

Journey to the Centre of the Earth

Teaching Ideas

Lesson Objective: To understand what lies beneath our feet.

Success Criteria:

- To know the layered structure of the Earth.
- To understand what materials are in each layer of the Earth.
- To know what happens to the temperature towards the centre of the Earth.

Context

This is an introductory lesson to the topic of Restless Earth, highlighting key characteristics and vocabulary associated with the structure of the Earth. There are several activities in this pack, which could take some time – you could, therefore, split the content over two or more lessons if you wished. Later lessons will go on to look at plate tectonics, earthquakes and volcanoes.

Starter

A good way to get students' attention at the start of the lesson is to use a piece of fruit to introduce the idea of the Earth's structure. On the PowerPoint, there is an image of a peach with some idea prompts to demonstrate this. You could also bring a piece of fruit to the lesson to demonstrate this idea!

Main Activities

Journey to the Centre of the Earth – Use the PowerPoint to explain the Earth's different layers. As each layer is introduced, students can complete the diagram provided on the Journey to the Centre of the Earth differentiated [Labelling Sheet](#). There is a higher and a lower ability version provided. Students annotate the diagram to show the layers, what they consist of, how hot they are and how deep they go.

Journey to the Centre of the Earth story-writing. Students are first of all encouraged to design a vehicle which would get them to the Earth's core in a story they are about to write. Use the Journey to the Centre of the Earth [Vehicle Sheet](#) to help students come up with ideas for their design.

The next stage is planning the story, encouraging students to think about what they are going to write and what will happen in the story before beginning to write it. The Journey to the Centre of the Earth [Planning Sheet](#) in this pack is designed to aid this process. With the two planning tasks undertaken before the writing begins, students will be well prepared to start this extended writing task.

The finished stories should be peer marked, with students giving their partner's work "2 stars and a wish" – encourage students to make the wish very specific. They are then encouraged to "grow their work" by acting upon the wish and improving their work. This would be best done in a different colour pen to show where they have made improvements.

Plenary

Fill in the gaps activity on the PowerPoint.

Discussion: Will humans ever get to the centre of the Earth?

Homework Suggestion

Ask students to use the Internet to research the difference between how far humans have been and how far humans have drilled. Drilling operations have gone much deeper, and into the mantle.