

Fossils transport us to an exciting ancient world full of unfamiliar creatures. Children will love becoming fossil experts as they discover and explore realistic fossils for themselves. Learning about fossils ties in beautifully with a dinosaur theme, expanding children's knowledge of prehistoric animals and plants.

Dig in!

- What could be hiding in a tray of sand, pebbles or soil? The children will need to become palaeontologists to find out!
- Spades, buckets and sieves will come in handy as children dig to discover the fossils. A wide-brimmed hat or hard hat could help them to look the part too!
- Children can clean the fossils they uncover by carefully brushing off any sand or soil with a paintbrush or washing them with a sponge and water.
- Magnifying glasses will help them take closer look, and collecting trays and labels will be useful for sorting and classifying their finds.
- In addition to the fossils, you might like to add Yellow Door's Dinosaur Bones or Prehistoric Teeth to the dig site, as well as any natural materials such as rocks, sticks, shells, bark or moss.
- Non-fiction books about fossils or prehistoric creatures, or a selection of printed pictures, will be useful for the children to refer to as they make their discoveries.



On record

A good palaeontologist needs to record their findings – providing opportunities for mark making and developing fine motor skills:

- Children could make a note of the fossils they have found using pencils and clipboards.
- Back at base camp, they could make a more detailed record of the fossils, using clay to take an impression of each fossil, or making wax crayon rubbings.

To take the role-play a step further, the fossils could go into a museum with the children as museum curators. You could provide identity badges and gloves for them to wear as they handle the precious fossils. Children could add pictures or labels to the fossils, and give a tour of their collection.

Fossil talk

There's plenty to talk about as you explore fossils together!

- When the children first discover the fossils, what do they think they might be?
- Are the shapes on them like any plant or animal they've seen before?
- You might like to compare a few of the fossils to some real shells or plants, such as ferns. What's different about how they look or feel?

- How do we find out about animals and plants that lived long ago and have died out? Through fossils! Can the children think of any large animals that are now extinct? Talk about the fact that fossils can be really big, such as a dinosaur skull, or very small.
- If you have access to a path alongside a newly ploughed field, you might spot some real fossils in the soil (with the opportunity to remind children not to trespass onto the field, of course!). One example that is common in several parts of the UK is the 'devil's toenail' or gryphaea, an extinct oyster.



Find out more

Fossils are a great topic for research. As well as providing non-fiction books, you could look at video clips and pictures online. Museum websites can be an ideal starting point for finding out more. You might like to research the different ways fossils are formed (mould, cast and trace fossils).

Now they know more about fossils, can the children sort them by different characteristics? These could include:

- Does it have a shell?
- Is it from a plant or animal?
- Is it extinct?
- Is it from the land or the sea?

Get creative

Fossils can spark children's imagination in plenty of ways:

- Make up stories about the fossils: where did they come from? What happened to the plants and animals they show? How were they buried in the ground?
- Add them to small world play, maybe mingled with open-ended materials such as moss, sticks, stones, feathers, artificial turf or fabric, or alongside dinosaurs or creepy crawlies.
- Use air-drying clay to take impressions from the fossils, then paint these once they have set.
- Use the children's crayon rubbings of the fossils to create a fossil display.



Get talking – useful words

Palaeontologist, museum, extinct, prehistoric, shell, bone, fern, ammonite, clam, sea urchin, shrimp, trilobite, mould, cast, trace, sedimentary rock

Books about fossils

Monster Stones: The Story of a Dinosaur Fossil by Jacqui Bailey

Stone Girl Bone Girl: The Story of Mary Anning by Laurence Anholt

My Book of Fossils: A Fact-Filled Guide to Prehistoric Life by Dean Lomax