Extreme Earth: Under Our Feet

Aim:

Describe and understand key aspects of physical geography in the context of what is under the Earth's surface.

To describe what you find underground.

Success Criteria:

I can recognise that there is rock under all surfaces.

I can list the layers that make up the Earth.

I can create and label a cross-section of the Earth.

I can compare the Earth's structure to a familiar object.

Key/New Words:

Topsoil, subsoil, bedrock, crust, mantle, outer core, inner core, magma.

Resources: **Lesson Pack**

Modelling clay (in red, yellow, orange or

Rolling pins

Circle shapes or stencils in a range of sizes

Coloured pencils

Preparation:

Make a Model Earth Instructions - per pair as required

Inside the Earth Activity Sheet - as required

Prior Learning: No prior learning necessary.

Learning Sequence



What Would You Find? What do you think is under your feet right now? Could you dig a hole straight through the Earth to the other side? Ask what children think they might find beneath their feet. Use the Lesson Presentation to stimulate discussion about what might be under their feet.





Welcome on Board the Underground Explorer! Children close their eyes and imagine they are being lowered down through the sink-hole. Using the Underground Explorer Script, talk them through each layer in order, in the style of a tour guide.





Layers of Soil and Layers of the Earth: Recap the world that lies beneath our feet. Talk through the various layers, providing more specific details about what makes up each layer.





What Is Under Your Feet?



Children use modelling clay in a range of colours to create a model of the inside of the Earth. Use the **Make a Model Earth Activity Instruction** Sheet.



Children draw and label their own cross-section diagram through the Earth using the Inside the Earth Activity Sheet.



Children draw and label a cross-section diagram through the Earth, then write a short definition of each layer using the Inside the Earth Activity





What's That Like? Watch the video. Discuss the metaphor the presenter uses, comparing the Earth's structure to a peach. In what ways is the comparison accurate? Listen for children talking about the different textures of each layer, using the vocabulary associated with each layer. In what ways is the structure of the Earth different to that of a peach? Listen for children talking about the layers and what each is made of, how many layers the peach has and the temperature difference.



Taskit

Collect samples of different kinds of rocks (igneous, metamorphic and sedimentary). What differences can you see in them? Investigateit: Can you find a way to test their strength?

Writeit: Look at the sink-hole image again. Write a news report as if the hole has just appeared in your town/village. Write a story about what you found when you dug the hole.

Linkit: Allow pupils to explore a simulation game, such as Minecraft.

Modelit: Children could use shells and modelling clay to create their own fossils.



