Name _____ Date _____ Period _____ 

# The Earth's Insides Comparison

## Activity 1 – Is There a Meaning?

**Use your assigned Chromebook to research the meaning of the root words. Be sure to use websites that are reliable.**

| Root | 2 Words containing the root | Meaning |
|---|---|---|
| **Astheno** | | |
| **Litho** | | |
| **Meso** | | |
| **Sphere** | | |

1. What is the meaning of lithosphere?

2. What is the meaning of mesosphere?

3. What is the meaning of asthenosphere?

## Activity 2 – Heating the Inside of the Earth

Go to dixiemiddlescience.weebly.com and scroll to today's date. Then click on the black box that says "HEATING THE INSIDE OF THE EARTH ARTICLE". Go to the website and answer the questions below.

4. List the 2 main reasons Earth's interior is very hot.

5. Explain how heat was created during Earth's Formation.

6. What percentage of heat is left over from Earth's formation?

7. Explain how radioactive decay creates heat inside the Earth.

8. What percentage of heat inside the Earth is a result of radioactive decay?

## Activity 3 – Earth's Insides Poster

**Purpose:** to identify the different layers of Earth's structure.

**Procedures**:

1. Read over the requirements below and begin making your diagram.
2. Using all of the requirements, create an appealing, colorful, informative, and unique diagram of Earth's interior comparing the composition layers and stress layers.
3. **Binder pages 56, 57, & 58 will be valuable tools**.

**Requirements Checklist**:

- Show a comparison of the layers of Earth based on composition and physical properties. Look at page ## and how it is comparing, this is the same.
- Correctly identify and label the following layers of differing stress properties: lithosphere, asthenosphere, lower mantle (mesosphere), outer core, and inner core.
- Correctly identify and label the following layers of differing composition: crust, mantle, core.
- Label the approximate depths
- Label the temperature of the different layers.
- Draw and correctly label oceanic and continental crust.
- Identify where convection currents occur inside the Earth, 1)what they are, 2)what they do, and 3)why they occur.
- Label and use arrows to show the change in density moving from the crust to the core.
- Neatness and Creative
- Colored

## Analysis Questions

9. What layer has the coolest temperature?

10. What layer has the highest temperature?

11. What layer is the densest?

12. What layer is the least dense?

13. What layer is the thickest?

14. What layer is the thinnest?

15. In your own words, explain the differences between the composition layers and the stress layers. (This should be a 2 to 4 sentence description for full points)

# Comparing layers Poster