

Name _____ Period _____

Earth's Chemical and Physical Layers – Poster

The interior of the Earth has layers. The Earth's layers can be divided up into two different types: chemical and physical. Chemical layers of the Earth are divided up based on the elements that make them up. Physical layers are divided up based on whether they are solids or liquids.

Procedure:

- Make a poster that shows both the chemical layers and physical layers of the Earth.
- Label the names of all layers.
- On the chemical layers, label the types of elements or minerals that make up the layer.
- On the physical layers, label whether the layer is a solid, liquid, etc.
- Make sure you color it, are neat, and are accurate in how thick each layer is.

Answers these questions when you finish your poster:

1. How does the density of each layer change as you go toward the middle?
2. How does the temperature of each layer change as you go toward the middle?
3. Can we see or drill down to the center of the Earth?
4. How do we know the Earth has layers?
5. How does an understanding of the physical layers of the Earth help us explain how the plates move? (Hint: think of what layer makes up the plates and the layer the plates are sitting on)
6. Draw a picture that shows what happens to S-waves as they go through the Earth. S-waves can't travel through liquids.
7. Draw a picture that shows what happens to P-waves as they go through the Earth. P-waves can travel through liquids and solids.
8. What creates S- and P- waves?