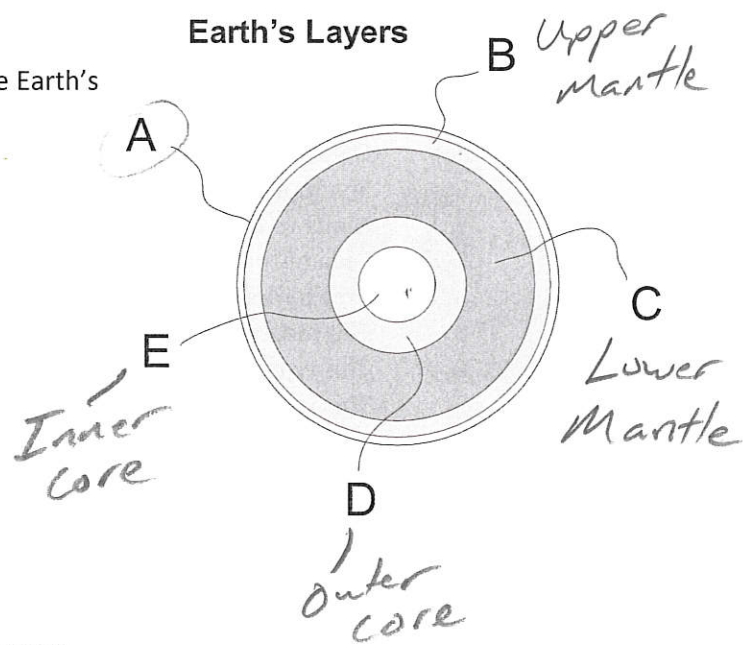


Plate Tectonics Practice Test

The following questions refer to the diagram on the right.

1. Which layer has convection currents that cause the Earth's plates to move?
A B C D E
2. Which layer is the upper mantle?
A B C D E
3. Which layer is the lithosphere?
A B C D E *crust*
4. Which layer is most dense?
A B C D E
5. Which layer contains mostly liquid iron?
A B D E

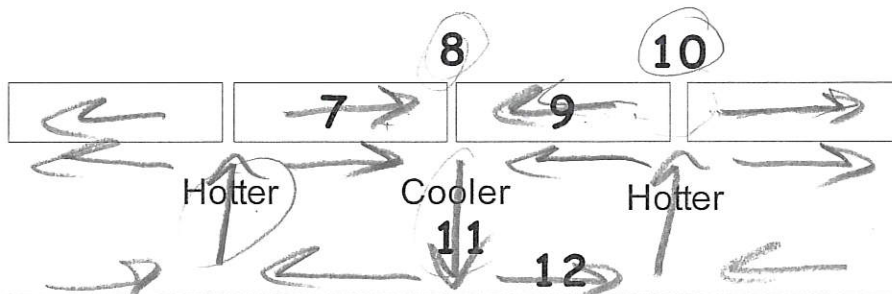


6. Why is the inside of the Earth hot? Provide two reasons.

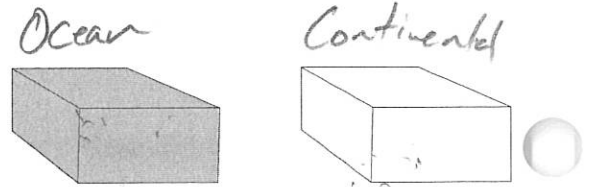
- Radioactive Rocks
- Friction from dense material sinking to core
- Pressure
- Collisions ~~underneath~~ during Earth's formation

The diagram below shows several plates that are floating on the Earth's surface. The gap between each plate represents a plate boundary. Material flowing below the Earth's surface cannot pass beneath the bottom line. Sketch the plate and mantle movements and then answer the questions.

7. In which direction is the plate moving at position 7? ↑ ↓ ← →
8. What type of plate boundary exists at position 8? a. convergent b. divergent c. transform
9. In which direction is the plate moving at position 9? ↑ ↓ ← →
10. What type of plate boundary exists at position 10? a. convergent b. divergent c. transform
11. In which direction is the earth material flowing at position 11? ↑ ↓ ← →
12. In which direction is the earth material flowing at position 12? ↑ ↓ ← →



13. The diagram on the right shows chunks of two types of crust. One represents continental crust, and the other represents ocean crust. Label them correctly.



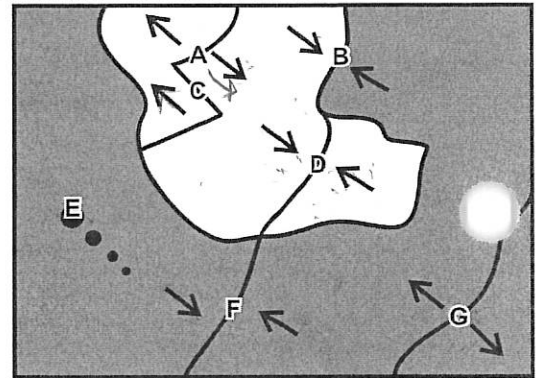
Match each description to the appropriate type of crust. Choices:

A = Continental Crust B = Ocean Crust

- | | <i>Cont</i> | <i>Ocean</i> | |
|-----|-------------|--------------|--|
| 14. | A | B | Darker in color/shade |
| 15. | A | B | Seafloor sediment contains a lot of this type of material. |
| 16. | A | B | Melts to become low viscosity (runny) lava. |
| 17. | A | B | Lava of this type does not pile up. It forms low, rounded volcanoes. |
| 18. | A | B | An example of this rock type is called <u>basalt</u> . |
| 19. | A | B | The most explosive volcanoes have some of this type of lava. |
| 20. | A | B | This type of lava can pile up to form steep volcanoes. |
| 21. | A | B | This is the least dense type of crust. |

Match each feature name to the corresponding feature on the plate map on the right. You can also refer to the incomplete plate drawings on page 3.

- | | | | | | | | | |
|-----|---|---|---|---|---|---|---|--------------------------------|
| 22. | A | B | C | D | E | F | G | Ocean/Ocean Divergent |
| 23. | A | B | C | D | E | F | G | Ocean/Ocean Convergent |
| 24. | A | B | C | D | E | F | G | Continent/Continent Convergent |
| 25. | A | B | C | D | E | F | G | Continent/Continent Divergent |
| 26. | A | B | C | D | E | F | G | Ocean/Continent Convergent |
| 27. | A | B | C | D | E | F | G | Hotspot |
| 28. | A | B | C | D | E | F | G | Transform Boundary |



Each of the real-world locations below forms in an area that is similar to one of the lettered locations on the map. Match each real-world location to its corresponding map location.

- | | | | | | | | | |
|-----|---|---|---|---|---|---|---|---------------------------------|
| 29. | A | B | C | D | E | F | G | Hawaii |
| 30. | A | B | C | D | E | F | G | East Africa |
| 31. | A | B | C | D | E | F | G | Japan |
| 32. | A | B | C | D | E | F | G | Mid-Atlantic Ridge |
| 33. | A | B | C | D | E | F | G | Himalayas (Mt. Everest) |
| 34. | A | B | C | D | E | F | G | Andes Mountains (South America) |
| 35. | A | B | C | D | E | F | G | San Andreas Fault, California |

- Ocean crust

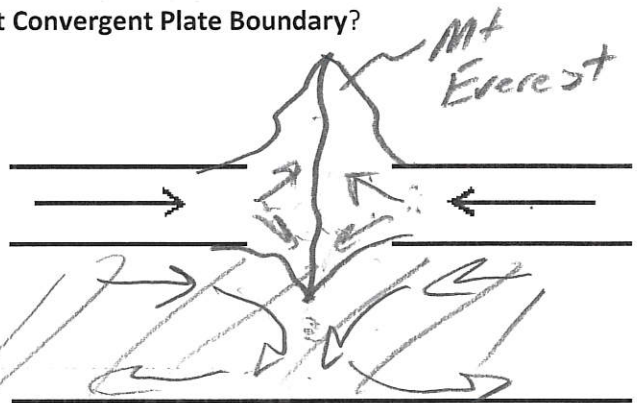
- Continental crust

Quiz 3 Practice: Plate Tectonics

Place a check (or an X) next to each of the true statements for each type of plate boundary (or hotspot)

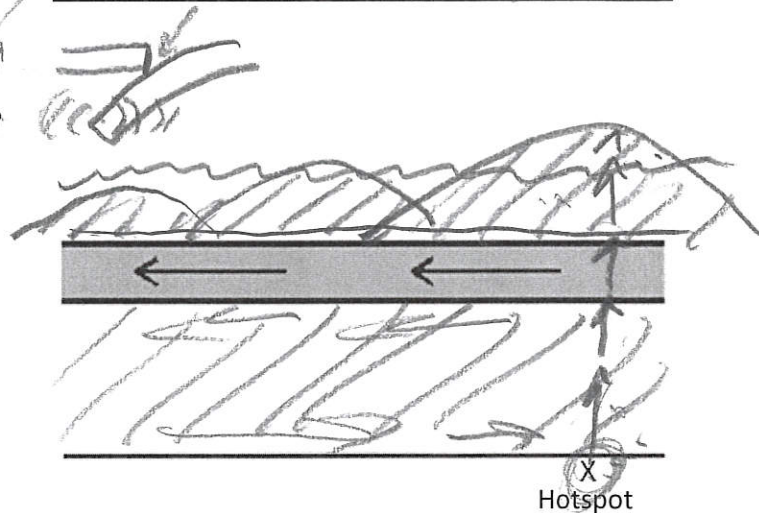
1. Which statements are true about a **Continent/Continent Convergent Plate Boundary**?

- a. Relatively gentle eruptions may occur.
- b. Very violent eruptions may occur.
- c. Rounded, shield volcanoes exist here.
- d. Steep composite cone volcanoes exist here.
- e. Situated over a **hotter** part of the mantle
- f. Shallow-focus earthquakes may occur.
- g. New ocean crust is being created here.
- h. There is an ocean trench.
- i. There are tall mountains but no volcanoes.
- j. There is a subduction zone.



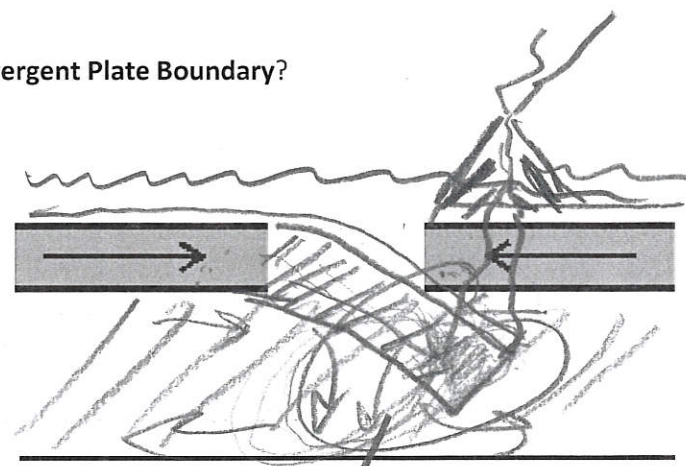
2. Which statements are true about an **Ocean Hotspot**?

- a. Relatively gentle eruptions may occur.
- b. Very violent eruptions may occur.
- c. Rounded, shield volcanoes exist here.
- d. Steep composite cone volcanoes exist here.
- e. Situated over a **hotter** part of the mantle
- f. Shallow-focus earthquakes may occur.
- g. Deep-focus earthquakes may occur.
- h. There is an ocean trench.
- i. There are tall mountains but no volcanoes.
- j. There is a subduction zone.



3. Which statements are true about an **Ocean/Ocean Convergent Plate Boundary**?

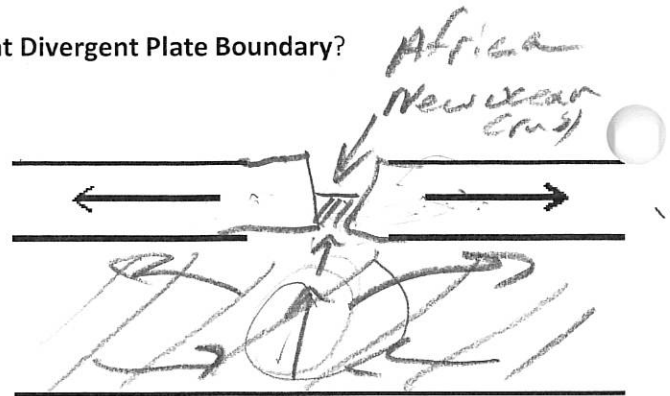
- a. Relatively gentle eruptions may occur.
- b. Very violent eruptions may occur.
- c. Rounded, shield volcanoes exist here.
- d. Steep composite cone volcanoes exist here.
- e. Situated over a **hotter** part of the mantle
- f. Shallow-focus earthquakes may occur.
- g. Deep-focus earthquakes may occur.
- h. New ocean crust is being created here.
- i. There is an ocean trench.
- j. There are tall mountains but no volcanoes.
- k. There is a subduction zone.



Subduction

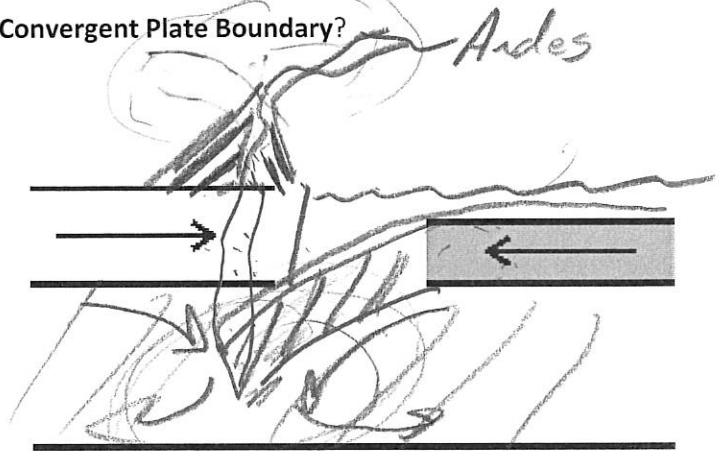
4. Which statements are true about a **Continent/Continent Divergent Plate Boundary**?

- a. Relatively gentle eruptions may occur.
- b. Situated over a **hotter** part of the mantle
- c. Shallow-focus earthquakes may occur.
- d. Deep-focus earthquakes may occur.
- e. New ocean crust is being created here.
- f. There is an ocean trench.
- g. There are tall mountains but no volcanoes.
- h. There is a subduction zone.



5. Which statements are true about a **Continent/Ocean Convergent Plate Boundary**?

- a. Relatively gentle eruptions may occur.
- b. Very violent eruptions may occur.
- c. Rounded, shield volcanoes exist here.
- d. Steep composite cone volcanoes exist here.
- e. Situated over a **hotter** part of the mantle
- f. Shallow-focus earthquakes may occur.
- g. Deep-focus earthquakes may occur.
- h. New ocean crust is being created here.
- i. There is an ocean trench.
- j. There are tall mountains but no volcanoes.
- k. There is a subduction zone.



6. Which statements are true about a **Transform Plate Boundary**?

- a. Rounded, shield volcanoes exist here.
- b. Steep composite cone volcanoes exist here.
- c. Situated over a **hotter** part of the mantle
- d. Shallow-focus earthquakes may occur.
- e. Deep-focus earthquakes may occur.
- f. New ocean crust is being created here.
- g. There is an ocean trench.
- h. There are tall mountains but no volcanoes.
- i. There is a subduction zone.



7. Which statements are true about an **Ocean/Ocean Divergent Plate Boundary**?

- a. Relatively gentle eruptions may occur.
- b. Very violent eruptions may occur.
- c. Rounded, shield volcanoes exist here.
- d. Steep composite cone volcanoes exist here.
- e. Situated over a **hotter** part of the mantle
- f. Shallow-focus earthquakes may occur.
- g. Deep-focus earthquakes may occur.
- h. New ocean crust is being created here.
- i. There is an ocean trench.
- j. There are tall mountains but no volcanoes.
- k. There is a subduction zone.

