

CW:

Name: \_\_\_\_\_ Date: \_\_\_\_\_ Hour: \_\_\_\_\_

## EARTH SCALE ACTIVITY

Objective: During this activity you will be creating a scaled model of Earth's interior, which you will later label and describe. Follow the directions below carefully to create your model.

Materials: 2 pieces of 12 x 18 inch paper

Clear tape

1 Strip of Cardboard

1 Push Pin

1 Metric Ruler

Calculator

Pencil (with good eraser)

Colored Pencils

Compass

Directions:

1. Tape the long sides of 2 pieces of 12 x 18 inch paper together.
2. Write your name/ date/ hour in the top right hand corner
3. Develop a plan that will enable you to draw a neat circle with a radius of exactly 20 cm (40 cm diameter). Draw your circle as close to center on the paper. You might also want to leave a little room near the top for titles and other Earth features.

☉ Have your circle checked before going on to the next step ☉

4. Create a title for your model and write it near the top and center of your paper.
5. Draw a vertical line down the center of your Earth, splitting it into 2 equal halves.
6. Title the left half of your Earth "Composition Layers" and the right half of your Earth "Physical Layers".
7. Determine the scale of your Earth.

Scale =  $\frac{\text{Real Earth Radius}}{\text{Your Earth's Radius}} = \frac{6378 \text{ km}}{20 \text{ cm}} = \frac{\text{_____ km}}{\text{cm}}$

Hint: This means that for each 1 cm on your Earth equal \_\_\_\_\_ km on the real Earth.  
Divide this number into the actual numbers below to find your scale model measurements. ☉

8. Draw: Starting at the surface measure the depth of each of the following boundaries/areas.

Compositional Layers: (Left Side)

Crust/Mantle	Actual = 40 km	Model = _____ cm
Mantle/Core	Actual = 2940 km	Model = _____ cm
To Center of Core	Actual = 6378 km	Model = _____ cm