

Build Earth's Structure



Ever wonder what's inside our planet Earth? Let's explore with playdough! In this fun experiment, we'll create a colorful model of Earth's layers.

Materials

- Red, yellow, white, and green Playdough
- Plastic knife

Science Behind the Experiment

Earth's Core:

The innermost layer of Earth is the core. It consists mainly of two parts: the solid inner core and the liquid outer core.

Earth's Outer Core:

Surrounding the inner core is the liquid outer core. It is also composed of iron and nickel but exists in a molten state due to the higher temperatures.

Earth's Mantle:

The mantle is the thickest layer of Earth, located above the outer core. It is made up of semi-solid, plastic-like rock materials.

Earth's Crust:

The Earth's crust is the outermost layer, and it is relatively thin compared to the other layers. It consists of solid rock and includes both the continents and the ocean floor.

Step 1: Earth's Core

Take a small piece of brown playdough and roll it into a ball. This will represent Earth's innermost layer, the inner core.

Step 2: Earth's Outer Core

Take a slightly larger piece of red playdough and flatten it into a circle.

Carefully wrap the red playdough around the brown core, forming a ring. This will represent Earth's outer core.

Step 3: Earth's Mantle

Take a larger piece of orange playdough and flatten it into a larger circle.

Wrap the orange playdough around the red outer core, forming the mantle layer.

Step 4: Earth's Crust

Take a thin piece of yellow playdough and flatten it into a large, thin circle.

Carefully place the yellow playdough on top of the orange mantle layer, representing Earth's crust.