

What should I already know?		Big Ideas this works towards:	
<ul style="list-style-type: none"> Which things are living and which are not. Identifying animals (e.g. amphibians, reptiles, birds, fish, mammals, invertebrates) and plants using classification keys Animals that are carnivores, herbivores and omnivores. Animals have offspring which grow into adults. The basic needs of animals for survival (water, food, air) Some animals have skeletons for support, protection and movement. Food chains, food webs and the role of predators and prey. Features of habitats and the animals and plants that exist there (biodiversity) . Examples of different biomes The life cycle of some animals and plants Sometimes environments can change and this has an effect on the plants and animals that exist there Living things breed to produce offspring which grow into adults. This is called reproduction. The role of Mary Anning in palaeontology and the discovery of fossils. The features of some rocks and the role they play in the formation of fossils 		<p><i>Living things are special collections of matter that make copies of themselves, use energy and grow.</i></p> <p><i>Living things on Earth come in a huge variety of different forms that are all related because they all came from the same starting point 4.5 billion years ago.</i></p> <p><i>The different kinds of life, animals, plants and microorganisms, have evolved over millions of generations into different forms in order to survive in the environments in which they live.</i></p>	
What will I know by the end of the unit?			
What is evolution?	<ul style="list-style-type: none"> Evolution is 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. This is because offspring are not identical to their parents. It occurs when there is competition to survive. This is called natural selection. Difference within a species (for example between parents and offspring) can be caused by inheritance and mutations. Inheritance is when characteristics are passed on from generation to the next. Mutations in characteristics are not inherited from the parents and appear as new characteristics. 	adaptation	a change in structure or function that improves the chance of survival for an animal or plant within a given environment
How do we know about evolution?	<ul style="list-style-type: none"> Evidence of evolution comes from fossils - when these are compared to living creatures from today, palaeontologists can compare similarities and differences. Other evidence comes from living things -comparisons of some species may reveal common ancestors. 	biodiversity	a wide variety of plant and animal species living in their natural environment
What is adaptation?	<ul style="list-style-type: none"> Adaptation is when animals and plants have evolved so that they have adapted to survive in their environments. For example, polar bears have a thick layer of blubber under their fur to survive the cold, harsh environment of the Arctic while giraffes have long necks to reach the leaves on trees. Some environments provide challenges yet some animals and plants have adapted to survive there Sometimes adaptations can be disadvantageous. One example of this can be the dodo, which became extinct as it lost its ability to fly through evolution. Flying was unnecessary for the dodo as it had lived for so many years without predators, until its native island became inhabited. When adaptations are more harmful than helpful, these are called maladaptations. 	biome	a large naturally occurring community of animals and plants occupying a major habitat
		breeding	the process of producing plants or animals by reproduction
		characteristics	the qualities or features that belong to them and make them recognisable
		environment	all the circumstances, people, things, and events around them that influence their life
		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 particular place
		fossil	the hard remains of a prehistoric animal or plant that are found inside a rock
		generation	the act or process of bringing into being; through reproduction , especially of offspring
		inherit	If you inherit a characteristic you are born with it, because your parents or ancestors also had it.
		mutation	characteristics that are not inherited from the parents or ancestors and appear as new characteristics .
		natural selection	a process by which species of animals and plants that are best adapted to their environment survive and reproduce , while those that are less well adapted die out
		offspring	a person's children or an animal's young

	reproduction	when an animal or plant produces one or more individuals similar to itself
	species	a class of plants or animals whose members have the same main characteristics and are able to breed with each other
	survive	continue to exist
	variation	a change or slight difference