

A "Pizza Slice" of the Earth's Interior

Name _____

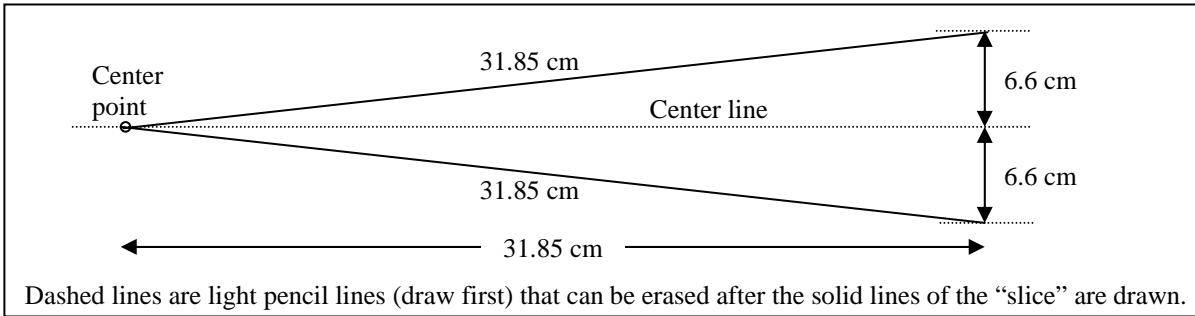
Date _____ Per _____

Purpose: To create a scaled diagram of the interior layers of the earth and provide information about each layer.

Materials: meter stick 35 cm long string with a loop at one end paper

Procedure:

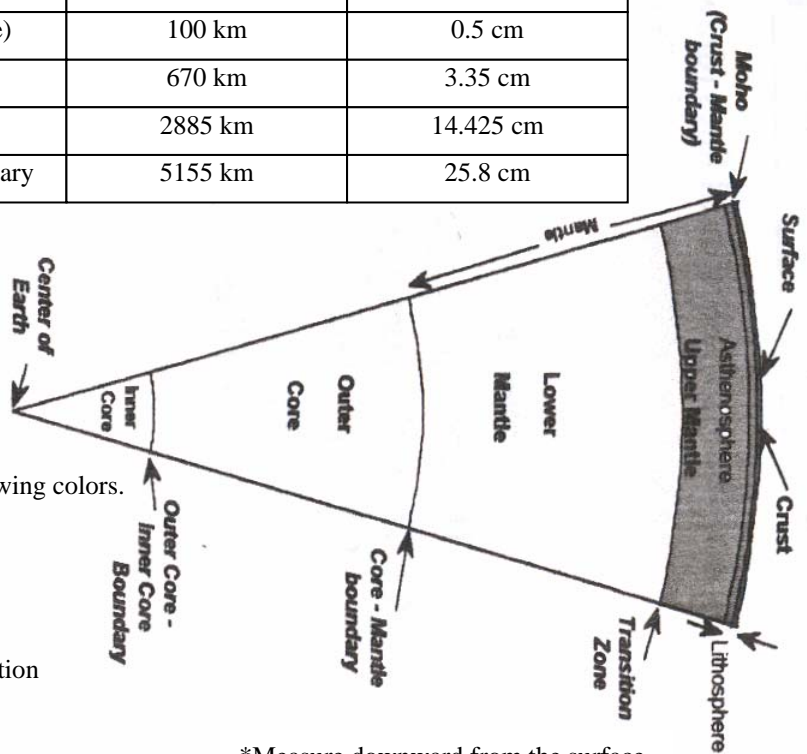
1. Draw a light center line 31.85 cm in length. (So it does show later.)
This distance represents the radius of the Earth.
2. Draw two "width lines" 6.6 cm to each side of the center line at the end of the center line.



3. Draw the straight angle lines from the center point to the width line.
The straight angle lines should also measure 31.85 cm.
4. Draw the surface arc line using the string with a loop and a pencil (with the length from the center point to the pencil in the loop being 31.85 cm).
5. The center line and width lines can now be erased.
6. Complete the scale model of the slice of the Earth by drawing arcs at the appropriate places using the information in the chart below. Use the string to make your arcs for each layer.

	Actual Value	Scale Value (1:20 million scale)
Radius of Earth	6371 km	31.85 cm
Depth* to base of the crust (average)	35 km	0.175 cm
Depth* to base of lithosphere (average)	100 km	0.5 cm
Depth* to the base of upper mantle	670 km	3.35 cm
Depth* to core-mantle boundary	2885 km	14.425 cm
Depth* to outer core-inner core boundary	5155 km	25.8 cm

7. Label the boundaries and layers of the Earth as shown in the diagram



8. Color the different layers using the following colors.
Inner Core – white
Outer Core – yellow
Lower Mantle – orange
Upper Mantle – red
Crust/Lithosphere – brown
9. Use the resources given to write information about each layer on your poster.

*Measure downward from the surface