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Rocks: Mary Anning

Aim: Identifying changes related to simple scientific ideas in the context of theories about fossils. I can explain Mary Anning's contribution to palaeontology.	Success Criteria: I can explain what a palaeontologist does. I can understand why Mary Anning's fossil findings were important. I can describe how palaeontology has changed our understanding of prehistoric animals.	Resources: Lesson Pack
	Key/New Words: Mary Anning, fossils, ichthyosaur, trace fossils, coprolite, dinosaurs, Jurassic, Lyme Regis, seaside, beach, poverty, scientists, William Buckland.	Preparation: Palaeontology Reading Comprehension - 1 per child

Prior Learning: Children will have learnt about different types of fossils in lesson 3.

Learning Sequence

	Palaeontology and Palaeontologists: Children learn how to pronounce the words palaeontology and palaeontologist. What could a palaeontologist be? What would a palaeontologist do? Use your previous learning in this unit to help you work it out. Children discuss with talk partner and feedback.	
	History of Ideas About Fossils: Read information relating to ideas about fossils in ancient times. Georges Cuvier – The Breakthrough: Explain how Cuvier proved extinction as fact and the link between Cuvier and Mary Anning.	
	Types of Fossils: Children recap and feedback on the main types of fossils. Children focus on the types of fossils she found e.g. body fossils. Children discuss the questions on the Lesson Presentation as a whole class.	
	Mary Anning and Palaeontology: Read the information on the Lesson Presentation relating to Mary Anning's contribution to the field of palaeontology.	
	Palaeontology: Children read and answer questions about modern day palaeontology using the differentiated Palaeontology Reading Comprehension.	
Nihole Class	Palaeontologist : Would you like to be a palaeontologist? Why? Why not? Children feedback based on the main activity.	
Modelit: Cl	nildren create a model of one of the fossils that Mary Anning found	
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Filmit: Children create a film recreating Mary Anning's famous ichthyosaur fossil find.

Visitorit Arrange a visit from a palaeontologist to explain current ideas in the field of palaeontology.





Science

Rocks

Science | Year 3 | Rocks | Mary Anning | Lesson 4



Aim

• I can explain Mary Anning's contribution to palaeontology.

Success Criteria

- I can explain what a palaeontologist does.
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Palaeontology and Palaeontologists

Key words to learn! Palaeontology

(pay-lee-on-tolo-jee)
Palaeontologist

(pay-lee-on-tolo-jist)

What could a palaeontologist be?

What would a palaeontologist do?

Use your previous learning in this unit to help you work it out.



History of Ideas About Fossils

Fossils have been found by people throughout history.

It's only in the last two hundred years that we have begun to understand what these fossils really are and how they formed.

Here are some ideas from the past.

We ancient Greeks found fossils of marine animals. We realised that this meant some land used to be under water.

In ancient China, we found many fossils of dinosaurs although these were mistaken for dragon bones! Some people even used them in medicines!



Georges Cuvier The Breakthrough

Believe it or not, in the past people were not convinced that some animals had become extinct (died out)!

Cuvier proved that fossils found were of animals, who were similar to animals that were known like elephants, but which had died out due to natural disasters like floods.

This was a really important idea which led to the beginning of Palaeontology (the study of fossils) as it proved the existence of animals that humans did not know about as they had died out before our time.





Georges Cuvier The Breakthrough

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Georges Cuvier named the fossil of a flying reptile Pterodactylus.



Cuvier's ideas were supported by evidence of fossils found in Britain, particularly those of Mary Anning.

Types of Fossils

Before we find out more about Mary Anning, let's see what you remember about the different types of fossils. In groups discuss what is hidden under the shapes.

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Mary Anning



So who was Mary Anning and what did she find that was so important?

While watching the video see if you can work out the types of fossils she found.

What have you learnt about Mary Anning?

What types of fossils did she find?

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How did she learn about fossils?

Why were her finds so important?

Why do you think she was not credited with finding the fossils?

Click me to watch the video!



In Mary Anning's lifetime palaeontology (the study of fossils) was still a very new field of ideas and theories.

The fossils Mary Anning found were important for a number of reasons:

•Her major finds included the first ichthyosaur skull (and then whole skeleton), a complete plesiosaur skeleton and a partial skeleton of a pterosaur.

•The fossils provided evidence for the ideas of the early palaeontologists.



Ichthyosaur skull



A sketch of a plesiosaur



- Many scientists visited Mary Anning and she was able to help them understand more about the fossils she had found.
- She discovered 'bezoar' stones in the abdominal area of the ichthyosaur.
 These contained fish bones. She discussed her findings with William Buckland (a geologist and palaeontologist) who identified them as faeces and named them coprolites (which is now a type of trace fossil).



A model of a pterosaur



The area where she collected her fossils is now known as the Jurassic Coast, due to the large number of pre-historic sea creatures found in that area.

She didn't chance upon the fossils. She realised that they were found at the Blue Lias cliffs.

These cliffs are made from layers of shale and limestone which formed over 200 million years ago! As with all discoveries, there is an element of chance. Mary Anning lived in Lyme Regis.





She also knew to search after a storm, as this eroded the rocks. This made it easier to hunt for fossils as they became more exposed.

In addition, she knew that she would have to search soon after the storm so that the smaller fossils were not washed away to the sea.

She was most definitely an expert fossil hunter!



Palaeontology

Read through this reading

comprehension and answer questions on the answer sheet.

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there were animal

who lived millions o

years ago, the mo

fascinating o

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dinosaurs

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long way since Mary

We understand more

how they might have

looked, what they ate and how they lived.

about dinosaurs,

The climate

became colder and the dinosaurs

Anning's time.

Palaeontology Readin * **Comprehension Question**

Read the Palaeontology Reading Comprehension and then answer the following ques

Q1: What are palaeontologists?

Q.2: What kind of animals lived millions of years ago?

Q.3: What does the word 'extinct' mean?

Q.4: Why did Mary Anning go fossil hunting when it was not always safe?

Q.5: What do modern palaeontologists do to keep safe?

Q.6: Why has a 'Did You Know?' box been included?

Palaeontology Reading Comprehension

Fossil Hunting Then and Now

Finding fossils was, and still is, a dangerous activity. Falling rocks, slippery and sometimes unstable surfaces mean that it is necessary to take precautions when finding fossils.

Mary Anning narrowly missed being killed by a landslide (where lots of rocks fall at once from the cliff). Unfortunately her dog Trey was buried underneath the rocks and died as a result.

Modern palaeontologists don't often go out searching for fossils like Mary Anning did. They search existing sites where fossils have been found. They take safety precautions, like wearing a hard hat and checking the times of tides, so they don't become isolated in remote locations.

New fossils sites are usually found by accident by people who are not palaeontologists Did You Know? at all!

> Not all dinosaurs are dead! All the birds (including chickens) that are alive today are related to those dinosaurs! Even the dinosaurs that did not fly, like the T-Rex, have similarities with modern birds, including hollow bones!

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Science | Year 3 | Rocks | Mary Anning | Lesson 4

Science | Year 3 | Roo

Palaeontologist

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Would you want to be a palaeontologist?

Why? Why not?

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Aim

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Success Criteria

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user guide









What goes into a planit lesson plan?

Each lesson pack contains a lesson plan as a pdf document. Text can be copied from the plan to your own planning format. The lesson plan is split into four main sections to help with your planning.



Lesson Plan Icons



What goes into a planit lesson presentation?

Each lesson pack has a lesson presentation, available as a PowerPoint or interactive whiteboard file. The presentation frames the learning sequence as outlined on the lesson plan, providing information, posing questions and setting tasks.

Each presentation has the same 3 slides at the beginning;



Slide One: Plant title slide with the subject and the unit title. The footer of the slide will match the lesson plan.



Slide Two: Child friendly title slide. You might choose to start your lesson with this slide.



Slide Three: Child friendly aim and success criteria.

Slide titles in the lesson presentation correspond with the bold titles in the learning sequence in the lesson plan. You'll find the corresponding icon in the top right hand corner. There is a key to the icons at the bottom of the page.



Aim • I not a values and well use exact up produints • I have I were the early an and wegetables to tray the object • **Success Criteria** • And story sould not made (from road wegetables and explain when I be done) • And story sould not made (from road wegetables and explain when I be done) • And story sould not made (from road wegetables and explain when I be done) • And story sould not made (from road wegetables and explain when I be done) • And story sould not made (from road wegetables and explain when I be done) • And story and the story could not material of the source of the source

Every presentation will repeat the success criteria slide at the end of the presentation to facilitate the children's assessment.





What is planit adult guidance?

Adult guidance provides teachers with background knowledge and information to assist with the lesson. The type of guidance in the pack will depend on the lesson content

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What is in the planit assessment pack?

We have put together some ready made assessment tools for each unit. More information and ideas on how to use these tools can be found in the Assessment Guidance.





Be kind to yourself, you're doing wonderfully.



Rocks | Mary Anning

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In this unit, children will discover the different types of rocks and how they are formed. Children will compare and group rocks based on appearance and simple properties. They will learn how fossils are formed and learn about the contribution of Mary Anning to the field of palaeontology. Children will understand how soil is formed and then investigate the permeability of different types of soil.



Health & Safety

Dust can make asthma worse in sufferers. If you are presenting children with rocks that may give off dust when handled, then ensure that all adults are aware who has asthma and the location of their pumps, should they need to be used. As a preventative measure it would be worth enquiring if children have any particular triggers prior to lessons 1 and 2, where they will be expected to handle rocks.

Ensure that children use plastic gloves when handling worms and waste food scraps. Hands should be washed afterwards as a precaution.



Home Learning

Dinosaur Fossil Research Activity Sheet: Children select a dinosaur and research facts including who found the fossils, where they were found and when.

Famous Palaeontologist Fact File: Building on their learning from lesson 4 on Mary Anning, children will select a famous palaeontologist and create a fact file about their life and discoveries.



Assessment Statements

By the end of this unit...

...all children should be able to:

- Children will be able to name the three different types of rocks.
- They will handle and examine rocks to identify their properties, with support.
- They will be able to state the four different types of matter that soil is composed of.
- Children will learn to make careful observations.
- They will be able to take part in and contribute towards an oral presentation of their observations.

...most children will be able to:

- Children will be able to give examples of natural and man-made rocks.
- They will be able to group rocks by their properties and identify simple similarities and differences.
- Children will be able to explain the difference between a bone and a fossil.
- They will be able to explain, using simple scientific language, how soil is formed.
- They will make and record observations accurately.

...some children will be able to:

- Children will make systematic observations.
- They will be able to explain the main processes of fossilisation.
- They will be able to identify the importance of Mary Anning's work to the field of palaeontology.
- Children will use simple scientific language accurately in oral and written work.

Lesson Breakdown

1. Types of Rocks



Compare different kinds of rocks based on their

appearance in the context of understanding the difference

between natural and man-made rocks.

I can compare different types of rocks.

Resources

 A selection of igneous, sedimentary and metamorphic rocks



• A selection of igneous, 2. Grouping Rocks sedimentary and metamorphic Making systematic and careful observations by examining rocks different types of rocks. • A selection of books on rocks I can make systematic and careful observations. • Computers/Laptops/Tablets Sandpaper Pipette Group together different kinds of rocks on the basis of • A large container or plastic box their simple physical properties in the context of natural rocks. • I can group rocks based on their properties. 3. Fantastic Fossils Scissors • Glue sticks Describe in simple terms how fossils are formed when • If available, example of real things that have lived are trapped within rock by explaining fossils or models of fossils the fossilisation process and by comparing fossils to the animals they belong to. I can explain how fossils are formed. 4. Mary Anning Identifying changes related to simple scientific ideas in the context of theories about fossils. I can explain Mary Anning's contribution to palaeontology. 5. Soil Formation • Clear plastic bottles (round bottomed two litre bottles are Recognise that soils are made from rocks and organic best) matter by explaining how soil is formed. Thin pieces of fabric • I can explain how soil is formed. • Cardboard pieces • Shredded paper • Fruit and vegetable scraps (cut into small pieces) Compost • Small stones • 5 to 6 tiger worms per group Scissors Plastic gloves • Plant saucers • Elastic bands 6. Soil Profiles • Samples of the different types of soil (pre-measured to ensure Making systematic and careful observations in the context the children use the same of investigating the permeability of different soils. amount of soil) I can observe carefully and systematically. Beakers Funnels Coffee filter paper Recording findings using simple scientific language. Measuring cylinders on findings from enquiries, including Reporting • Water presentations of results and conclusions. Children will • Visualiser equipment or a present their findings using the key science vocabulary for webcam (if available) this lesson.

• I can present my findings using scientific vocabulary.



Palaeontology Reading Comprehension

Read through this reading comprehension and answer questions on the answer sheet.

We have learned a lot from palaeontologists:

We know that there were animals who lived millions of years ago, including the dinosaurs!

Dinosaurs became extinct due to a falling asteroid. When the asteroid fell it caused the climate (weather) to change.

> The climate became colder and the dinosaurs were not able to survive.

Fossil Hunting Then and Now

Finding fossils was, and still is, a dangerous activity. Falling rocks, slippery and sometimes unstable surfaces mean that it is necessary to take precautions when finding fossils.

Mary Anning was almost killed by a landslide (where lots of rocks fall at once from the cliff). Unfortunately her dog Trey did die.

Now, palaeontologists search where fossils have already been found.

They keep safe by, for example, wearing hard hats.

New fossils are usually found by accident by people who are just out having fun at the beach or going for a walk!

Did You Know?

Not all dinosaurs are dead. All the birds (including chickens) that are alive today are related to the dinosaurs!



Poused education on life's walk! Palaeontology Reading Comprehension Question Sheet

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Read the Palaeontology Reading Comprehension and then answer the following questions.
Q1: What are palaeontologists?
Palaeontologists are
Q.2: What kind of animals lived millions of years ago?
Millions of years ago
Q.3: What does the word 'extinct' mean?
The word extinct means
Q.4: Explain why fossil hunting can be dangerous:
Fossil hunting can be dangerous because
Q.5: Why has a 'Did You Know?' box been included?
The 'Did You Know?' box has been included



General Year 3 and 4 Reading Objectives covered:

Understand what they read, in books they can read independently, by:

• checking that the text makes sense to them and explaining the meaning of words in context

• identifying main ideas drawn from more than 1 paragraph and summarising these

Retrieve and record information from non-fiction

Q1: What are palaeontologists? (retrieve and record information from non-fiction) Palaeontologists are people who study fossils.

Q.2: What kind of animals lived millions of years ago? (retrieve and record information from non-fiction) Dinosaurs.

Q.3: What does the word 'extinct' mean? (explaining the meaning of words in context) The word extinct means died out / no longer alive.

Q.4: Explain why fossil hunting can be dangerous:: (retrieve and record information from non-fiction) Fossil hunting can be dangerous because of (at least one of the following should be in the answer):

- falling rocks
- slippery surfaces
- unstable surfaces

Q.5: Why has a 'Did You Know?' box been included? (identifying how language, structure, and presentation contribute to meaning)

The 'Did You Know?' box has been included (at least one of the following should be in the answer):

- to give extra information (about dinosaurs)
- to present an interesting fact
- to highlight unusual facts or ideas
- to present information you may not know



Palaeontology Reading Comprehension

Read through this reading comprehension and answer questions on the answer sheet.

Palaeontology has come a long way since Mary Anning's time.

> We now know that there were animals who lived millions of years ago, the most fascinating of which are the dinosaurs!

We understand more about dinosaurs, how they might have looked, what they ate and how they lived.

It is

thought that the dinosaurs became extinct due to a falling asteroid. The impact of the asteroid was so huge that it changed the climate (weather) around the world.

The climate became colder and the dinosaurs were unable to survive.

Fossil Hunting Then and Now

Finding fossils was, and still is, a dangerous activity. Falling rocks, slippery and sometimes unstable surfaces mean that it is necessary to take precautions when finding fossils.

Mary Anning narrowly missed being killed by a landslide (where lots of rocks fall at once from the cliff). Unfortunately her dog Trey was buried underneath the rocks and died as a result.

Modern palaeontologists don't often go out searching for fossils like Mary Anning did. They search existing sites where fossils have been found. They take safety precautions, like wearing a hard hat and checking the times of tides, so they don't become isolated in remote locations.

New fossils sites are usually found by accident by people who are not palaeontologists at all!

Did You Know?

Not all dinosaurs are dead! All the birds (including chickens) that are alive today are related to those dinosaurs! Even the dinosaurs that did not fly, like the T-Rex, have similarities with modern birds, including hollow bones!

Pocused education on life's walk! Palaeontology Reading Comprehension Question Sheet

Read the Palaeontology Reading Comprehension and then answer the following questions.

Q1: What are palaeontologists?

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Q.2: What kind of animals lived millions of years ago?

Q.3: What does the word 'extinct' mean?

Q.4: Why did Mary Anning go fossil hunting when it was not always safe?

Q.5: What do modern palaeontologists do to keep safe?

Q.6: Why has a 'Did You Know?' box been included?



General Year 3 and 4 Reading Objectives covered:

Understand what they read, in books they can read independently, by:

- checking that the text makes sense to them and explaining the meaning of words in context
- identifying main ideas drawn from more than 1 paragraph and summarising these
- identifying how language, structure, and presentation contribute to meaning
- drawing inferences such as inferring characters' feelings, thoughts and motives from their actions, and justifying inferences with evidence

Retrieve and record information from non-fiction

Q1: What are palaeontologists? (retrieve and record information from non-fiction) Palaeontologists are people who study fossils.

Q.2: What kind of animals lived millions of years ago? (retrieve and record information from non-fiction) Dinosaurs.

Q.3: What does the word 'extinct' mean? (explaining the meaning of words in context) The word extinct means died out / no longer alive.

Q.4: Why did Mary Anning go fossil hunting when it was not always safe? (drawing inferences such as motives from their actions)

Answers should be related to one of the following:

- Enjoyment loved /liked fossil hunting
- Employment / Money
- Important fossil finds
- Best time to go fossil hunting was after a storm
- She was experienced at fossil hunting and knew how to keep safe

Q.5: What do modern palaeontologists do to keep safe? (retrieve and record information from non-fiction) Wear a hard hat, check the times of tides.

Q.6: Why has a 'Did You Know?' box been included? (identifying how language, structure, and presentation contribute to meaning)

The 'Did You Know?' box has been included (at least one of the following should be in the answer):

- to give extra information (about dinosaurs)
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Palaeontology has come a long way since Mary Anning's time. We now know that there were animals who lived millions of years ago, the most fascinating of which are the dinosaurs!

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Thanks to palaeontologists we understand more about dinosaurs, how they might have looked, what they ate and how they lived.

It is thought that the dinosaurs became extinct due to a falling asteroid. The impact of the asteroid was so huge that it changed the climate (weather) around the This is

world. supported by evidence of a thin layer of sedimentary rock around the world which contains the metal iridium. This metal is rarely found in the Earth's crust but is very common in asteroids.

The climate became colder and the dinosaurs were unable to survive. Read through this reading comprehension and answer questions on the answer sheet.

Fossil Hunting Then and Now

Finding fossils was, and still is, a dangerous activity. Falling rocks, slippery and sometimes unstable surfaces mean that it is necessary to take precautions when finding fossils.

Mary Anning narrowly missed being killed by a landslide (where lots of rocks fall at once from the cliff). Unfortunately her dog Trey was buried underneath the rocks and died as a result.

Modern palaeontologists don't often go out searching for fossils like Mary Anning did. They search existing sites where fossils have been found. They take safety precautions, like wearing a hard hat and checking the times of tides, so they don't become isolated in remote locations.

New fossils sites are usually found by accident by people who are not palaeontologists at all!

Did You Know?

Not all dinosaurs are dead! The avian (flying) dinosaurs did not all die out. All the birds (including chickens) that are alive today are related to those dinosaurs! Even the dinosaurs that did not fly, like the T-Rex have similarities with modern birds, including hollow bones!

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Poused education on life's walk! Palaeontology Reading Comprehension Question Sheet

Read the Palaeontology Reading Comprehension and then answer the following questions.

Q1: What are palaeontologists?

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Q.2: What does the word 'extinct' mean?

Q.3: What evidence is there that climate change was caused by an asteroid?

Q.4: What are the similarities and differences between early palaeontologists like Mary Anning and modern palaeontologists?

Similarities	Differences

Q.5: Why has a 'Did You Know?' box been included?



General Year 3 and 4 Reading Objectives covered:

Understand what they read, in books they can read independently, by:

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Retrieve and record information from non-fiction

Q1: What are palaeontologists? (retrieve and record information from non-fiction) Palaeontologists are people who study fossils.

Q.2: What does the word 'extinct' mean? (explaining the meaning of words in context) The word extinct means died out / no longer alive.

Q.3: What evidence is there that climate change was caused by an asteroid? (retrieve and record information from non-fiction)

There is a thin layer of rock which contains the metal iridium which is rare on earth but common in asteroids.

Q.4: What are the similarities and differences between early palaeontologists like Mary Anning and modern palaeontologists? (retrieve and record information from non-fiction) At least one answer in each box.

Similarities	Differences
 Study fossils Work out what the fossils tell us about prehistoric animals. 	 Safety precautions taken Finding new fossils / fossil sites Modern palaeontologists have more information about prehistoric animals.

Q.5: Why has a 'Did You Know?' box been included? (identifying how language, structure, and presentation contribute to meaning)

The 'Did You Know?' box has been included (at least one of the following should be in the answer):

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Palaeontology Reading Comprehension Question Sheet

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Palaeontology Reading Comprehension

Read through this reading comprehension and answer questions on the answer sheet.



Fossil Hunting Then and Now

Finding fossils was, and still is, a dangerous activity. Falling rocks, slippery and sometimes unstable surfaces mean that it is necessary to take precautions when finding fossils.

Mary Anning narrowly missed being killed by a landslide (where lots of rocks fall at once from the cliff). Unfortunately her dog Trey was buried underneath the rocks and died as a result.

Modern palaeontologists don't often go out searching for fossils like Mary Anning did. They search existing sites where fossils have been found. They take safety precautions, like wearing a hard hat and checking the times of tides, so they don't become isolated in remote locations.

New fossils sites are usually found by accident by people who are not palaeontologists at all!

Did You Know?

Not all dinosaurs are dead! All the birds (including chickens) that are alive today are related to those dinosaurs! Even the dinosaurs that did not fly, like the T-Rex, have similarities with modern birds, including hollow bones!



Read the Palaeontology Reading Comprehension and then answer the following questions.

Q1: What are palaeontologists?

Q.2: What kind of animals lived millions of years ago?

Q.3: What does the word 'extinct' mean?

Q.4: Why did Mary Anning go fossil hunting when it was not always safe?

Q.5: What do modern palaeontologists do to keep safe?

Q.6: Why has a 'Did You Know?' box been included?



General Year 3 and 4 Reading Objectives covered:

Understand what they read, in books they can read independently, by:

- checking that the text makes sense to them and explaining the meaning of words in context
- identifying main ideas drawn from more than 1 paragraph and summarising these
- identifying how language, structure, and presentation contribute to meaning
- drawing inferences such as inferring characters' feelings, thoughts and motives from their actions, and justifying inferences with evidence

Retrieve and record information from non-fiction

Q1: What are palaeontologists? (retrieve and record information from non-fiction) Palaeontologists are people who study fossils.

Q.2: What kind of animals lived millions of years ago? (retrieve and record information from non-fiction) Dinosaurs.

Q.3: What does the word 'extinct' mean? (explaining the meaning of words in context) The word extinct means died out / no longer alive.

Q.4: Why did Mary Anning go fossil hunting when it was not always safe? (drawing inferences such as motives from their actions)

Answers should be related to one of the following:

- Enjoyment loved /liked fossil hunting
- Employment / Money
- Important fossil finds
- Best time to go fossil hunting was after a storm
- She was experienced at fossil hunting and knew how to keep safe

Q.5: What do modern palaeontologists do to keep safe? (retrieve and record information from non-fiction) Wear a hard hat, check the times of tides.

Q.6: Why has a 'Did You Know?' box been included? (identifying how language, structure, and presentation contribute to meaning)

The 'Did You Know?' box has been included (at least one of the following should be in the answer):

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Palaeontology has come a long way since Mary Anning's time. We now know that there were animals who lived millions of years ago, the most fascinating of which are the dinosaurs!

REGENT STUDIES Focused education on life's walk!

> Thanks to palaeontologists we understand more about dinosaurs, how they might have looked, what they ate and how they lived.

It is thought that the dinosaurs became extinct due to a falling asteroid. The impact of the asteroid was so huge that it changed the climate (weather) around the This is world. supported by evidence of a thin layer of sedimentary rock around the world which contains the metal iridium. This metal is rarely found in the Earth's crust but is very common in The asteroids. climate became colder

and the dinosaurs were unable to survive. Read through this reading comprehension and answer questions on the answer sheet.

Fossil Hunting Then and Now

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Mary Anning narrowly missed being killed by a landslide (where lots of rocks fall at once from the cliff). Unfortunately her dog Trey was buried underneath the rocks and died as a result.

Modern palaeontologists don't often go out searching for fossils like Mary Anning did. They search existing sites where fossils have been found. They take safety precautions, like wearing a hard hat and checking the times of tides, so they don't become isolated in remote locations.

New fossils sites are usually found by accident by people who are not palaeontologists at all!

Did You Know?

Not all dinosaurs are dead! The avian (flying) dinosaurs did not all die out. All the birds (including chickens) that are alive today are related to those dinosaurs! Even the dinosaurs that did not fly, like the T-Rex have similarities with modern birds, including hollow bones!



Palaeontology Reading Comprehension Question Sheet

Read the Palaeontology Reading Comprehension and then answer the following questions.

Q1: What are palaeontologists?

Q.2: What does the word 'extinct' mean?

Q.3: What evidence is there that climate change was caused by an asteroid?

Q.4: What are the similarities and differences between early palaeontologists like Mary Anning and modern palaeontologists?

Similarities	Differences

Q.5: Why has a 'Did You Know?' box been included?



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Q1: What are palaeontologists? (retrieve and record information from non-fiction) Palaeontologists are people who study fossils.

Q.2: What does the word 'extinct' mean? (explaining the meaning of words in context) The word extinct means died out / no longer alive.

Q.3: What evidence is there that climate change was caused by an asteroid? (retrieve and record information from non-fiction)

There is a thin layer of rock which contains the metal iridium which is rare on earth but common in asteroids.

Q.4: What are the similarities and differences between early palaeontologists like Mary Anning and modern palaeontologists? (retrieve and record information from non-fiction) At least one answer in each box.

Similarities	Differences
 Study fossils Work out what the fossils tell us about prehistoric animals. 	 Safety precautions taken Finding new fossils / fossil sites Modern palaeontologists have more information about prehistoric animals.

Q.5: Why has a 'Did You Know?' box been included? (identifying how language, structure, and presentation contribute to meaning)

The 'Did You Know?' box has been included (at least one of the following should be in the answer):

- to give extra information (about dinosaurs)
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- to highlight unusual facts or ideas
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Palaeontology Reading Comprehension

Read through this reading corr Insert text here. questions on the answer sheet.

We have learned a lot from palaeontologists:

We know that there were animals who lived millions of years ago, including the dinosaurs!

Dinosaurs became extinct due to a falling asteroid. When the asteroid fell it caused the climate (weather) to change.

> The climate became colder and the dinosaurs were not able to survive.

Finding fossils was, and still is, a dangerous activity. Falling rocks, slippery and sometimes unstable surfaces mean that it is necessary to take precautions when finding fossils.

Mary Anning was almost killed by a landslide (where lots of rocks fall at once from the cliff). Unfortunately her dog Trey did die.

Now, palaeontologists search where fossils have already been found.

They keep safe by, for example, wearing hard hats.

New fossils are usually found by accident by people who are just out having fun at the beach or going for a walk!

Did You Know?

Not all dinosaurs are dead. All the birds (including chickens) that are alive today are related to the dinosaurs!





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Read the Palaeontology Reading Comprehension and then answer the following questions.
Q1: What are palaeontologists?
Palaeontologists are
Q.2: What kind of animals lived millions of years ago?
Millions of years ago
Q.3: What does the word 'extinct' mean?
The word extinct means
Q.4: Explain why fossil hunting can be dangerous:
Fossil hunting can be dangerous because
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Q.4: Explain why fossil hunting can be dangerous:: (retrieve and record information from non-fiction) Fossil hunting can be dangerous because of (at least one of the following should be in the answer):

- falling rocks
- slippery surfaces
- unstable surfaces

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Palaeontology has come a long way since Mary Anning's time.

> We now know that there were animals who lived millions of years ago, the most fascinating of which are the dinosaurs!

We understand more about dinosaurs, how they might have looked, what they ate and how they lived.

It is

thought that the dinosaurs became extinct due to a falling asteroid. The impact of the asteroid was so huge that it changed the climate (weather) around the world.

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