



FOSSILS

Fossils are the remains of plants or animals that lived a long time ago or the evidence of them.



Jurassic fossil shell from Houlgate, France



Triassic bone from Aust, Gloucestershire



fossilised footprints and burrows



Jurassic fern leaves from the Isle of Wight
Leaves or Seeds



Fossilised Animal Droppings

HOW ARE FOSSILS MADE?

Most fossils are actually casts of animals or plants. Here's how they might be made:

- The animal dies and sinks to the sea floor.
- The body begins to decay and is buried under layers of sediment such as mud or sand.
- These layers become rock.
- The hard parts of the animal are replaced with minerals such as iron pyrites or silica.
- These minerals form the fossil.

Usually fossils show the hard parts of the animal or plant - such as shell or bones.

This is because the soft parts are destroyed quickly after death.

Sometimes you will find the actual shells, eg the shells found in the Barton clay beds in Hampshire, England.

Sometimes you find trace fossils, that is fossils not of the animals themselves but of evidence of living plants or animals, such as worm burrows or dinosaur footprints.

Most fossils are found in sedimentary rocks - rocks which were created when shells or small loose bits of rock are laid down in layers.

Examples of sedimentary rocks are limestone, sandstone, clay and chalk.

Can you remember?

What are fossils? _____

Where are most fossils found? _____

What are 3 ways fossils form? _____

Why are the hard parts of animals preserved? _____

Make your own Fossil

What you will need:

A small shallow cardboard or plastic box (like a cut-off milk jug)
modeling clay or sculpting clay
plaster of paris
water and a small bucket to mix the plaster in
a knife or popsicle stick
cooking oil, shortening, or petroleum jelly
sea shells, leaves, chicken bones, your baby teeth... items to make your "fossil" from

How to make your fossil

1. Start off by making a smooth layer of clay in the bottom of your box. This clay represents the mud that the once-living organism fell on to.
2. Press in your shell or leaf, or anything once living, into the clay. You can also make a handprint or footprint, or pawprint if your pet will let you.
3. Mix the plaster of paris according to the package directions. Pour the thick soupy plaster over your clay in a thin layer, and let it harden. Be sure **not** to pour any leftover plaster down your sink, because it will stop up the drain!
4. Carefully remove the clay and hard plaster from the box. Scrape the clay off of the plaster, and you'll find a backwards impression of your fossil. This negative shape is like a mold fossil, where a dead animal or plant rotted away and left its shape in the mud, which later turned to rock.
5. After the plaster hardens, remove it all from the box and separate the two pieces. Now you have a shape like the original living organism. If you would like to make it more realistic, you can paint your fossils to look like real ones.