

JOURNEY TO THE CENTER OF THE EARTH

Objective: You will increase knowledge and understanding of the earth's interior by making a pop-up of the earth.

Supplies Needed:

Pen and pencil	1 sheet yellow paper
Compass	1 sheet orange paper
Scissors	2 sheets red paper
Ruler	2 sheets blue paper
Glue	1 large piece of tag board
Lots of scratch paper to practice those pesty circles!	

Grading: Your grade will be based on how well you follow directions and if all the required information is included on your model. The project is worth 35 points.

	<u>Points</u>
Title and presentation	2
Completion of 8 circles	8
Four earth layer titles included	4
Four facts included about each of the four layers	16
Short paragraph about the earth's magnetic field	<u>5</u>
Total Points	35 points

How Do I Make This Thing?

Following the model on the chart paper, you will make a total of 8 circles, 2 circles of each color. The following are the dimensions of each circle.

2 yellow circles each:	Radius of 2 cm. Diameter of 4 cm.
2 orange circles each:	Radius of 5.5 cm. Diameter of 11 cm.
2 red circles each:	Radius of 10 cm. Diameter of 20 cm.
2 blue circles each:	Radius of 10.5 cm. Diameter of 21 cm.

Procedures:

1. Practice, practice, practice on making the circles the correct diameter. When you are ready, make your best circles on the colored paper. Make sure when using the compass, mark the center of your circles with the point of the compass.
2. On 1 of the circles of **each** color, use the center of the circle and draw a line with a pencil through the center of the circle.
3. Cut out all eight circles. With each circle that has the diameter line (that would be four of the circles), fold two small flaps inward toward the diameter line (see example).
4. Take the four circles that do not have the diameter line and begin to glue. Glue the large blue circle in the center of the tag board. Center the red circle on top of the blue circle and glue. Center the orange circle on top of the red circle and glue. Center the yellow circle on top of the orange circle and glue.
5. Cut the second yellow circle along the diameter line and glue the flaps onto the sides of the first yellow circle. Cut the orange circle along the diameter line and glue the flaps onto the sides of the first orange circle. Cut the second red circle along the diameter and glue the flaps onto the sides of the first red circle. Cut the second blue circle along the diameter line and glued the flaps onto the sides of the blue circle. **You now have a pop-up earth!**
6. On the outside of each circle, label each layer (inner core, outer core, mantle, crust) correctly. On the inside of each circle, provide **four** facts about each layer. The information about each earth layer may be found on **pages 9- 14** in your science textbook. **One of the facts that must be included about each layer is the composition (what the layer is made of) of the layer.** You may not have room to write the information about the inner core and the crust on your circles and will have to write about them on the tag board. You must

have information about the lithosphere and asthenosphere included in your facts.

7. In the right hand lower corner of the tag board, you need to include a short paragraph about the Earth's magnetic field.

HAVE A GREAT JOURNEY TO THE CENTER OF THE EARTH!