

Fossils Archaeology Dig Pack (GH47380)

A superb pack containing a variety of genuine Fossils, enabling you to recreate a mini-archaeological dig in the classroom. Just add sand (not included) and bury the fossils ready to be discovered by your budding Archaeologists!



Contents: -

1. 1 x Gragnells Tray and Lid
2. 5 x Fossil Magnifier Pack
3. 1 x Study of Fossils Booklet
4. 1 x Brushes
5. 1 x Pallet Knife
6. 1 x Ammonite Fossil
7. 1 x Sharks Tooth Fossil
8. 1 x Fossilised Turtle Poo (Coprolite)
9. 1 x Trilobite Fossil
10. 2 x Polished Ammonite (Contents may vary)

Questions you could ask children about the artefacts

Initial Discussion

- What is this object?
- Does it resemble anything the children have seen?
- What do you think the item was used for and by whom?
- Does anyone know what it is called?

Collect any other questions the children might have about the artefacts and display them as you try to find the answers through your learning sessions.

Other questions to consider:

- Where does the object come from?
- Who might have made this object? And how were they made?
- Why were they made?
- **What do the objects tell us about life in the past?** *This last question can be returned to at the end of the investigation.*

All About the Artefacts

Polished Ammonite/Ammonite Fossil

Ammonites are perhaps the most widely known fossil, possessing the typically ribbed spiral form shell as in picture. These creatures lived in the seas between 240 - 65 million years ago, when they became extinct along with the dinosaurs.

The name 'ammonite' (usually lower-case) originates from the Greek Ram-horned god called Ammon. Ammonites belong to a group of predators known as cephalopods, which includes their living relatives the octopus, squid, cuttlefish and nautilus.

Polished Ammonites are a fossilised ammonite cut in half and polished to reveal the intricate internal structure of the shell.

There are hundreds of great places here in the UK to go fossil hunting.

Typically, coastal areas with soft cliffs and rapid erosion offer the best opportunities, because they regularly reveal fresh fossils, such as Dorset (Jurassic Coast), Pembrokeshire, Whitby and Redcar in Yorkshire.

<https://youtu.be/4WljOabDTrs?si=ObeHyTP6BAi5DC9D>



Trilobite

Trilobites are a group of extinct marine arthropods that first appeared around 521 million years ago, living for nearly 300 million years. They died out 251 million years ago, killed (we think) by the mass extinction event that removed over 90% of all species on Earth. They were very diverse for much of the Palaeozoic Period, and today trilobite fossils are found all over the world.

Trilobites are named (and easily recognised) by their distinctive three-lobed, three-segmented form. They are divided from side-to-side into a central axis, with two side regions (lobes) called pleurae. The word 'trilobite' refers to this side-to-side partition, rather than the vertical segments common to many Trilobites (cephalon, thorax and pygidium).

The thorax of a Trilobite is made up of a series of segments, each with a single pair of appendages. The segments articulated with each other, and trilobites could roll up into a ball similar to present-day woodlice. It is believed that some Trilobites burrowed in sediment, while others crawled over the sea floor or swam in open water.

<https://www.trilobites.info/index.html>



Sharks Tooth

The first sharks evolved more than 400 million years ago, long before dinosaurs roamed the Earth. Shark skeletons are made of cartilage, which is very soft and rarely fossilised, sharks don't leave bony fossils like other ancient animals with skeletons such as dinosaurs, mammals and reptiles. Instead, fossilised shark teeth may have shark skin scales, vertebrae, and a few impressions of ancient shark tissue which gives us clues to what happened to sharks over time.

Sharks shed so many teeth during their lifetimes and because of this there are a huge number of shark teeth fossils around particularly as a by-product of Phosphate mining in Morocco.

In the Middle Ages fossilised shark's teeth were called petrified this is when a fossil organism is subjected to mineral replacement.



Fossil Shark teeth are commonly found preserved in sedimentary rocks. The age of the shark tooth can be found by testing the sedimentary rock around it.

Turtle Coprolite

A coprolite is fossilised animal poo! Coprolites are classified as trace fossils as opposed to body fossils, as they give evidence for the animal's behaviour (in this case, diet) rather than structure. The name is derived from the Greek words 'kopros', meaning dung and 'lithos', meaning stone.

Coprolites were discovered by Mary Anning (1799-1847) a fossil hunter from Lyme Regis on the coast of Southern England. She noticed that bezoar stones (the old name for coprolite), had fish scales and bones in them so they could not be stones. Although Mary was uneducated, scientists and museum curators still went to her to buy fossils.

Coprolites, distinct from paleo faeces (fossilised human poo), are fossilised animal dung. Like other fossils, coprolites have had much of their original composition replaced by mineral deposits such as silicates and calcium carbonates.

To find out more about Mary Anning see link [Mary Anning - BBC Teach](#)



Key Questions when looking at Fossils

1. What does it look like?
2. How big is it?
3. What shape is it?
4. What colour is it?
5. How heavy is it?
6. How have living things changed over millions of years (evolution)?
7. What do you think we can learn from finding and looking at fossils?
8. Why do we study fossils?
9. How are fossils formed?
10. Is it a complete fossil or part of a larger animal/skeleton?
11. What would it be like to be a fossil hunter?
12. What can we learn about a dinosaur by looking at the fossils?
13. Dinosaurs don't exist anymore. They are extinct. Why do you think they became extinct?
14. Removing a fossil from the rocks and soil surrounding it is called excavation. How would you excavate a fossil without damaging it?

Fossil Wordsearch

F Q A R T E F A C T F S M
O E H F R I E T T Y O E I
S X P O I O F T R O R D L
S P D Y L Z A O O A M I L
I L I T O Q T P C M A M I
L O N I B S E I I M T E O
Y R O L I L L V I O I N N
F E S H T P H M A N O T T
I I A R E A T S O I N A T
O J U R A S S I C T P V I
L T R T S T T R I E M N I
S H A R K T O O T H R O S
C O P R O L I T E T I M T

AMMONITE
HISTORY
DINOSAUR
JURASSIC
SEDIMENT

ARTEFACT
SHARKTOOTH
EXPLORE
MILLION
YEARS

COPROLITE
TRILOBITE
EXTINCT
PAST

FOSSIL
TURTLEPOO
FORMATION
REPLICA