

Eco Boys and Girls Science Bite

#10: Earth's Layers

Materials Needed:

- Five colors of dough or clay
- Picture from the Internet of the earth's layers
- A butter knife



“Ernie Earth here, reporting for duty! I’m a lot more than meets the eye. Did you know that our planet has different layers? It may seem like I’m just a big rock, but there’s way more to me than just that! We’re going to be making a model today that explores all of those layers.”

Earth Layers Background Info:

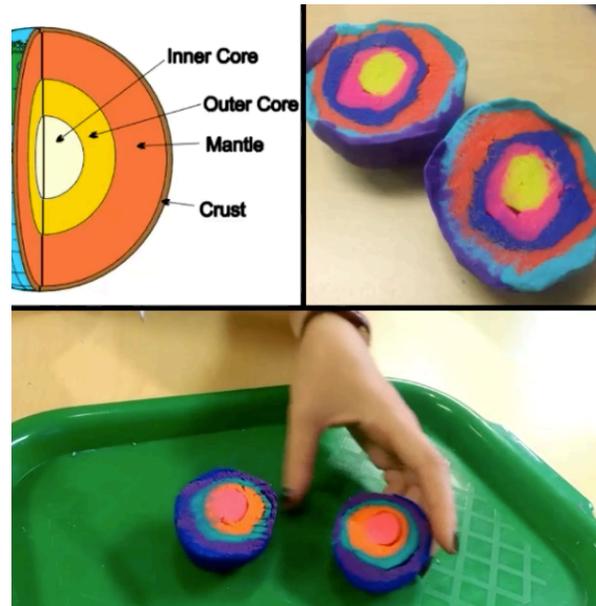
The Earth is made up of layers—sort of like an onion. These layers get more and more dense the closer to the center of the earth you get.

- The Crust: a thin outer layer where we live! It’s only thin compared to the other layers of the earth—it’s about *three miles* thick at it’s “thinnest”.
- The Mantle: This layer is much thicker than the earth—it’s about 185 miles thick! It’s made up of rocks with magnesium and iron.
- The Outer Core: This is made of iron and nickel and is very hot! It’s so hot that the metals are in liquid form.
- The Inner Core: This is also made of iron and nickel. The inner core is so far inside the Earth and under so much pressure that it is about as hot as the surface of the sun!

Layers of the Earth Activity:

- Start with four different colors of dough or clay
- Pick one color and roll it into a small ball—about the size of a large cotton ball—this will be your inner core

- Pick another color and wrap it completely around the inner core so you can't see any of the inner core anymore. This is your outer core!
- Choose another color and wrap that around the outer core—this layer is the mantle
- You should only have one color left. Take this color and put it around the mantle layer so that none of the mantle shows
- It'll now look like you have one large ball of clay or dough that is a single color
- Take some time and look at an image of the earth. Now is the time to put on some dough/clay blobs that can represent the continents
- Carefully take a butter knife and cut your Earth ball in half
- Now you have made your own model of the layers of the earth and what it would look like if we could see inside!





“So, what did you think? Was it interesting to learn about the different layers of the earth? Take some time to look up more fun facts about them! The more you know about the earth the more you can do to protect it!”

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