

THE  
MARGATE  
CAVES

## *The Experiment:* Fossils and Rocks

### You will need

2 x bread slices (cut in half)  
Heavy books (as many as you can find)  
Small household items (coins, keys,  
buttons, paperclips etc.)  
Cling film or greaseproof paper  
A ruler

### Instructions

- 1 Lay some greaseproof paper or cling film onto your surface and put your first slice of bread in the middle. Your bread slices represent layers of sediment, like sand for example.
- 2 Lay a few of your items on top, making sure you spread them out. These represent animals that have died.
- 3 Lay another two slices of bread over the items and put your final items on top.
- 4 Place your last slice of bread over your items and use the ruler to measure how tall your stack of bread is.
- 5 Put some more clingfilm or greaseproof paper on top and balance your heavy books on top. Leave your books on top of your bread overnight. Does the height of your bread stack change? What do you think is happening to your items inside your bread?
- 6 Remove your books and peel back the layers of bread. What has happened to your bread? What can you see?

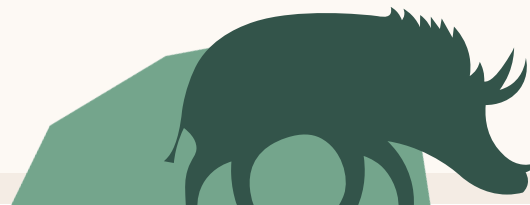
### What is happening?

Sedimentary rocks are formed from layers of sediment being put under a lot of pressure, which presses them together turning them to rock - just like how your books squished down your slices of bread. Fossils are formed when animals die, and their skeletons get buried under layers of sediment. As the sediment around the bones turn to rock, and the bones eventually dissolve, they leave impressions in the rock, just like your items left in your bread slices. Fossils can only be found in sedimentary rocks and the process of their creation is called fossilisation.

### *More activities*

Why not see if the process works with items like sticks or leaves?

Why not use coloured pencils and paper and make rubbings of the items you fossilise?



1



2



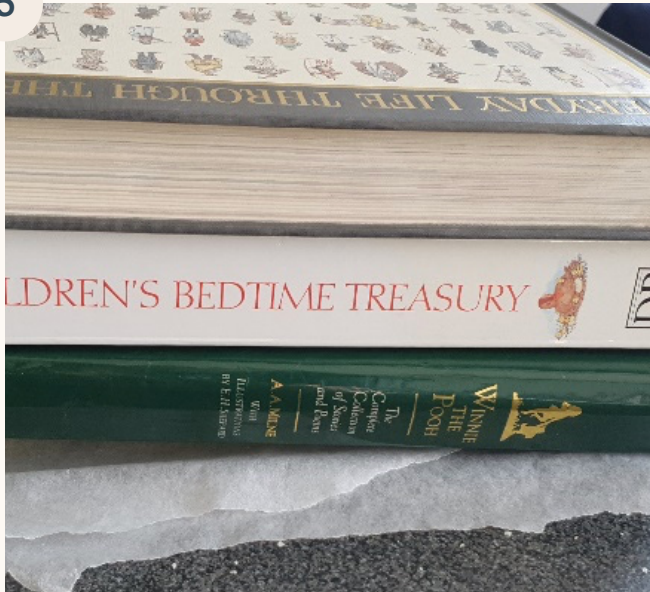
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