



KS2 Science

National Curriculum: Primary Science. This exercise reinforces the curriculum's aim "to ensure that all pupils: develop understanding of the nature, processes and methods of science through different types of science enquiries..." and the key strand of 'working scientifically'.

It supports the Year 6 requirements: "Pupils should be taught to recognise that living things have changed over time and that fossils provide information about living things that inhabited the earth millions of years ago" and the Year 6 non-statutory suggestion "Pupils might find out about the work of paleontologists such as Mary Anning."

Learning Objectives

Pupils will increase their understanding of 'working scientifically'.

They will learn about the role of conferences in science. They will understand the importance of the discovery of fossils in; the understanding of the age of the earth and of the fact that species can become extinct and the significance of the work of Mary Anning.

Resources

Films: "Mary Anning - Uncovering Extinction.mp4", interviews with Professor Lionel Wilson; "Dinosaur Extinction.mp4", "Why Conferences?.mp4".

PDFs: Materials supporting the arguments for the Asteroid and Volcanic explanations of the Dinosaur extinction.

PPT: Starter template for conference presentation powerpoint. [Link to Culture Street Dino game.](#)

Suggested Classroom Activity

Show the pupils the film "Mary Anning - Uncovering Extinction" and check they understand the importance of fossils in developing the idea that animal species can become extinct and that the Earth is very old, also of Mary Anning's importance and the scale of her achievement as a self-taught working-class woman at a time when science was the preserve of formally educated and wealthy men. Check they understand that towards the end of the last century there was some argument between those scientists who believed the dinosaurs were wiped out by an asteroid hit, and those who blamed huge flows of lava. Explain that one of the ways scientific ideas are developed is through conferences and show them the Prof. Lionel Wilson interview, 'Why Conferences?'. Lionel explains why they still have a vital function in the Internet Age.

Divide the class into two groups; one group is given copies of the evidence used by scientists who argued for the asteroid culprit, the other group have the outline of the magma theory. Ask both groups to prepare short powerpoint presentations they will deliver to their 'opponents'. (Template powerpoints are available if you wish to ensure time isn't wasted on choosing the perfect font!).

When each group has finished, they read each others' presentations and choose one to represent their group in a role-play conference setting, with the other group asking difficult questions. (You could explain in advance that argument in conferences never result in anything more violent than a withering put-down!)

Play them the "What killed the dinosaurs?" for Professor Wilson's summary of the current consensus (essentially that both factors were to blame). Professor Wilson is a leading expert on volcanoes - including those that formed on asteroids.

Development Activity

Culture Street has produced a game-app on the theme of the Dinosaur extinction. Get the pupils to play it, then suggest how it could be modified to more accurately reflect the current view of the extinction as presented by Professor Wilson.

Notes and Links

Tracey Chevalier has written a fine novel about Mary Anning, 'Remarkable Creatures' a film of which is currently (Summer 2014) being planned.