A Model Earth

Procedure

1. **Collaborate** Working with a partner, roll modeling clay into two balls of different colors. Make one the size of a golf ball and the other the size of a baseball.

2. **Use Models** The smaller clay ball represents Earth’s outer core. The marble represents its inner core. Push the marble into the center of the smaller clay ball and reshape the clay around it. You now have a model of Earth’s two-part core.

3. **Observe** The larger clay ball represents Earth’s mantle. Using the plastic knife, cut this clay ball in half. Reshape the clay so that this ball can be wrapped around the two-part core. You now have a model of Earth’s core and mantle.

4. **Measure** Use a measuring tape to find the distance around your model at its “equator.” Cut a rectangle of foil equal to that distance in length and one-half that distance in width. Wrap the foil around the mantle and smooth it out. This thin layer of foil represents Earth’s crust.

Conclusion

1. **Use Models** In the space on page 22, draw what your model Earth would look like if you could slice it in half. Label the layers.
2. Communicate  Write a report explaining the steps and results of your investigation.


Ask Questions

What questions do you have about the temperatures of Earth’s layers? Make a plan to research your questions, including choosing tools to collect and display data.