Science Topic: Evolution and Inheritance What I should know by the end of the unit? Vocabulary

- All living things have changed over time and we can see this change through fossils.
- Fossils show us what living things looked like millions of years ago.
- Living things produce **offspring** that are of the same type as their parents but are not normally identical.
- Animals and plants have changed over millions of years and display adaptations that help them succeed in their environment.
- Animals and plants that have adaptations which are considered beneficial are able to reach maturity and **reproduce** successfully.
- Successful adaptations in plants and animals may lead to evolution, over a long time period.

Evolution	Adaptation	Inheritance
The theory of evolution by natural selection (first formulated in Charles Darwin) is the process by which organisms change over time as a	Adaptation is when a plant or animal has changed in some way, over a long period of time, to be better suited to the environment .	When parents have offspring , they pass on their physical traits . The offspring inherit their parents' qualities .
result of changes in inheritable		Parent 1 Parent 2
physical or behavioural traits.	1	+ (1)
sellk	MI	Color of the child's eyes 75% 6,2% 18,8%

Can you spot the camouflage animal?



Mary Anning (1799 – 1847) was an English fossil collector, dealer, and **paleontologist** who became known around the world for important finds she

Mary Anning

made in Jurassic marine
fossil beds in the cliffs
along the English
Channel at Lyme Regis
in the county of Dorset in
Southwest England.



adaptation	a change in structure or function that improves the chance of survival for an animal or plant within a given environment
characteristics	the qualities or features that belong to them and make them recognisable
DNA	carries specific generic information inside every living things.
environment	all the circumstances, people, things, and events around
evolution	a process of change that takes place over many generations, during which species of animals, plants, or insects slowly change some of their physical characteristics
extinct	no longer has any living members, either in the world or in a
fossil	hard remains of a prehistoric animal or plant that are found
genetics	inherited characteristics
inherit	if you inherit a characteristic you are born with it, because your parents or ancestors also had it
offspring	a person's children or an animal's young
palaeontology	the study of fossils as a guide to the history of life on Earth
species	a class of plants or animals whose members have the same main characteristics and are able to breed with each other
theory	a formal idea that is intended to explain something
variation	a change or slight difference



Did you know?

Meerkats have dark circles around their eyes, which act like sunglasses, helping them see even when the sun is shining brightly.