

## Fossils - Lower KS2

### Further Resource links on Fossils:

Mary Anning [https://www.earthlearningidea.com/PDF/115\\_Mary\\_Aning.pdf](https://www.earthlearningidea.com/PDF/115_Mary_Aning.pdf)

<https://www.pstt-cpd.org.uk/ext/cpd/dramatic-science/resources.html>

Charles Darwin <https://ca1-tls.edcdn.com/documents/Charles-Darwin.pdf?mtime=20160212053440>

Fossil video <https://www.bbc.co.uk/bitesize/topics/z9bbkqt/articles/z2ym2p3>

Fossil hunter game <https://www.stem.org.uk/resources/community/resource/5457/fossil-hunter>

Fossil creation using Scratch ICT system

<https://www.stem.org.uk/resources/elibrary/resource/35616/dinosaur-fossil-animation-sequence-activity>

### Making salt dough moulds with a rock effect

#### Ingredients

1 cup table salt

2 cups of flour

$\frac{3}{4}$  cup of water made up of either cold tea with tea leaves or cold coffee made with ground coffee.

#### How to make salt dough

1. In a large bowl mix the salt and flour together.
2. Gradually stir in cold coffee or tea and mix well until it forms a dough consistency.
3. Turn the dough onto the table and knead with your hands until smooth and combined.
4. Then make your fossil moulds using the salt dough by pressing the shell into the salt dough to create a mould.

## How to create fossils - the story behind them !

### You will need:

- Transparent plastic square/rectangular container
- Black or dark food colouring
- Candy floss or you could use icing sugar in a paste
- Tissues
- Light coloured dog biscuit in the shape of a bone
- Pipette or small spoon
- Small coffee stirrer or similar
- Plasticene / blutac or playdough



### What to do:

1. Introduce the story to the children about the base rock being what the plasticene represents at the bottom of the container. (Make sure that it is flat and hard).
2. Wrap the dog bone in candy floss/ icing sugar paste and discuss what the dog bone and candy floss/ icing sugar represent. (The candy floss or icing sugar is the skin, muscular structure and internal organs). It does not include hair as often hair can remain intact and present for many years - depending on the age of the children you could discuss this as they often refer to hair for DNA evidence on many crime programmes for many years after the crime was committed. The hair can still be found and analysed as it has not broken down and decomposed like the other tissues do.



3. Then place the wrapped bone into the container and explain that the animal has died and fallen to the seabed, river bed or onto the floor.



4. Next is the application of water drop by drop and this is simulating the rain/ waves/ decomposition as the water will slowly dissolve the candy floss(i.e. skin, muscles and internal organs will decompose by bacteria etc ) leaving only the bones remaining.



5. Then the addition of black food colouring is needed. The thicker ones work best as they are absorbed into the bone more easily .You need to add enough food colouring to cover the bones and add a little more water if you want to. The food colouring is a representation of the dirt, mud and sediment being washed up or deposited on the bones.



6. The final stage before you leave it to rest is to very tightly pack flat tissues over the bones , food colouring etc explaining that each tissue represents a layer of sedimentary rock being compacted on top of each other.



7. Leave the container then for, ideally at least, a day.  
8. Finally very carefully remove the layers of stained tissue one by one to reveal the imprint(mould) of the fossil in the tissue as well as a very well preserved but darkened bone fossil. With these you can then explain the different ways in which fossils are made.



