

Golden Concepts

Asking scientific questions and making observations

Planning an investigation

Collecting, presenting and interpreting data

Errors and uncertainty

Science in our world

Key Vocabulary

Evolution	The process by which characteristics change over time, sometimes resulting in new species
Natural Selection	Theory from Charles Darwin: The way an species characteristics give it a greater chance of survival.
Fossils	Fossils are found in sedimentary rocks. They are impressions of species in stone
Sedimentary rocks	Rocks that are formed from small pieces of sediment under pressure
Adaptation	Characteristics which support a species survival its in environment
Common Ancestry	Sharing a common ancestor. Having similar DNA, comparative anatomy
Genes	A section of DNA that codes for a particular characteristic
Evidence	Proof. Information which supports a theory
Species	Animals that can breed to produce fertile offspring
Genetic	DNA is located in the nucleus of the cell. The code that determines individual characteristics
Environmental	The world in which something exists

Evolution 7 - Knowledge Organiser

Introduction to Evolution:

- Understanding the basic concept of evolution as the process of change in all forms of life over generations.

Natural Selection:

- Exploring the mechanism of natural selection as proposed by Charles Darwin.
- Understanding how variations in traits within a population can lead to differential survival and reproduction.

Evidence for Evolution:

- Studying various lines of evidence that support the theory of evolution, such as fossil records, comparative anatomy, embryology, and molecular biology.

Adaptation:

- Examining how species adapt to their environments over time.
- Investigating the role of adaptations in the survival and success of species.

Common Ancestry:

- Understanding the concept of a common ancestry for all living organisms.
- Exploring the evolutionary relationships between different species through phylogenetic trees.

