Beech Hill Primary School Knowledge Organiser

Topic:	Year group	Term
Fossils	6	Summer

Background knowledge

Children learn about fossils and how they are formed. They explored the process of fossilisation in Year 3.

Children are introduced to the enquiry question "How have fossils changed over time and does this provide evidence for evolution?". This is a research enquiry. They should be given opportunities to explore how fossils formed during different periods of history have enabled scientists to gather evidence that supports the idea of evolution.

Children use their understanding of fossil formation to explore a variety of fossils and what scientists can learn from them. children should recap that evolution is the process where descendants develop different characteristics to their ancestors, creating new species.

Children learn about Mary Anning and her Jurassic fossil discoveries in south-west England. They should be given opportunities to research Mary Anning and her contributions to fossil exploration, including the challenges she faced.

Common misconceptions

- Children might think that only male scientists have made scientific discoveries. This is not the case, for example, Mary Anning made many important discoveries which have improved our understanding of fossils.

- Children may believe that all prehistoric animals are extinct because all that remains of them are fossils. However, some reptiles and birds alive today share common ancestors with prehistoric animals.

What should I already know?

Year 3

I can describe how fossils are formed.

National Curriculum Objectives / Key Skills	The Journey
Recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago. <u>Working scientifically</u> Identifying scientific evidence that has been used to support or refute ideas or arguments. Use relevant scientific language and illustrations to discuss, communicate and justify their scientific ideas and should talk about how scientific ideas have developed over time (non-statutory). Reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and a degree of trust in results, in oral and written forms such as displays and other presentations. <u>Scientific enquiry</u> 	1. Fossil formation 2. Explore fossils 3. Mary Anning

Outcomes
Working towards: I can research how fossils are used to find out about how organisms have evolved and about life in the past. Expected: I can research and explain how fossils are used to find out about how organisms have evolved and about life in the past. Exceeding: I can confidently research and explain how fossils are used to find out about how organisms have evolved and about life in the past.

Key Vocabulary	Timeline / Diagrams
Fossil – the imprint in a rock of a living thing that lived a long time ago Rock – a natural material fund on or underneath the Earth's crust Decompose – a process of a material breaking down Skelton – a framework of bones Charles Darwin – an English naturalist and biologist who proposed a theory of how a new species came to exist Evolution – the process where decedents develop different characteristics to their ancestors, creating new species Palaeontologist – a scientist who studies fossils Mary Anning – an English palaeontologist who discovered ad studied many fossils	

Key people / places
Mary Anning

Assessment questions / outcomes
Sequence the stages of fossil formation and explain how fossils are formed. Choose a fossil and state what you found out about it.