

## Handout 2 (yellow) Earth's Interior

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

### Standard 2-1.b, c, and d

### Chapter 2 Section 1: Directed Reading Pages 28- 29

### EARTH'S INTERIOR (page 28-29)

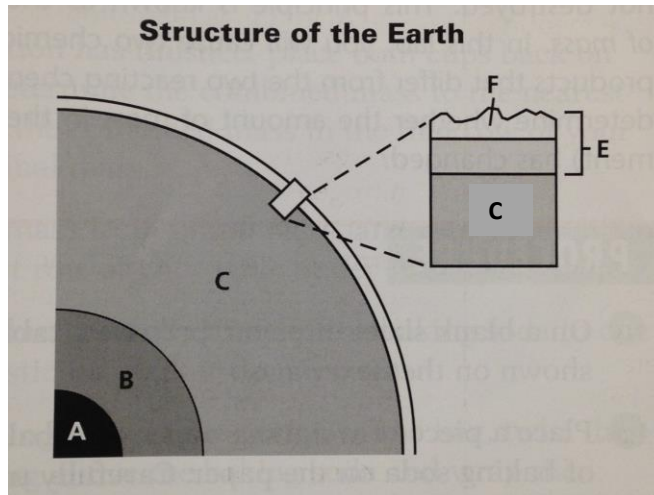
1. Summarize how scientists learn about Earth's interior.

2. What have scientists learned about Earth by studying seismic waves?

**In the space provided, write the letter of the definition that best matches the term or phrase.**

- |                            |  |
|----------------------------|--|
| _____ 2. crust             | a. the solid, outer layer of Earth that consists of the crust and the rigid upper part of the mantle   |
| _____ 3. oceanic crust     | b. the central part of Earth below the mantle  |
| _____ 4. continental crust | c. the strong, lower part of the mantle between the asthenosphere and the outer core   |
| _____ 5. Moho              | d. the thin, solid, outermost layer of Earth above the mantle  |
| _____ 6. mantle            | e. the crust beneath the oceans  |
| _____ 7. core              | f. the lower boundary of the crust   |
| _____ 8. lithosphere       | g. the layer of rock between Earth's crust and core  |
| _____ 9. asthenosphere     | h. the crust that makes up the continents  |
| _____ 10. plasticity       | i. the solid, plastic layer of the mantle beneath the lithosphere; made of mantle rock that flows very slowly, which allows tectonic plates to move on top of it |
| _____ 11. mesosphere       | j. a dense liquid below the mantle   |
| _____ 12. outer core       | k. the ability of a solid to flow  |

The diagram below shows the interior layers of Earth. The layers in the diagram are representative of arrangement and are not drawn to scale. Use this diagram to match the layers 13-17.



- \_\_\_\_\_ 13. mantle
- \_\_\_\_\_ 14. lithosphere
- \_\_\_\_\_ 15. inner core
- \_\_\_\_\_ 16. outer core
- \_\_\_\_\_ 17. crust

18. How does the asthenosphere differ from the mesosphere?

**Chapter 10 Section 2: Directed Reading Page 252**

**CAUSES OF PLATE MOTION (page 252)**

- \_\_\_\_\_ 19. The movement of heated material due to differences in density is called
  - a. convection.
  - b. a convection cell.
  - c. radioactivity.
  - d. plate motion.
  
- \_\_\_\_\_ 20. Earth's mantle is heated by
  - a. tectonic plates.
  - b. core energy and radioactivity.
  - c. boiling water.
  - d. cool, dense mantle material.
  
- \_\_\_\_\_ 21. What causes tectonic plate movement?
  - a. Hot material in the mantle sinks.
  - b. Lack of a convection cell causes plates to rise.
  - c. The mantle drags overlying tectonic plates along.
  - d. Divergent boundaries come together.