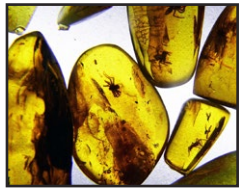
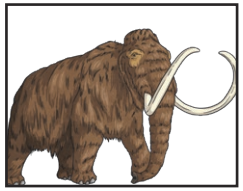
Key Vocabulary Overview	
rock	a naturally occurring material made up of minerals (solid pieces of non-living material)
fossil	the preserved remains or traces of a prehistoric living thing
skeleton	structures of bones or other substances that can provide protection, movement and support
shell	a protective, hard outer covering of some animals
fossilisation	the name given to the process that forms fossils
sediment	pieces of material (such as sand, mud or rock fragments) which can carried by methods such as water and then deposited

Fossils

Fossils are preserved remains or traces of prehistoric living things. This includes animals (such as dinosaurs) but also plants and even microorganisms (tiny organisms). We usually find **fossils** in **rocks**.

Types of Fossil

Normally, it is the hard parts of animals (teeth, bones and **shells**) that are **fossilised**. However, other things can also be **fossilised**.

 insect **fossilised** in amber	 preserved woolly mammoth	 **fossilised** ammonite **shell**	 **fossilised** footprints	 **fossilised** tooth
 coprolite (**fossilised** poo)	 petrified (**fosslised**) tree trunk	 a **fossil** of a microorganism (stromatolites)	 a plant **fossil**	 a **fossilised** fish

Fossilisation

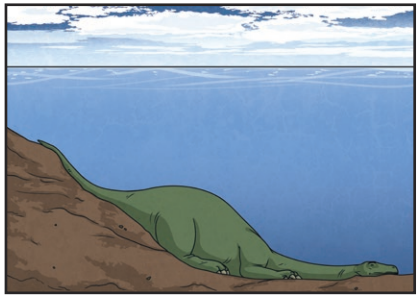
Fossilisation is a very rare occurrence that needs the right conditions and a lot of time to occur. Specimens are generally considered to be **fossils** if they are at least 10,000 years old.

Fossils from marine environments are common as this type of environment provides appropriate conditions for **fossilisation**.

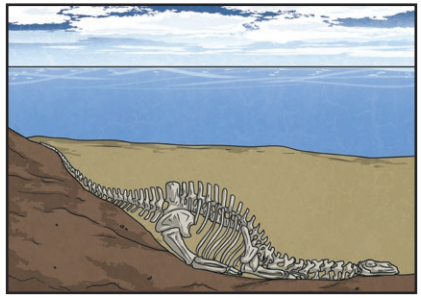
Layers of Fossils

Due to the way the **rock** **fossils** are commonly found in layers over time, older **fossils** tend to be deeper underground.

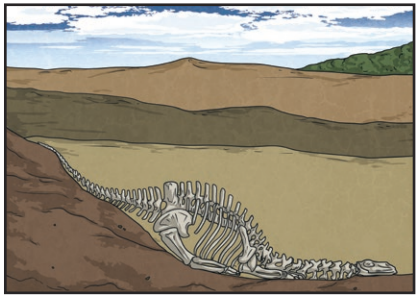
The Fossilisation Process



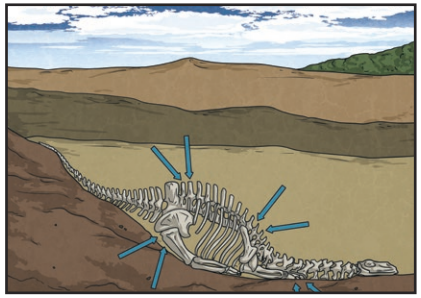
A living thing, such as an animal or plant, dies.



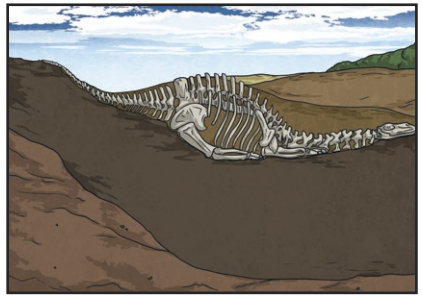
The remains are covered by **sediment**. Eventually, only the hard parts (such as bones) remain as the soft parts have decayed.



Sediment continues to build up in layers, placing pressure on the layers below and turning them into **rock**.



Water containing minerals enters the hard remains. The minerals replace the bone to form the **fossil**.



Over millions of years, the **rock** containing the **fossil** rises to the surface. A process called erosion can reveal the **fossil**.