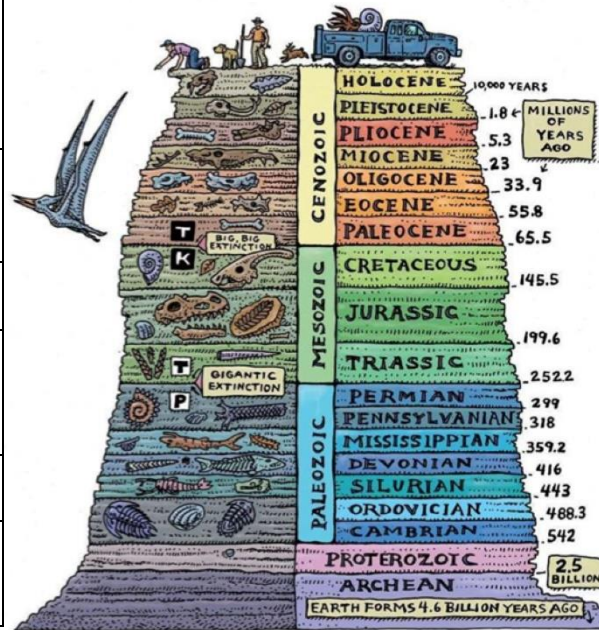


Knowledge Organiser – Evolution (Science Year 6)

Key Vocabulary	Definition
Evolution	Gradual process in which something changes.
Adaptation	Process of changing.
Characteristics	Qualities that make things different to other things.
Variation	A difference or change.
Inheritance	Passing of characteristics from parents to offspring.

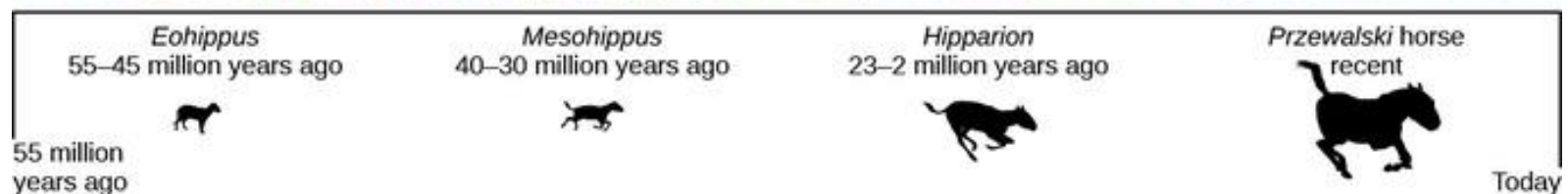


Fossils are formed over millions of years and they are trapped in layers of rock.

We can use these layers to find out how old the fossils are and how species have changed over time.

Similarities and differences between fossils in rocks of different ages help us to see how animals have evolved over billions of years.

A four-toed hoof evolved into a single hoof, more suitable for running.
A modern-day horse is much taller than its original ancestor.



When living things reproduce, they pass on characteristics to their offspring.

When offspring have similar characteristics to their parents, we say that they are inherited.

Inherited characteristics

Eye colour
Hair colour
Height

Environmental characteristics

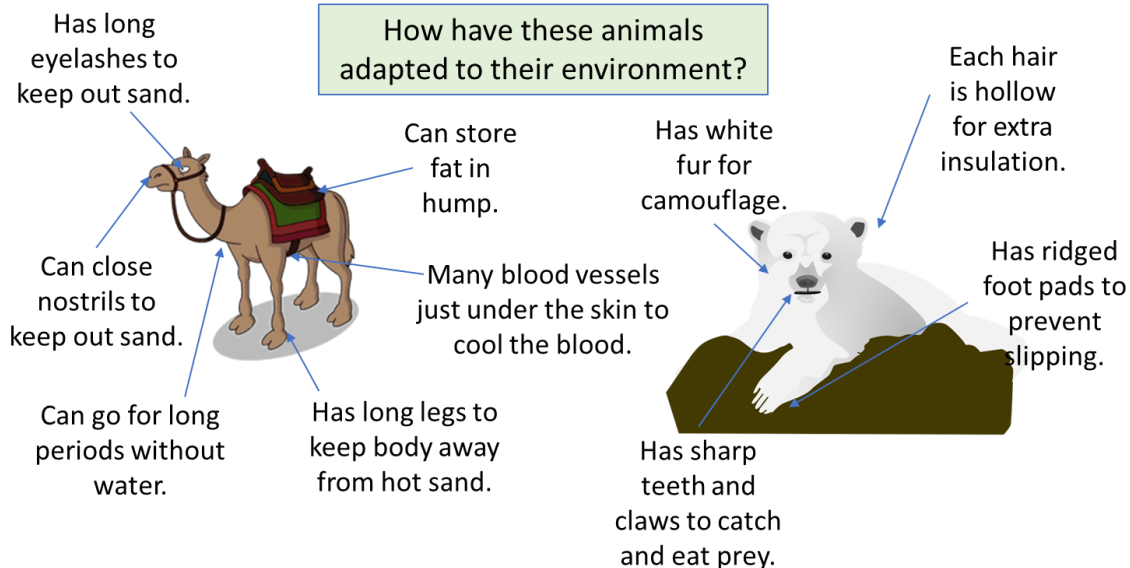
Food choices
Being good at sport
Liking football

Why do species change over time?

Variation - Within a species, there are natural variations, mutations, that result from differences in the genetic material.

Adaptation - Sometimes a mutation occurs that makes an individual more able to survive than other members of the group.

Selection - Organisms with particularly advantageous adaptations are most likely to survive long enough to reproduce.



Before selection



After selection



Final population



Natural selection

The better adapted members of the species to the environment survive...Survival of the fittest.

The survivors pass on their genes to their offspring.