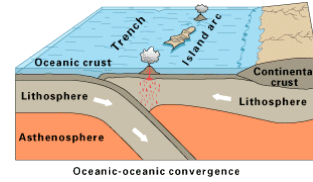
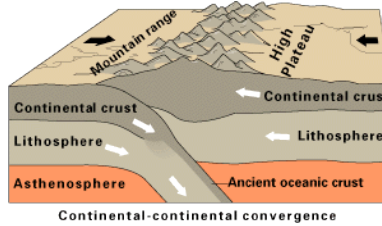
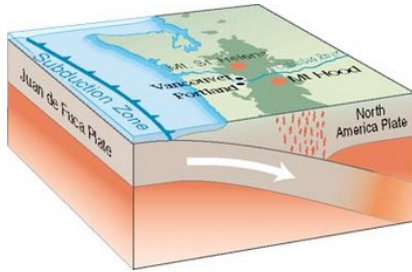


Name \_\_\_\_\_ Date \_\_\_\_\_ Period \_\_\_\_\_

## Earth's Interior StudyGuide

1. The two main elements that make up the Earth's crust are \_\_\_\_\_ and \_\_\_\_\_.
2. The Earth's inner core is made of solid \_\_\_\_\_ and \_\_\_\_\_.
3. When one plates slides under another plate this is called \_\_\_\_\_.
4. The San Andrea's Fault is an example of a \_\_\_\_\_ plate boundary.
5. At a subduction zone, \_\_\_\_\_ will form when the Earth's crust gets crumbed and \_\_\_\_\_ form when the subducting plate melts and rises to the surface.
6. Draw the layers of the earth, label CRUST, MANTLE, INNER CORE, OUTER CORE, ASTHENOSPHERE, MESOSPHERE, LITHOSPHERE.
  
7. Compare the density of the crust to the density of the core.
  
8. What is the different between the chemical and physical layers of the Earth?
  
9. List all the evidences of plate tectonics, and describe each.

10. List the three plate boundaries, label earthquakes with a “ \* “ and volcanoes with a “ ^ “.



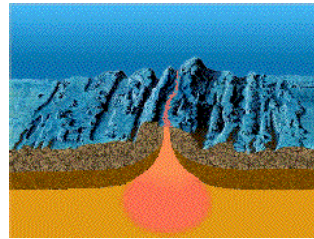
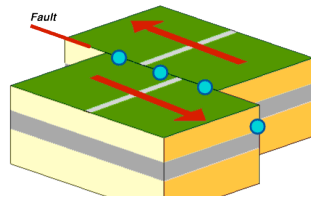

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11. List the 4 types of volcanoes, and describe how each of them form.

12. What is the difference between a focus and an epicenter?

13. Draw the entire Rock Cycle and label all the appropriate arrows.

14. List the ways the rocks can be eroded or broken down.

15. What is the most effective way to erode a rock...in other words, what one thing is best in weathering?

**STUDY YOUR QUIZ ALSO along with your notes and labs.**

# Chapter 17: Plate Tectonics Test

## **True/False**

*Indicate whether the sentence or statement is true or false.*

1. The crust is the Earth's only solid layer.
2. The inner core of the Earth is solid and made primarily of iron.
3. Temperature and pressure increase toward the center of the Earth.
4. The Theory of Plate Tectonics is a fact.
6. India was formed when the Himalayans crashed into the Eurasian Plate.
7. The age of the rocks become older as you move from the Mid-Atlantic Ridge out to the continents.
8. The inner core is mostly lead and iron.
9. Rift valleys are found along mid-ocean ridges.

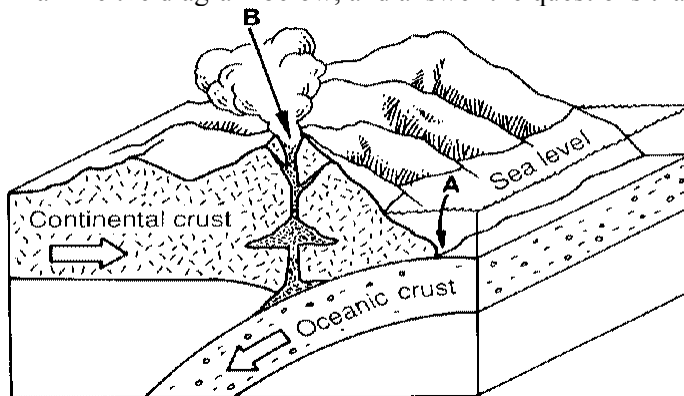
**Multiple Choice:** *Identify the letter of the choice that best completes the statement or answers the question.*

10. Oceanic crust is
  - A. thicker and less dense than continental crust.
  - B. thinner and less dense than continental crust.
  - C. thicker and more dense than continental crust.
  - D. thinner and more dense than continental crust.
11. Earth's inner core is
  - A. solid.
  - B. liquid.
  - C. both solid and liquid.
12. A geologic feature of divergent plate boundaries in oceanic crust is the formation of
  - A. trenches.
  - B. fossils.
  - C. U-shaped valleys.
  - D. rift valleys.
13. A divergent boundary occurs where two plates
  - A. move toward each other.
  - B. move away from each other.
  - C. move past each other.
  - D. move over each other.
14. A zone where oceanic crust dives beneath continental crust is called a zone of
  - A. subduction.
  - B. divergence.
  - C. reduction.
  - D. rifting.
15. A convergent boundary occurs where two plates
  - A. move toward each other.
  - B. move away from each other.
  - C. move past each other.

16. A transform fault boundary occurs where two plates
- A. move toward each other.
  - B. move away from each other.
  - C. move past each other.
  - D. move over each other.
17. Earthquakes occur mostly
- A. in the middle of continents.
  - B. in the mantle.
  - C. at plate boundaries.
  - D. at the edges of the continents.
18. The breakage of rocks along a fault line releases energy in the form of
- A. electromagnetic waves.
  - B. seismic waves.
  - C. heat.
  - D. light.
19. The magma released from volcanoes is
- A. material from the core.
  - B. molten rocks from the mantle and crust.
  - C. liquid iron and nickel.
  - D. radioactive.
22. The part of the Earth that is a liquid is the
- A. crust.
  - B. mantle.
  - C. outer core.
  - D. inner core.
23. The ancient continent that contained all the landmasses is called
- A. Pangaea.
  - B. Gondwana.
  - C. Laurasia.
  - D. Panthalassa.
24. The type of tectonic plate boundary involving a collision between two tectonic plates is
- A. divergent.
  - B. transform.
  - C. convergent.
  - D. normal.
25. The type of tectonic plate boundary that sometimes has a subduction zone is
- A. divergent.
  - B. transform.
  - C. convergent.
  - D. normal.
26. Continental mountain ranges are usually associated with
- A. divergent boundaries.
  - B. transform boundaries.
  - C. convergent boundaries.
  - D. normal boundaries.
27. Mid-ocean ridges are associated with
- A. divergent boundaries.
  - B. transform boundaries.
  - C. convergent boundaries.
  - D. normal boundaries.
28. Magma that reaches the Earth's surface may form \_\_\_\_ mountains.
- A. fault-block
  - B. all
  - C. volcanic
  - D. subducted
29. Which of the following appears to cause movement of Earth's tectonic plates?
- A. convection currents in the mantle
  - B. energy from volcanic activity
  - C. magnetic-pole reversals
  - D. faults in mountain ranges

30. Earth's lightest materials make up the
- |                |                |
|----------------|----------------|
| A. crust.      | C. mantle.     |
| B. inner core. | D. outer core. |
31. Earth's oceanic crust is \_\_\_\_ than the continental crust.
- |           |               |
|-----------|---------------|
| A. denser | C. less dense |
| B. hotter | D. cooler     |
32. Scientists believe that the Earth's core is made mostly of
- |               |              |
|---------------|--------------|
| A. iron.      | C. aluminum. |
| B. magnesium. | D. oxygen.   |
33. Which of the following is NOT a major tectonic plate?
- |                    |                         |
|--------------------|-------------------------|
| A. Caribbean plate | C. Eurasian plate       |
| B. Antarctic plate | D. North American plate |
34. Wegener's continental drift theory suggests that at 245 million years a single landmass was surrounded by a sea called
- |              |                 |
|--------------|-----------------|
| A. Pangaea.  | C. Laurasia.    |
| B. Gondwana. | D. Panthalassa. |
36. When two tectonic plates slide past each other horizontally, the boundary between them is called a
- |                        |                         |
|------------------------|-------------------------|
| A. divergent boundary. | C. convergent boundary. |
| B. transform boundary. | D. subduction zone.     |
37. Tectonic movements are generally measured in \_\_\_\_ per year.
- |                |               |
|----------------|---------------|
| A. millimeters | C. meters     |
| B. centimeters | D. kilometers |
38. The Mariana trench is the deepest point in the oceans—11,033 m below sea level. This trench was formed at a \_\_\_\_ boundary, where one tectonic plate was subducted beneath the other.
- |              |                |
|--------------|----------------|
| A. divergent | C. convergent  |
| B. transform | D. strike-slip |

Examine the diagram below, and answer the questions that follow.



39. In the diagram above, which of the following has formed at A?
- |                      |                         |
|----------------------|-------------------------|
| A. an ocean trench   | C. a transform boundary |
| B. a mid-ocean ridge | D. none of the above    |

40. In the diagram above, which of the following has formed at **B**?
- A. a folded mountain
  - B. a fault-block mountain
  - C. a volcanic mountain
  - D. none of the above
41. In the diagram above, which type of boundary is occurring at **A**?
- A. a divergent boundary
  - B. a transform boundary
  - C. a strike-slip boundary
  - D. a convergent boundary
42. Sea-floor spreading occurs at which type of plate boundary?
- A. a divergent boundary
  - B. a transform boundary
  - C. a convergent boundary
  - D. all of the above
43. The type of collision that occurs when two tectonic plates converge is determined primarily by the \_\_\_\_\_ of the plate.
- A. density
  - B. mass
  - C. size
  - D. magnetism
44. Which of the following statements concerning magnetic reversal is NOT true?
- A. Magnetic reversals are recorded in rocks on the ocean floor.
  - B. The north and south magnetic poles have changed many times throughout Earth's history.
  - C. Magnetic mineral grains in rocks on the ocean floor all point in the same direction.
  - D. none of the above
45. Which of the following was NOT used as evidence to support the theory of continental drift?
- A. the existence of convection currents
  - B. the similarity of fossils found on continental coasts
  - C. the close fit of continental coastlines
  - D. the matching of glacial grooves on different continents