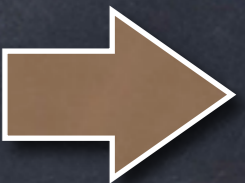


# Rocks, Fossils and Soils

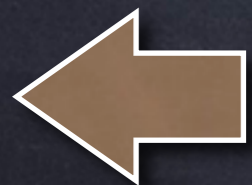
Learning Objective:

To be able to identify fossilised remains.



Can you remember what a fossil is?

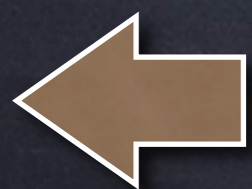
How are fossils formed?





A fossil shows the remains of prehistoric animals or plants. They are formed when the animal or plant becomes embedded in rock. When the organism dissolves, it leaves a mould in the rock. Gradually, this is filled by minerals which create a new stony substance.

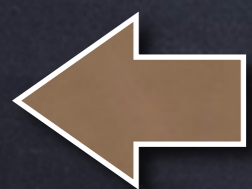
Millions of years after the animal or plant has lived, the fossil comes to the surface of the Earth due to movements in the Earth's plates. The fossils can then be discovered!



In order for an organism to become fossilised, it needs certain conditions. It needs to die in a place where sedimentary rock forms around it. This is why not all prehistoric animals became fossils.



Lots of fossils are animals and plants that lived in or near the sea. People hunt for fossils in coastal areas because land erosion means these fossils are now able to be discovered.



There are some fossils that are very common and some that are very rare. This is an example of a common fossil...

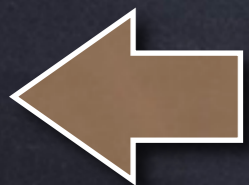


What kind of organism do you think this fossil used to be?



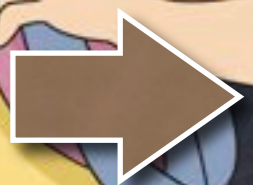
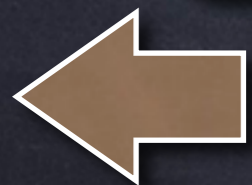


This is an ammonite. Ammonites were sea creatures that could swim quickly to catch their prey. They varied in size. Some were very small but some grew to up two metres wide!



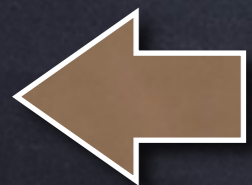


This is another common fossil.  
What kind of organism do you  
think this was?





This is a trilobite fossil. They were also sea creatures. Trilobites scuttled along the sea floor or swam around looking for food. Like crabs and lobsters, they had an outside shell. This shell made it possible for the fossils to form.

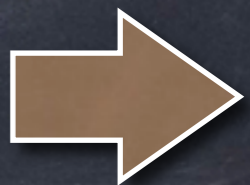
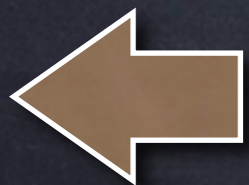
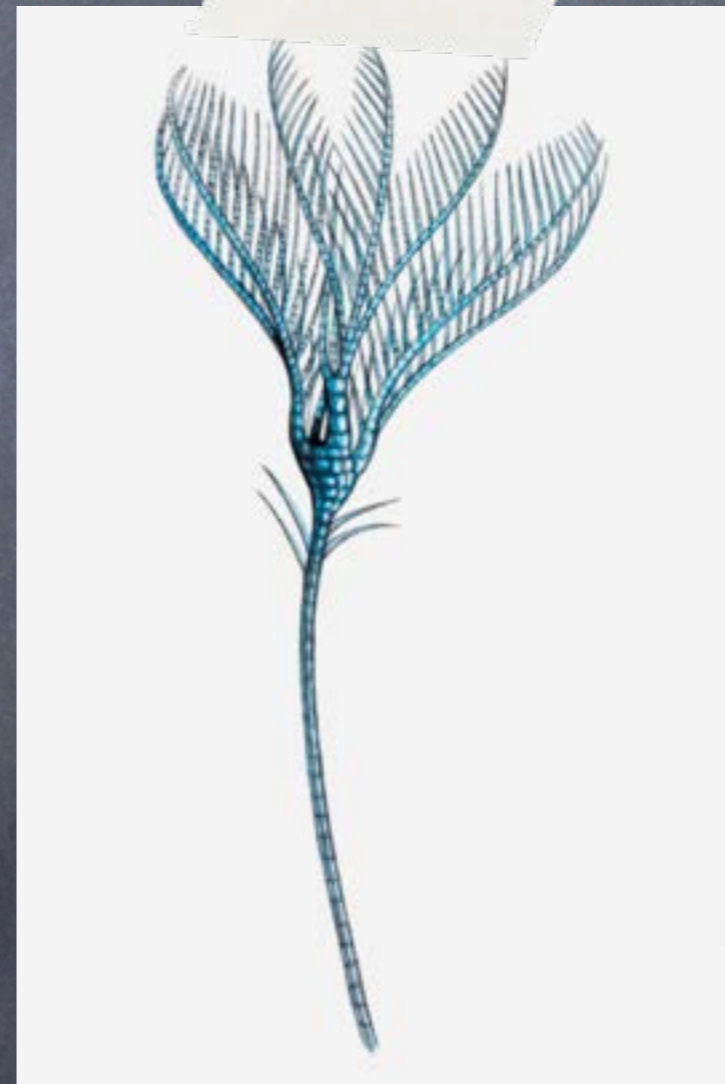




What kind of organism do you think this used to be?

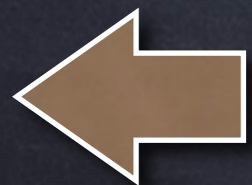


These are crinoids. They look like flowers (which is where they get their nickname 'sea lily' from) but they are actually animals that used their feathery arms to catch their prey.



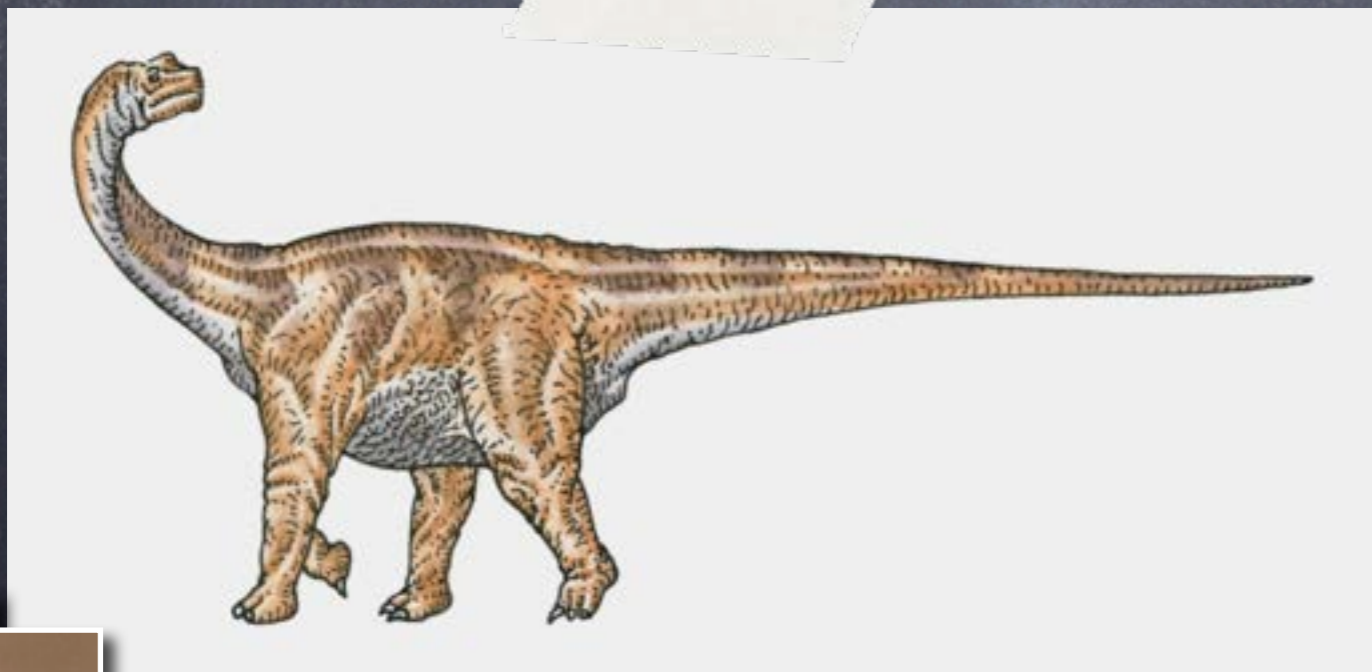


What do you think this fossil  
used to be?





This is a dinosaur fossil. This particular dinosaur is called a camarasaurus. It lived between 145 million and 155 million years ago. The camarasaurus is about 15 metres tall.



Palaeontologists (scientists who study fossils) can find out a lot about the plants and animals that lived millions of years ago by looking at their fossils.



What do you think we would know about dinosaurs and other prehistoric animals if we didn't have fossils?

