

Name _____

Period _____

The Whole World in Your Hands

Visualizing Earth's parts, or "spheres" in their proper relationships will be important in understanding how they work together. This activity should help you put things in proper perspective. This project should be done in **groups of four to five**

1. Examine the following data table:

<u>Earth sphere</u>	<u>average thickness (km)</u>
Atmosphere	80
Biosphere	10 (+6 to -4 from surface)
Hydrosphere	4
Geosphere:	
Inner Core	1200 (radius)
Outer Core	2300
Lithosphere	100
Mesosphere	2200
Asthenosphere	650

2. **Doing some basic research with the resources provided, complete a poster of your Earth with the spheres in their proper places.**

Use a scale of 1mm on your poster = 10km of the Earth. (E.g. the inner core would be 120mm thick)

You may choose how to draw your poster (whole earth, half earth, wedge, column...)

3. **As you do your research, make a note of the major characteristics (thickness, temperature, density, composition, state of matter, etc.) of these spheres. Label these on your poster**

Evaluation questions:

A. What was the hardest thing to do in this project?

B. What did you learn about the Earth by doing this project?

C. Define the following terms:

a. **Atmosphere:**

b. **Biosphere:**

c. **Geosphere:**

d. **Hydrosphere:**

D. In what ways could the **atmosphere and biosphere** interact?

E. In what ways could the **atmosphere and geosphere** interact?

F. In what ways could the **atmosphere and hydrosphere** interact?

G. In what ways could the **geosphere and hydrosphere** interact?

H. In what ways could the **biosphere and the geosphere** interact?

I. In what ways could the **biosphere and the hydrosphere** interact?