



The World in Your Hands

Getting Ready

Let's do science and have *The World in Your Hands!* Be careful, it's our world!

Stuff to Make it Happen (Materials)

2 large "poppers" string adhesive tape* packing peanuts
 Yellow, Blue and Green clay hex nut Earth globe*

Making it Happen

1. Find the string's middle. Tie the hex nut there. This represents the **Solid Inner Core**, mainly made of iron and nickel. This core produces the Earth's **Magnetic Field**.

2. Look inside a "popper". You should see a small hole. (Make one if needed.) Slip a string's end into the hole from underneath. This is the **North Pole** of your Earth model. Pull the string through the hole until the metal nut is even with the popper's bottom edge. Tape the string to the "popper". This half of the Earth represents the **Northern Hemisphere**.

3. Break up and stuff some packing peanuts into the popper. These represent the Earth's **Liquid Outer Core**, also made mostly of iron and nickel.

4. The "popper" represents the next layer, the **Mantle**. It's mainly made of melted or **Igneous** rock. Slip the string through the other "popper" just like in the #2 direction.

5. Fill the other popper with packing peanuts just like you did in step #3. This "popper" represents the **Southern Hemisphere**. Slide the two "poppers" together. Tape the "poppers" together. The spot where the two halves come together represents the **Equator**. For the next step flatten the yellow clay into a thin layer, 1/8" or less thick!

6. Apply this very thin yellow clay completely over the "poppers". This represents the mantle's top and the **Crust's** bottom. Flatten the blue and green clay just as thin as the yellow!

7. Look at the Earth globe. Locate and observe each of the **Continents** and **Oceans**. Make a very thin outline of each continent with your green clay. Put them on your Earth in the right spots, fill in between with blue clay to represent **Oceans**! The ocean and continents are extremely thin compared to the rest of the planet! Together the blue, yellow and green clay represent the Earth's **Crust**, where all **Life** happens!!!!

7. Ok, so your world is a bit small for people, but it's a great **Model** of how the planet is built. Scientists and engineers love models because it makes very tiny or very large things easier to see! You on the other hand, now have *The World in Your Hands!*

