

DINO-INVESTIGATORS: IDENTIFICATION



LESSON PLAN ONE

The Great Dinosaur Mystery

Related resources

- 1 x supporting PowerPoint presentation
- 4 x activity and fact sheets
- Dinosaur investigation notes
- Glossary

Learning objectives

- To identify questions to answer and problems to resolve.
- To carry out independent research, analysing and evaluating the value of information.

Core subject: History

Key stage: 2/Level P3-P6

Introduction

Set the scene for the great dinosaur mystery! A dinosaur fossil has been found in the school grounds. This lesson plan will give your pupils a good starting point to help them with their identification of the mystery dinosaur. If time and facilities allow, perhaps you could tape off an area in the school grounds and disturb the soil as though something has been dug up.

"There has been an exciting discovery! Last night (insert name of school caretaker) was digging up the (wildlife garden/flower bed/side of the path) to plant some new flower bulbs for spring when his spade hit something hard. Thinking it was a large rock, he began to clear away the soil. The rock seemed very odd... It was long and thin and on the top edge there was a row of strange, pointy, cone shapes. (Caretaker) moved more soil and saw more pointed shapes running in a line along the edge of the long thin rock."

Encourage children to draw what they think the strange object looked like on their whiteboards, repeating: *"There were pointed shapes running in a line along the edge of a long thin rock."*

Children share their drawings with a learning partner, asking each other: "What do you think it could have been?" "What does this picture remind you of?" Establish it looks like a set of teeth.

"(Caretaker) didn't stop there... He kept on digging and found more strange rocks of all shapes and sizes! There was a massive skull with a blunt nose and large round eye sockets. The jaws were filled with dozens of sharp pointed teeth. The skeleton's pelvis was in the middle of its body with the head, ribcage and two short forelimbs on one side being balanced by a huge, tapering tail on the other. Below the pelvis were two long limbs with large bones and three toes."

What do you think it was he found? (Establish it is a dinosaur fossil.)

N.B. The aim of the investigation is for the children to ultimately identify the dinosaur species as a Gorgosaurus. This is a species from the same family as a T-Rex. Some children may at this point volunteer species names that they are already familiar with. These could be collected and gradually eliminated as the investigation progresses.

Show the **first slide of PowerPoint presentation 1**.

Ask the pupils to work with a talk partner and write down three facts they know about dinosaurs. (This could be on sticky notes that you can collect in for display.) Children share their ideas. (Scribe these or collect in sticky notes and display to support activities.)



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LESSON PLAN ONE...

Explain that their job is to act as dinosaur detectives and find out all about our school dinosaur. What will we need to find out? Discuss and display **slide 2**, the big questions.

Show **slide 3** and ask children to consider the question: What skills will be needed to be a good dinosaur detective? We already have some knowledge (refer to dinosaur fact display just created). How can we learn more? Provide table groups with a large piece of sugar paper to mind map (or thought shower) what thinking and learning skills they will need to use. Children make a mini presentation back to the class. Discuss: thinking skills (asking questions, considering evidence); reading skills (skimming, scanning, AF2 information retrieval, AF3 inference); writing skills (note taking, recording and presenting information); numeracy skills (interpreting and sorting data). Show **slide 4** and refer to the **classroom poster**.

This is a good time to hand out the **glossary** and **dinosaur investigation notes**. These resources will be useful tools throughout the investigation.

Pupil Activity

Big question 1: When did our dinosaur live?

Show the first timeline (**slide 5**). Explain that this is a time line to show human history. (The timeline has several KS1 and KS2 history topics marked on). Ask children what is different about the dates on each side of the line (AD and BC) and establish that AD counts forwards and BC counts backwards. So Stonehenge was built about 4000 years ago. Illustrate by counting back in thousands as on a number line. How long ago was 3000 BC? 5000 BC?

Ask children to think of other kings, queens or historical events and point to approximate place on time line. Emphasize that there is a lot of history to fit on our timeline!

Explain that when we talk about dinosaurs we are going back even further, so far it is hard to imagine! Show **slide 6** and explain that all of the first timeline, showing everything that has happened in human history, will all fit into the tiny line at the end of the geological timeline.

Locate 75 million years ago on the timeline and explain this was called the Cretaceous period. Our dinosaur was alive during this time.

Ask children to complete dinosaur report sheet, **Big question 1**.

It is now up to them to be **Dinosaur Detectives!**

Plenary

Give out all the activity and fact sheets. Explain to pupils they will need to use all their thinking and learning skills. They should read the fact sheets to look for evidence and then complete the corresponding activity sheet independently. To help children complete **activity sheet 1** it may be helpful to display **slide 7** which displays a description of the dinosaur bones found. Each time they complete an activity sheet they should be able to add another answer to their **dinosaur investigation notes**. At the end of the project they will use these notes to help them make a presentation to the class.

There is space at the bottom of the report notes for children to add additional questions they would like to find out more about.

Have a discussion about how they could find the answers to these questions.



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