Ch 19 Earthquakes
Section 2 Guided Reading: *Seismic Waves and Earth's Interior*

Scan *Section 2 of your text. Write three facts you discovered about seismic waves as you scanned the section.*

1. _____
2. _____
3. _____

Use your text to define the following terms

4. mantle_____

   _____

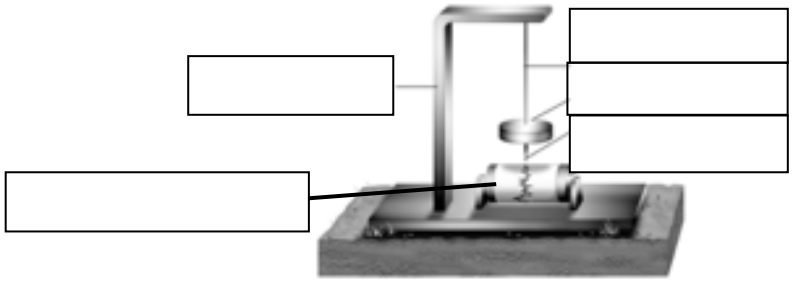
5. seismometer_____

   _____

6. encounter_____

   _____

Label *the parts of the seismometer below.*



What if *a younger student is looking at the diagram above with you? Explain to the student how the seismometer works.*

_____

_____

_____

_____

_____

_____

Create *two questions that can be answered using information from Figure 9 (Time Travel Curves) in your book. For example, "How long did it take the S-waves to move 2000 km from the epicenter of the earthquake?"*

1. _____

_____

2. _____

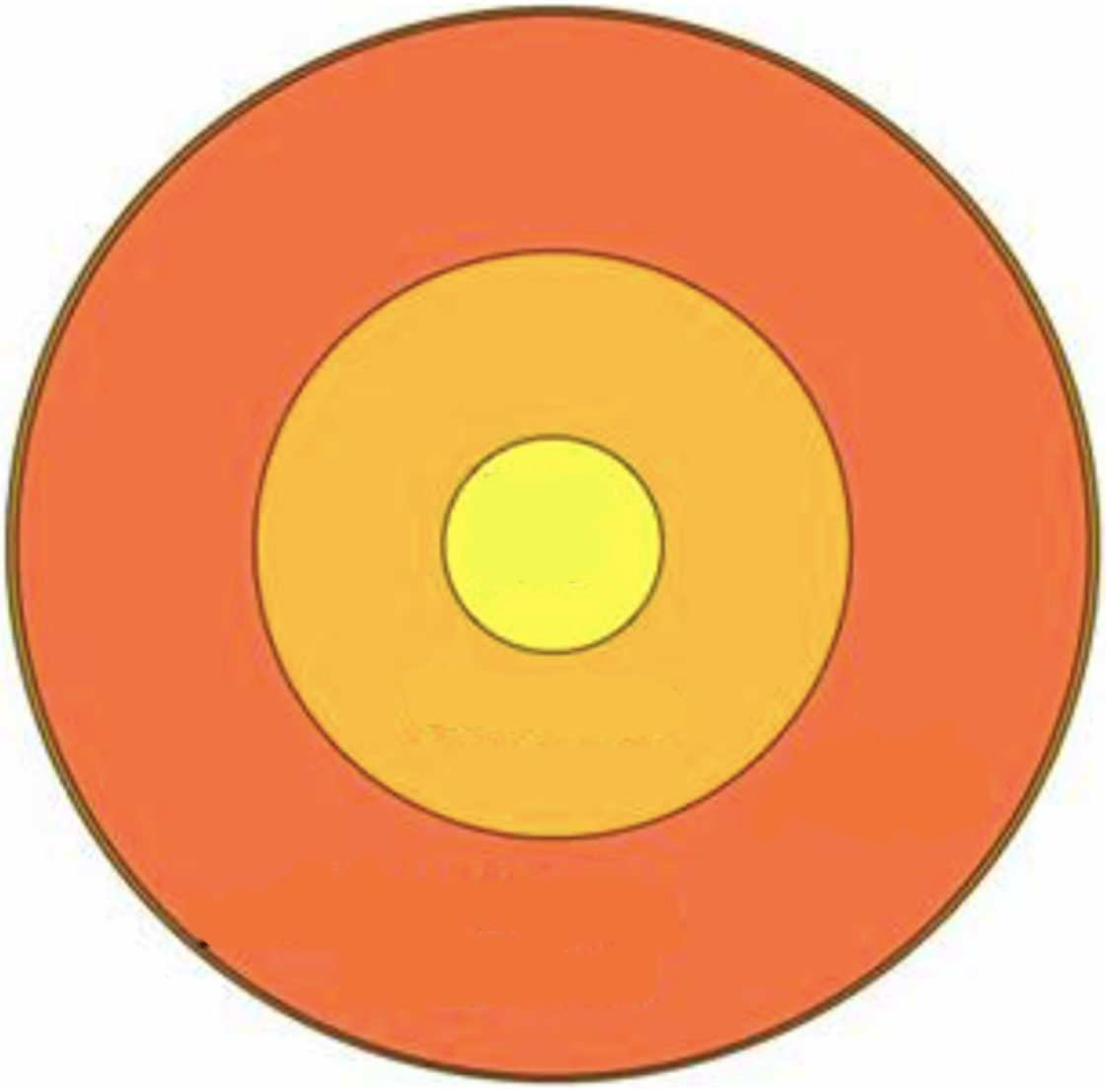
_____

Label this model of the interior of Earth with the following:

Inner Core Outer Core Mantle Crust

Once you have labeled your model, ***draw an earthquake focus*** *on the top of your model. Then draw and label how the following terms would appear. You will need to* ***draw*** *P & S waves on the diagram:* ***Hint****: pg16 of Notes*

P-waves P-wave shadow zones S-waves S-wave shadow zone



1. What are the two types of seismic waves produced at the focus?

_____

2. Describe how these two different types of seismic waves affect the rocks through which they travel.

_____

_____

_____

_____

3. What type of wave can travel through the core? Explain why this is the only wave type shown in the core.

_____

_____

4. What happens to P-waves when they strike the inner core?

_____

5. What is the P-wave shadow zone?

_____

_____

6. Why have scientists reasoned that Earth's outer core is liquid?

_____

_____

7. How have scientists inferred the composition of Earth's interior?

_____

_____

8. What would happen if S-waves encountered a lake or pond? Explain your reasoning.

_____

_____