

Fossils Dig Kit



WHAT TO DO

Step 1 ●

Place your earthen block on an easy to clean surface or on a big sheet of paper.



Step 2 ●

Use the digging tool to gently scrape away the plaster. Carefully dig away all plaster before removing the fossils.



Step 3 ●

Remove the remaining plaster with the brush or a cloth. If necessary you can wash off the remaining plaster with water.



WHAT ARE FOSSILS?

Fossils are the remains or impressions left by plants or animals that lived a very long time ago. The fossils may look the same as when the plant or animal was alive but have now changed to stone.

The totality of fossils, both discovered and undiscovered, and their placement in fossil-containing rock formations and sedimentary layers are known as the fossil record. There is no universally agreed age at which the evidence can be termed fossilized, however it's broadly understood to encompass anything more than a few thousand years. Such a definition includes our prehistoric human ancestry and the ice age fauna (e.g. mammoths) as well as more ancient fossil groups such as the dinosaurs, ammonites and trilobites. In short, fossils are among the most fascinating objects in nature, giving us an idea of how animals and plants lived in the past.



WHERE CAN WE FIND THE FOSSILS?

Fossils can be found practically anywhere, on mountains, underwater, in the desert, on the beaches or deep underground. Fossils can be found hidden in rocks called concretions or mixed with gravel in a creek. Fossils often become exposed during mining or the construction of roads.

Let's have fast browse of the fossils which are most popular for young collectors! Identify your fossil findings with the clues and name them!

Shark Tooth

A shark tooth is one of the numerous teeth of a shark. Sharks continually shed their teeth, and some Carcharhiniformes shed approximately 35,000 teeth in a lifetime. In some geological formations, shark's tooth is a common fossil. The most ancient types of sharks date back to 450 million years ago, during the Late Ordovician period, and they are mostly known from their fossilized teeth. Sharks have teeth that are embedded in their gums, not in a jawbone like other animals. New teeth constantly grow in and replace the older ones, sometimes in as little as 8 to 10 days.



Petrified Wood

Fossil wood is wood that is preserved in the fossil record. Over time the wood will usually be the part of a plant that is best preserved. The fossil wood may be the only part of the plant that has been preserved, with the rest of the plant completely unknown. Therefore, such wood may get a special kind of botanical name. Fossil wood may or may not be petrified. Petrified wood is fossilized wood that has become stone-like over time. This is unusual because most fossils are not formed from organic material, like wood and plants; they are commonly formed from bones.



Brachiopod

Brachiopods may look like clams but they're no bivalve! Bivalves have an extra ligament that can force their shell open-they're often found this way when they die. Brachiopods keep their shells closed, like a polite fossil does. Modern brachiopods are found in cold water, either very deep in the ocean or in the far-away Arctic. But in the Paleozoic era, they were all over the place and were even the foundation of ancient reef systems. Brachiopod fossils are usually the whole body, but imprint and mold fossils also occur. Over 12,000 species of brachiopods exist in the fossil record, but only 330 species are around today.



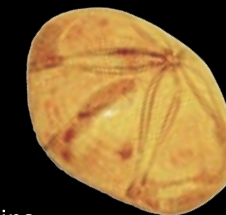
Corals

Corals are samples animals that secrete skeletons made of calcium carbonate. They are close relatives of sea anemones and jellyfish and are the main reef builders in modern oceans. Corals can be either colonial or solitary. As fossils, corals are found worldwide in sedimentary rocks. Based on these fossils, we know that the corals began their long evolutionary history in the Middle Cambrian, over 510 million years ago.



Sand Dollar

Sand Dollar, a small disc-shaped marine animal, closely related to the sea urchin. Sand dollars live on the sandy ocean floor. Their grayish-white skeletal remains are often found washed up on coastal beaches. Sand dollars are usually about 3 inches (7.5 cm) in diameter and 3/8 inch (1 cm) thick. Most sand dollars are purple or blue. They have a dense velvety covering of short spines and tiny muscular projections called tube feet. The spines and tube feet are used for locomotion and for burrowing into sand. Sand dollars creep about the ocean floor, mouth side down, feeding on minute organic particles.



Clam

Like gastropods and cephalopods, clams are also mollusks that live in a protective shell. The oldest fossil clams are generally the smallest; most Cambrian species are tiny, just large enough to see without magnification. Over time, large species evolved. The largest clams are as much as 6 feet in diameter. Some of these huge fossils are covered with encrusting oysters. Others have been found with a variety of fish fossils between their shells, indicating that the fish used the giant clam as a safe feeding place.



Gastropod

These mollusks are usually enclosed in a single, spiral shell that protects the foot and the rest of the animal. There are over 35,000 living species and 15,000 species found in the fossil record. While modern gastropods can be identified by their soft body parts, ancient ones are known only from their fossilized shells. Gastropods first appeared about 550 million years ago, and they are the most successful of all the mollusk groups. Today, gastropods can be found in salt water, in fresh water, and on land. Some eat plants, others are scavengers, and some are even meat-eating predators.



Crinoid

Crinoids are marine animals that make up the class Crinoidea of the echinoderms. They live both in shallow water and in depths as great as 6,000 meters. Crinoids are characterized by a mouth on the top surface that is surrounded by feeding arms. They have a U-shaped gut, and their anus is located next to the mouth. Crinoid fossils date back as far as 475 million years ago. They were often so numerous that whole limestone beds of crinoids skeletons can be found, but today only a few hundred modern varieties of crinoids still exist. These graceful creatures are commonly known as "sea lilies" or "feather stars" because they look like underwater flowers. Their name comes from the Greek words for "lily" and "form."

