

Name: \_\_\_\_\_

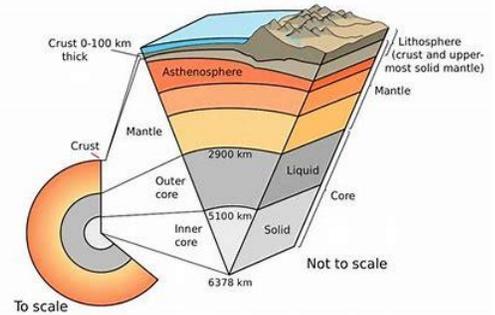
## Scale Model of Earth's Interior

### Objective:

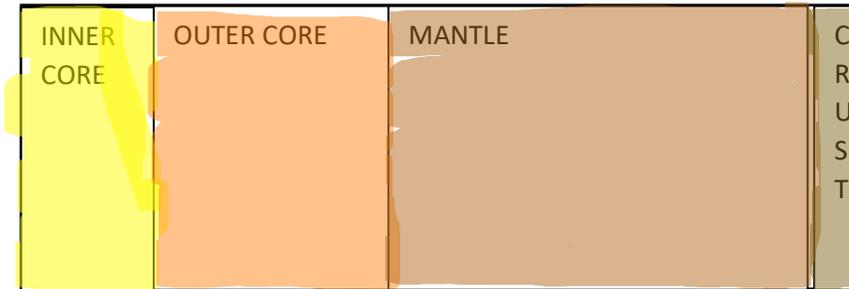
Students' will gain a better understanding of the Earth's Interior structure by creating a scale model.

### Procedure:

Using your Earth's Interior Notes you will create a model of Earth's interior layers on a sheet of paper or you can attempt it using a program on the computer (this might be more work to learn and do). Follow the procedure outlined below.



1. The goal of this activity is to estimate the relative thickness of the Earth's layers. Use a pencil to first **lightly** draw lines until you are sure they are correct and proportional to the others! (one inch = about 570 km) Ex: The inner core has a radius of 1220km,  $1220/570 =$  about 2 inches



- a.
2. The left edge of the paper will represent the very center of the Earth and you will measure out from this point.
  3. Using your notes on the Earth's layers lightly put markings on the paper where you think each layer of the Earth begins and ends (and label these markings). Include: The inner core, the outer core, the mantle and the crust. **(4pts)**
  4. At the surface of the model (which represents the Earth's surface) draw and label how high you think the world's tallest mountain (Mt Everest, 8.8 km tall) would be if drawn to scale. Do the same for the deepest part of the ocean (11km deep). **(2pts)**
  5. Somewhere on the paper the title "Interior of the Earth" must be present. **(1pt)**
  6. Label and include the following information for each layer: **(4pts for each layer)**
    - a. Name of layer
    - b. Thickness of the layer
    - c. Composition of the layer
    - d. Phase of material in the layer (solid or liquid)
    - e. Density of the layer ( $\text{g}/\text{cm}^3$ )
    - f. Movement of thermal convection in layer
  7. This should be colored to the best you can manage and should be neatly done. Be creative with color and design **(3pts)**

If you have questions email Mrs. Gillin at [egillin@helenaschools.org](mailto:egillin@helenaschools.org) or send a message in the remind app or Teams. Mrs. G will do a Zoom on Wednesday April 8, 2020 to answer any questions. Check Teams to find the time.