



Science

Rocks

An illustration of a dinosaur skeleton, likely a T-Rex, lying on its side in a cracked, sandy, and rocky environment. The skeleton is rendered in a dark brown color with black outlines. The background is a textured, light brown surface with dark brown cracks and shadows, suggesting a desert or prehistoric landscape. The title "Fantastic Fossils" is written in large, bold, orange letters with a black outline, centered over the dinosaur's body.

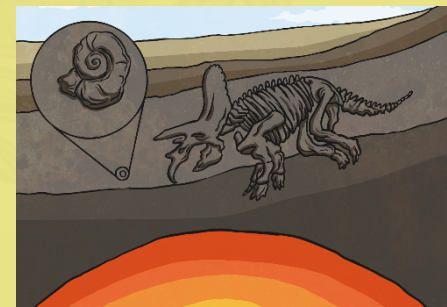
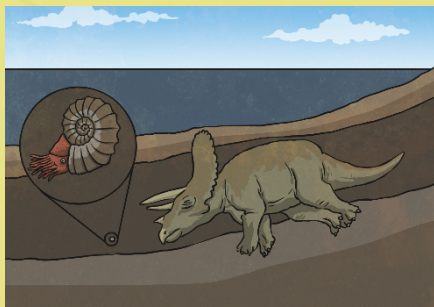
Fantastic Fossils

twinkl

Fossilisation Process

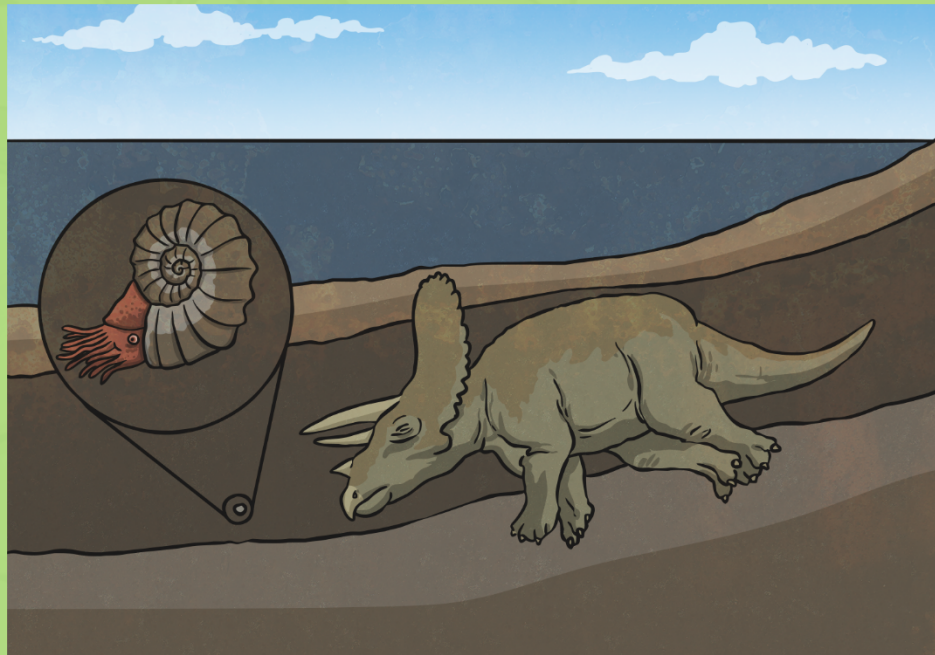
There are many different ways that fossilisation occurs. However, you will focus on how fossils form in rocks (both body and trace fossils).

Fossilisation only takes place in sedimentary rocks as the heat from the lava that creates igneous rocks and changes the structure of metamorphic rocks would be too high for fossils to survive.



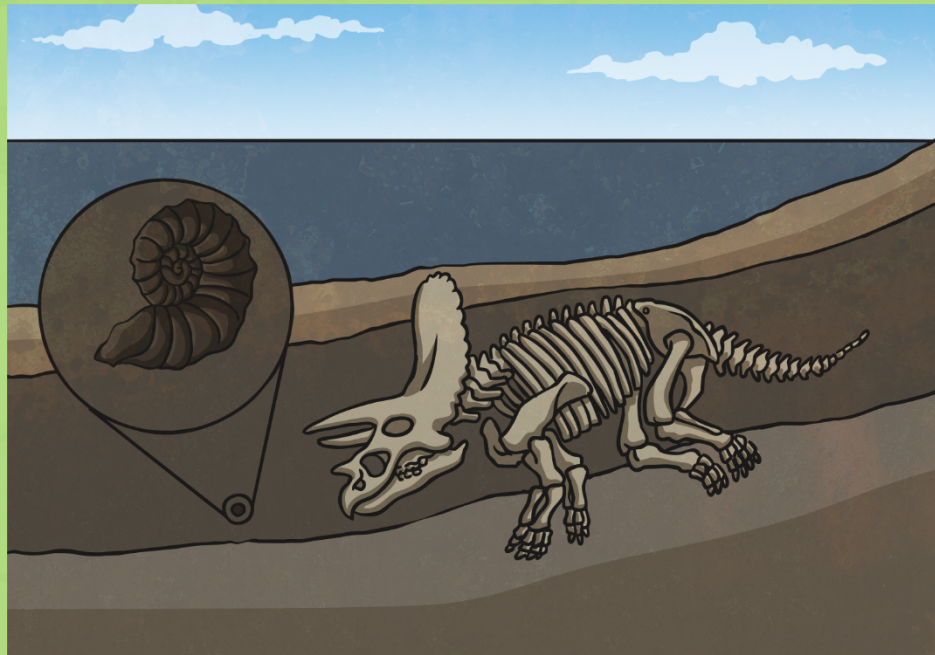
Fossilisation Process; Step 1

An animal or creature dies on land or in the sea and it gets covered by a layer of sediments (e.g. plant material and tiny parts of rock or soil etc). Over time, through compaction and cementation (solidifying), these eventually form a layer of rock.



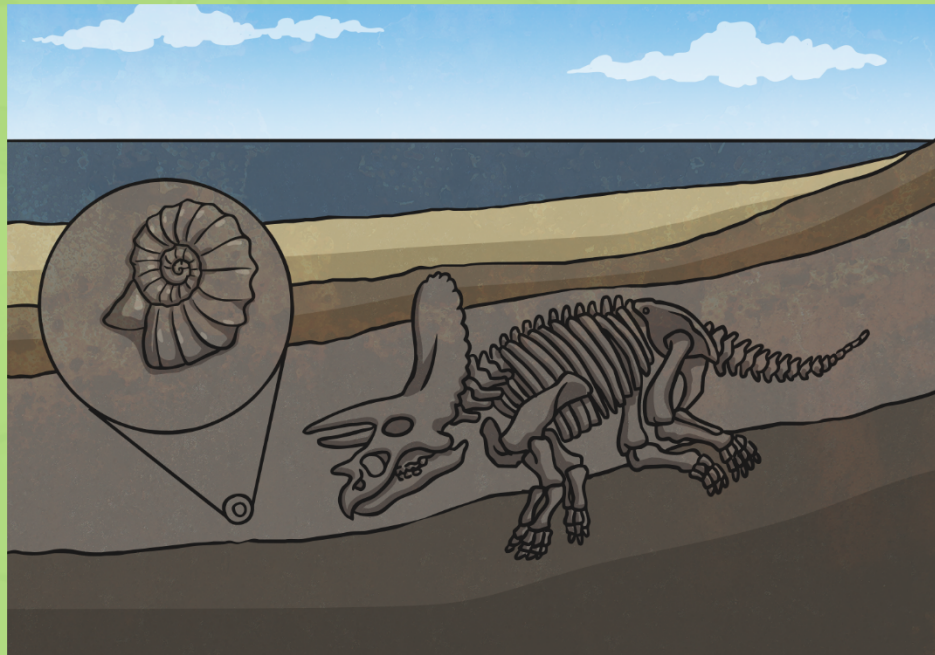
Fossilisation Process; Step 2

Over time more layers of rock are formed which cover it and by this time the only thing to remain of the organism would be the hard parts such as bones, shells and teeth.



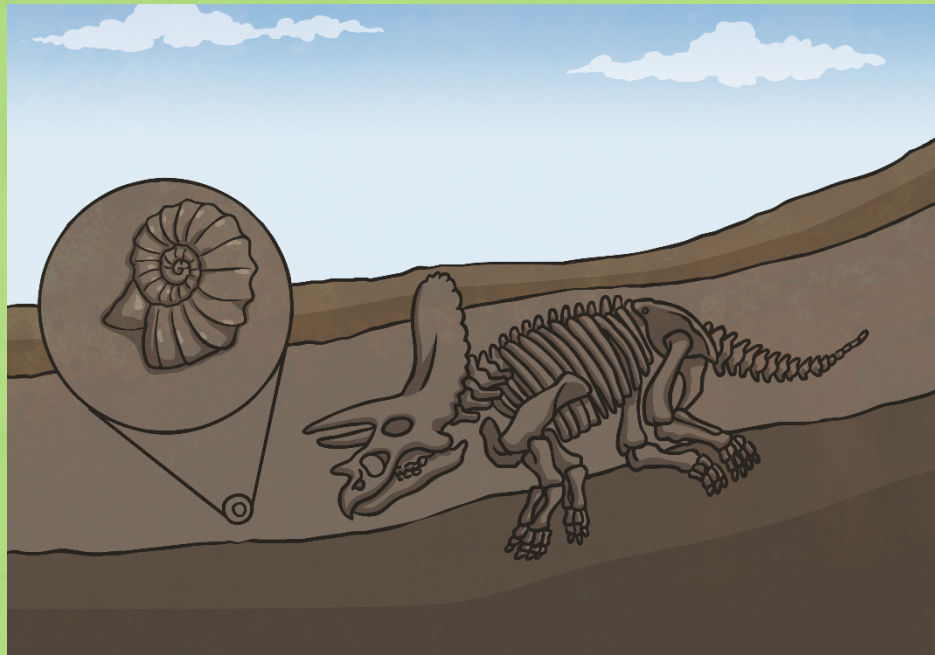
Fossilisation Process; Step 3

Over thousands of years the mold fossil might become a cast fossil with sediment entering the mold. In the case of replacement fossils, the original bone matter changes to mineral matter but this does not affect the shape of the bones.



Fossilisation Process; Step 4

Over a long period of time the sea will recede in certain places. The sea level could also be changed quickly through earthquakes and volcanic eruptions.



Fossilisation Process; Step 5

As erosion and weathering takes place, eventually the fossils become exposed.

