# Uncover the Layers of the Earth

Grade Level: Elementary School

## Objective:

- Identify the different layers of the Earth, including the inner and outer core, mantle, crust, oceanic crust, and continental crust.
- Understand the order of the Earth's layers.
- Create a visual representation of the earth using various materials.
- Demonstrate their understanding of the Earth's layers by labeling and describing each layer in their models.
- Engage in hands-on learning.

### Materials:

- Red dough (inner core)
- Orange dough (outer core)
- Yellow dough (mantle)
- Purple dough (crust)
- Blue dough (oceanic crust)
- Green dough (continental crust)
- Floss
- Labeling flags



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#### Procedure:

- 1. Gather all the materials listed above.
- 2. Start by taking the red dough and roll it into a ball.
  - a. This will represent the inner core of the Earth.
- 3. Take the orange dough and flatten it out. Carefully wrap it around the red ball, incorporating it into the core. Gently work it with your hands until it forms a smooth layer around the core.
  - a. This layer represents the outer core.
- 4. Take the yellow dough and flatten it out. Wrap it around the orange layer, creating a larger ball.
  - a. This represents the mantle.
- 5. Flatten the purple dough and wrap it around the yellow mantle layer, incorporating it into the model.
  - a. This represents the Earth's crust.
- 6. Take the blue dough and flatten it out. Add it as a thin layer on top of the purple crust layer.
  - a. This represents the oceanic crust.
- 7. Take the green dough and shape it to resemble land masses. Place it on top of the blue layer.
  - a. This will be representing the continental crust.
- 8. Once all the layers are assembled, your model of the Earth should be complete. Use your hands or a rolling pin to shape the green dough into accurate land masses on top of the crust layer.
- 9. Take a piece of floss and carefully cut out a pie-shaped section from the Earth model, revealing all the layers.
- 10. Use the labeling flags to label each layer of the Earth, indicating the names of the <u>inner</u> and <u>outer core</u>, <u>mantle</u>, <u>crust</u>, <u>oceanic crust</u>, <u>and continental crust</u>.

Note: Encourage creativity and exploration throughout the process! Feel free to experiment with different shapes and designs for the land masses and make the model as detailed as desired.



## Earth's Layers Modeling Activity Worksheet

Research and Describe: Choose one layer of the Earth and do some research about it. Write a short description or create a mini fact sheet about the chosen layer, including what it is made of, its characteristics, and any interesting facts you find.

Cross-Section Drawing: Draw a cross-section of the Earth, showing the different layers accurately. Include labels and write a short description for each layer. Use colors to represent the layers and make sure to highlight the differences between them.

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