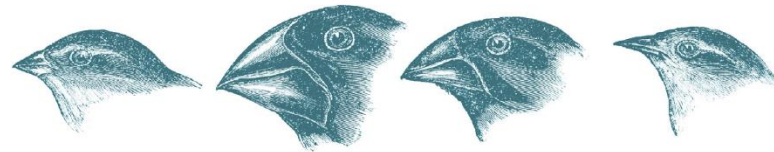
Rocks that have preserved evidence of bones, teeth, and shells.



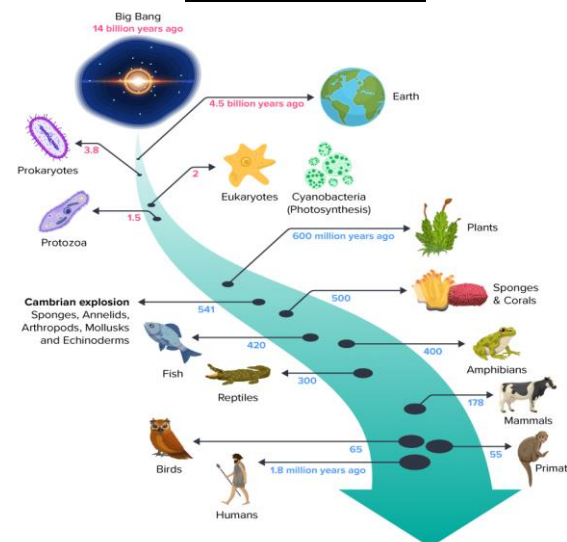
Chemical

Chemicals found in rocks and fossil fuels (petroleum, coal, and natural gas).

Darwin's Finches:



Evolution Timeline:



Key Facts:

Fossils are our only evidence of animals that are now extinct.

Living things pass characteristic to their offspring through their genes.

Siblings inherit DNA from both parents.

Normally, offspring vary and are not identical to their parents. This creates variation.

While some characteristics are inherited, some are acquired or learnt e.g. being an able swimmer.

Living things that are most suited to their environment are more likely to reproduce and pass on their adaptations.

All adaptations of organisms lead to better and stronger species.

Explorer and scientist Charles Darwin noticed how these adaptations over time cause organisms to evolve.

Human evolution can be demonstrated by the changing shape of human skull over millions of years ago.

Vegetation has also evolved over millions of years to suit the environment it grows in.