

Beneath our Feet: Dinosaurs and Fossils Year 2

What I have already learnt (Year 1)

Chronological understanding:

I have learnt to order some events that I have learnt about from furthest away to most recent
I have learnt to know what a timeline is

Vocabulary:

I have learnt to use and remember names and places that link to areas of study
I have learnt to start using simple words and phrases to indicate periods of time

Questioning:

I have learnt to ask simple questions when I have been unsure
I have learnt to answer some questions verbally relating to an area of study

Knowledge:

I have learnt to remember most key events about the areas I have studied
I have learnt to that I can find historical information in books

What I will have learnt by the end of this unit

- I can use words and phrases like: before, after, past, present, then and now
- I can recount the life of someone famous from Britain who lived in the past
- I can explain what they did earlier and what they did later (Mary Anning)
- I can find out things about the past by talking to an older person (Fossil/Rock Man)
- I can answer questions using books and the internet
- I can research the life of a famous person from the past using different sources of evidence (Mary Anning)

What I will have learnt by the end of my Key Stage

- I will have developed an awareness of the past, using common words and phrases relating to the passing of time
- I will know where the people and events I have studied fit within a chronological framework and identify similarities and differences between ways of life in different periods
- I will use a wide vocabulary of everyday historical terms
- I will ask and answer questions, choosing and using parts of stories and other sources to show that I know and understand key features of events
- I will understand some of the ways in which we find out about the past and identify different ways in which it is represented

My Skills and Knowledge that I may use from other subjects

Mathematics: I can use my measuring knowledge to measure fossils and dinosaur bones and my number knowledge to plot years on timelines

Literacy: I can use my literacy skills to write for different purposes

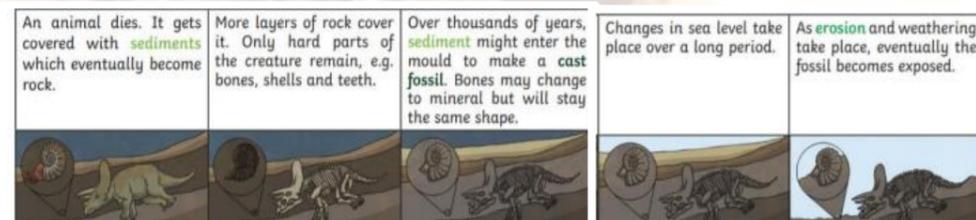
Reading: I can use my phonic knowledge to decode tricky dinosaur names

Geography: I can use my knowledge of my local area to think about where fossils may be and my knowledge of materials to describe different fossils

Science: I can use my scientific skills to research the concept of 'extinct/endangered' and what may have caused the end of the dinosaurs and my knowledge of how fossils are formed

Key Knowledge

- The dinosaurs existed in the Mesozoic Era which was 250 million years ago.
- The Mesozoic Era was split into three different time periods. The first was the Triassic period which occurred 200 million years ago. The second was the Jurassic period which occurred 150 million years ago. The third was the Cretaceous period which was 70 million years ago.
- Pangea was the super continent which was home to the dinosaurs, before splitting into the seven continents we know today.
- Tectonic plates caused the break-up of Pangea which led to continental drift.
- The two main types of dinosaur can be split into herbivore (plant eater) and carnivore (meat eater).
- The Diplodocus and the Stegosaurus were herbivores (see subject specific vocabulary).
- Dinosaur fossils include footprints, imprints of their skin or feathers, and poo - called coprolites.
- Dinosaur fossils are used to learn more about the species including their habitat, diet and pigment.
- Dinosaur habitats include planes, wetlands, forests, swamp forests, deserts and lagoon.
- The end of the Cretaceous period saw one of the most dramatic mass extinctions Earth has ever seen.
- 66 million years ago, over a relatively short time, dinosaurs disappeared completely (except for birds). Many other animals also died out, including pterosaurs and large marine reptiles.
- Mary Anning (1799 -1847) was an English fossil collector, dealer, and palaeontologist who became known around the world for important finds she made in Jurassic marine fossil beds in the cliffs along the English Channel at Lyme Regis in the county of Dorset in Southwest England.



Key Skills I will learn/use

UNDERSTAND - I will understand what times were like when the dinosaurs were around and how the past has changed since

Retell - I will be able to retell the lives of significant people such as Mary Anning and why she is important

Ask questions - I will learn to ask appropriate historical questions to help further my learning

Give opinions - I will be able to give opinions on why things have changed since the times of the dinosaurs and the times of Mary Anning

Collect, use and respond to ideas - I will learn to collect, use and respond to ideas by collaborating with my peers

Key Vocabulary

A period of history - A length of time in history with a certain feature

Mesozoic era - A period of time from about 252 to 66 million years ago. Also called the Age of the Reptiles

Triassic - The first stage of the Mesozoic era
Jurassic - The second stage of the Mesozoic era

Cretaceous - The last stage of the Mesozoic era

Pangea - The super continent which was home to the dinosaurs during the Mesozoic Era

Dinosaur - a special kind of creature that lived on land during the Triassic, Jurassic, or Cretaceous period, many millions of years ago

Fossil - the remains or traces of a once living plant or animals that are preserved as a rock

Invertebrate - animals such as insects without a backbone or bony skeleton

Carnivore - an animal that eats other animals

Omnivore - an animal that eats both plants and animals

Palaeontologist - a person who studies fossils

Extinct - no living species left on Earth

Pre-historic - period of time before written records

Vegetation - a collection of plants

Discover - find unexpectedly

Identify - find out what something is

Excavate - remove earth carefully in order to find remains

Key Historical Concepts

- Chronology Empire
- Civilisation
- Wider world history
- Continuity and change
- Cause and consequence
- Similarity/difference/significance
- Local history
- Culture
- Economy
- Governance
- Vocabulary

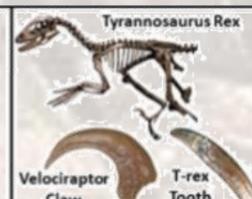
Fossil

The evidence in rock of the presence of a plant or animal from an earlier period in time



Body Fossil

The remains of actual organisms which include bones, teeth, shells or claws



Trace Fossil

A fossilized imprint of an organisms foot prints, trails, burrows, nests or eggs



Mold Fossil

A fossilized impression of the actual organism into the surface around it



Opportunities for teaching Diversity, Equality (Including protected characteristics) and expanding Cultural Capital

Scarborough's Rotunda was built to showcase the world-class fossils of Yorkshire's 'Dinosaur Coast'. The building itself is even shaped like a giant, glass fossil ammonite! It is not only home to some of the country's most thrilling sea-dinosaurs, but also to some of the world's most exciting archaeological finds including a mysterious shaman's antler stag headdress from Stone Age Star Carr.

Yorkshire Museum journey back through time in a Jurassic World exhibit. Dinosaurs, sea monsters and other colossal creatures are brought to life using the latest research and ground-breaking technology. See the oldest sauropod remains ever found in the UK; tremble at a terrifying Megalosaurus tooth as you stand amid its hunting habitat, and much more.

Recall and Remember

Can you answer these 10 questions in 10 minutes?

1. In what type of rock are fossils found? Metamorphic. Igneous. Crystal. Sedimentary.
2. Scientists who study fossils are...fossilologists. Palaeontologist. Repitilologists.
3. An example of a trace fossil is _____. A preserved path of footprints. A preserved jawbone. A preserved seashell. A preserved shark tooth.
4. An example of a body fossil is _____. A preserved footprint.
5. A preserved egg. A preserved dinosaur skull. A preserved reptile nest.
6. Who was Mary Anning? A fossil hunter. A naval commander. A queen of England. A physician.
7. Where was Mary Anning born? England. France. USA. Canada.
8. Fossilised insects have been found preserved in amber which is hardened...Tree resin. Flower nectar. Plastic.
9. Casts are...The remains of broken dinosaur bones. Moulds that have been filled by another type of rock over time. The hollow remains of animal burrows.
10. Example of imprints are...Drawings on rock made by prehistoric men. Frozen remains of elephant-like mammoths. Footprints and animal tracks.



Mary Anning's Ichthyosaur



Mary Anning (21.05.1799 - 09.04.1847) was an English fossil collector and palaeontologist who became known around the world for the finds she made in Jurassic marine fossil beds in the cliffs along the English Channel

May 21st 1799

Mary Anning is born in Lyme Regis, Dorset.



November 1810

Mary's father dies.



1811

Shortly after their father's death, Mary and her brother Joseph discover the full Ichthyosaur skeleton.



1823

Mary finds the complete skeleton of a Plesiosaurus.



1824

Mary realises that coprolites are actually fossilised poo! This can be studied to help us understand the diet of ancient creatures.



1826

Mary opens her shop, known as 'Anning's Fossil Depot.'

1828

Mary finds the Pterodactylus remains.



March 9th 1847

Mary dies aged 47.

1850

A stained glass window dedicated to Mary Anning is unveiled in St Michael's Church in Lyme Regis, which is the church she attended and also where she is buried.

