

Fantastic Fossils



Discover the geology at Great Linford Manor Park

Have you seen a fossil before?

Fossils are the remains of an ancient organism or traces of activity of an organism. They can be found in rocks like the ones in the stone circle at Great Linford Manor Park.



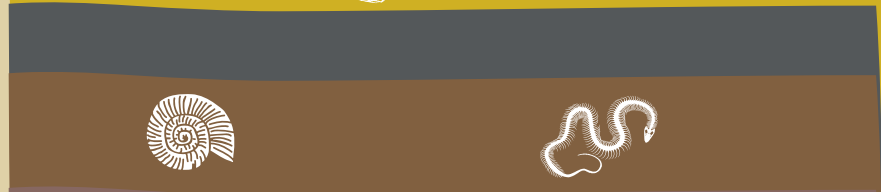
They come in many different shapes and sizes! Here are some examples.



Fossils can be millions of years old. Some of the fossils in the park are 170 million years old, that's older than some of the dinosaurs!

Fossils are found in layers of rock known as strata. They are studied by people called geologists because Geology is the study of rocks. Strata are laid on top of one another over time, which means some are older than others.

Write in the boxes which layer you think is the oldest and which is the newest. Why do you think this?



It is very rare for organisms to become fossilised, usually after most organisms die their bodies just rot away and nothing is left behind. But sometimes, under special conditions, a fossil can form!

Creatures that have a hard shell or a hard skeleton are more likely to form a fossil when they die. Look at the creatures below. Sort them into 2 categories of whether you think they would form a fossil or not.



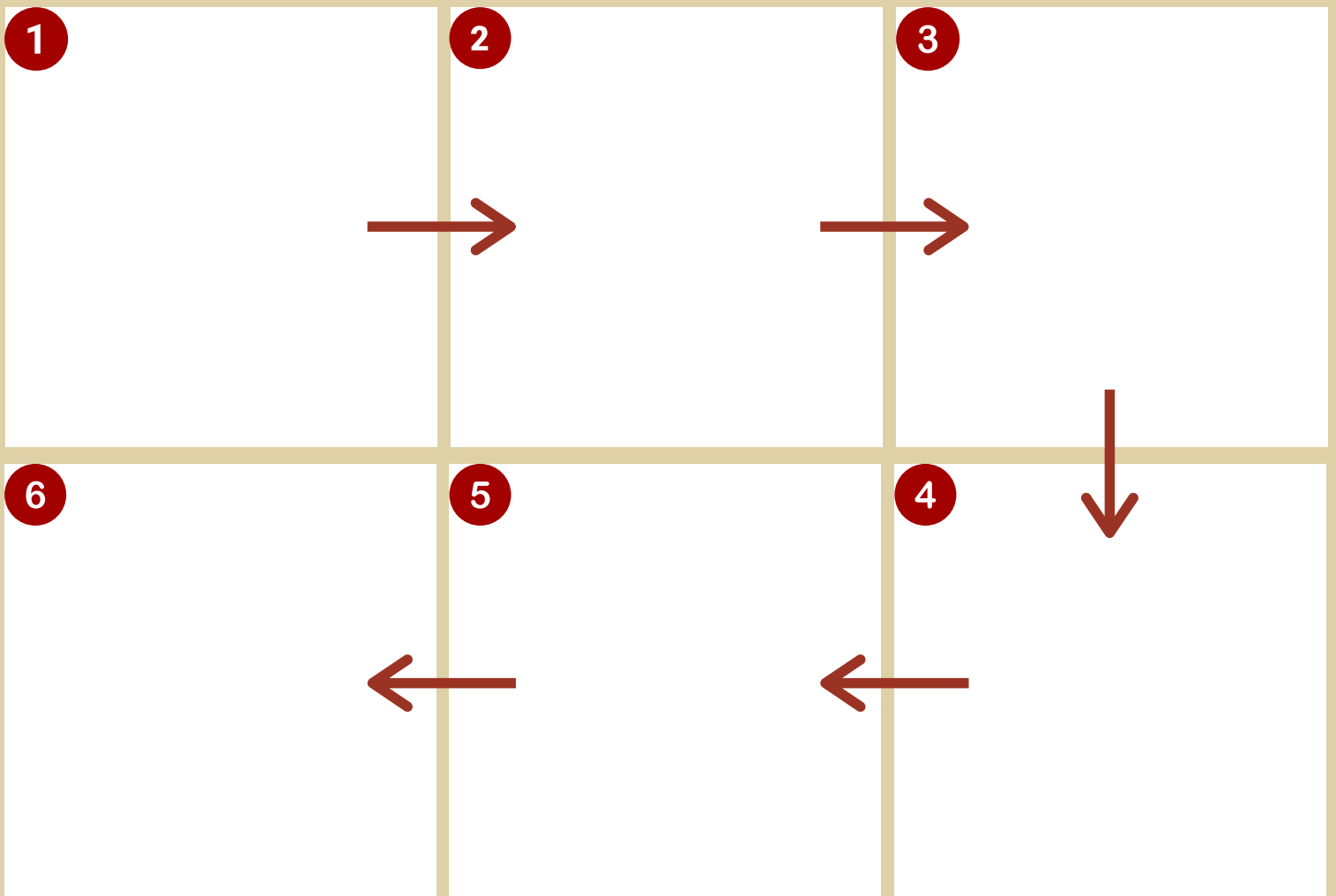
Likely to form a fossil

Unlikely to form a fossil

Read the text below and draw a picture in each box for each step of the fossilisation process.

1. Organism dies.
2. Soft parts of the plant or animal decompose (rot away), leaving behind hard parts like the skeleton or shell.
3. The hard parts are buried by small particles of rock called sediment.
4. Layers of sediment build up and sediment around skeleton or shell goes hard and turns to rock.
5. Bones are dissolved by water seeping into the rock.
6. Minerals replace bone leaving a rock replica of the original bone or shell, called a fossil.

The story of a fossil...



Look closely at the stones in the stone circle. Can you spot any fossils? They might look like tiny shells and they can be smooth and shiny. They look like the ones in this photo.



Draw a picture of a fossil you've spotted in the empty box below.



Once you've found a fossil, use your tape measure to measure its length and width and complete this geology record card.

Some of the fossil will be hidden inside the rock so when out and about geologists have to make a judgement of where the shell ends to give a reliable measurement.

Fossil type: Shell

Found at (name of park):

Length (in millimetres):

Width (in millimetres):

Behind the stone circle in the park you can find an old quarry. It's not used any more but you can still see evidence of the limestone strata (rock layers). They look like this. Can you spot them?



The harder limestone layers were separated with layers of clay, which has since washed away.

Well done! You have completed the Fantastic Fossils Activity Sheet!



Don't forget to take a photo of yourself with the stone circle or quarry and share it with us by tagging @theparkstrust on Facebook, Twitter or Instagram.

