

2.3 Test Review Plate Tectonics

Standard 2.3

Handout 1 (blue) Plate Tectonics

#'s 6, 7, 16, 18, 21, 22, 24, 25, 26, 29, 30

Handout 2 (salmon) Plate Tectonics

#'s 8, 10, 11, 12, 13, 16, 17, 18, 28, 30, 31, 38

Handout 1 (blue) Plate Tectonics
#’s 6, 7, 16, 18, 21, 22, 24, 25, 26, 29, 30

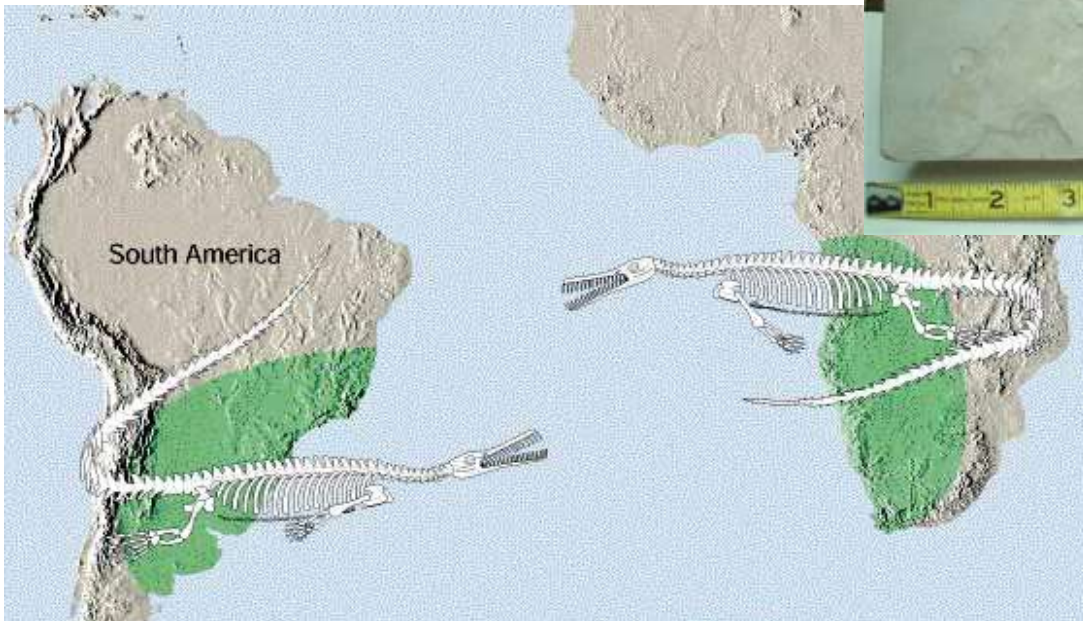
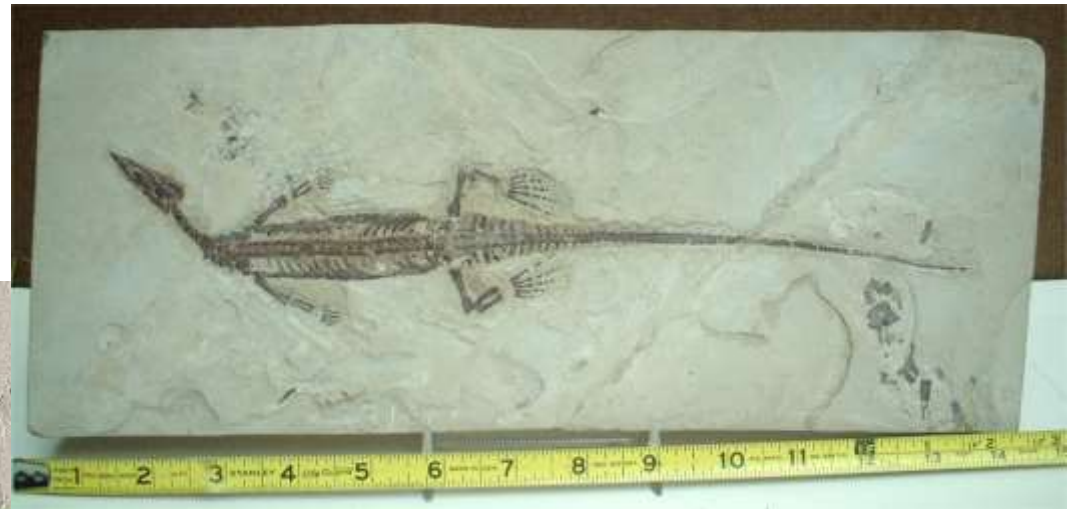
6. Why was Wegener interested in finding fossils of the same plants and animals on two different continents?

- If the continents had once been joined, fossils of the same plants and animals should be found in areas that had once been connected.

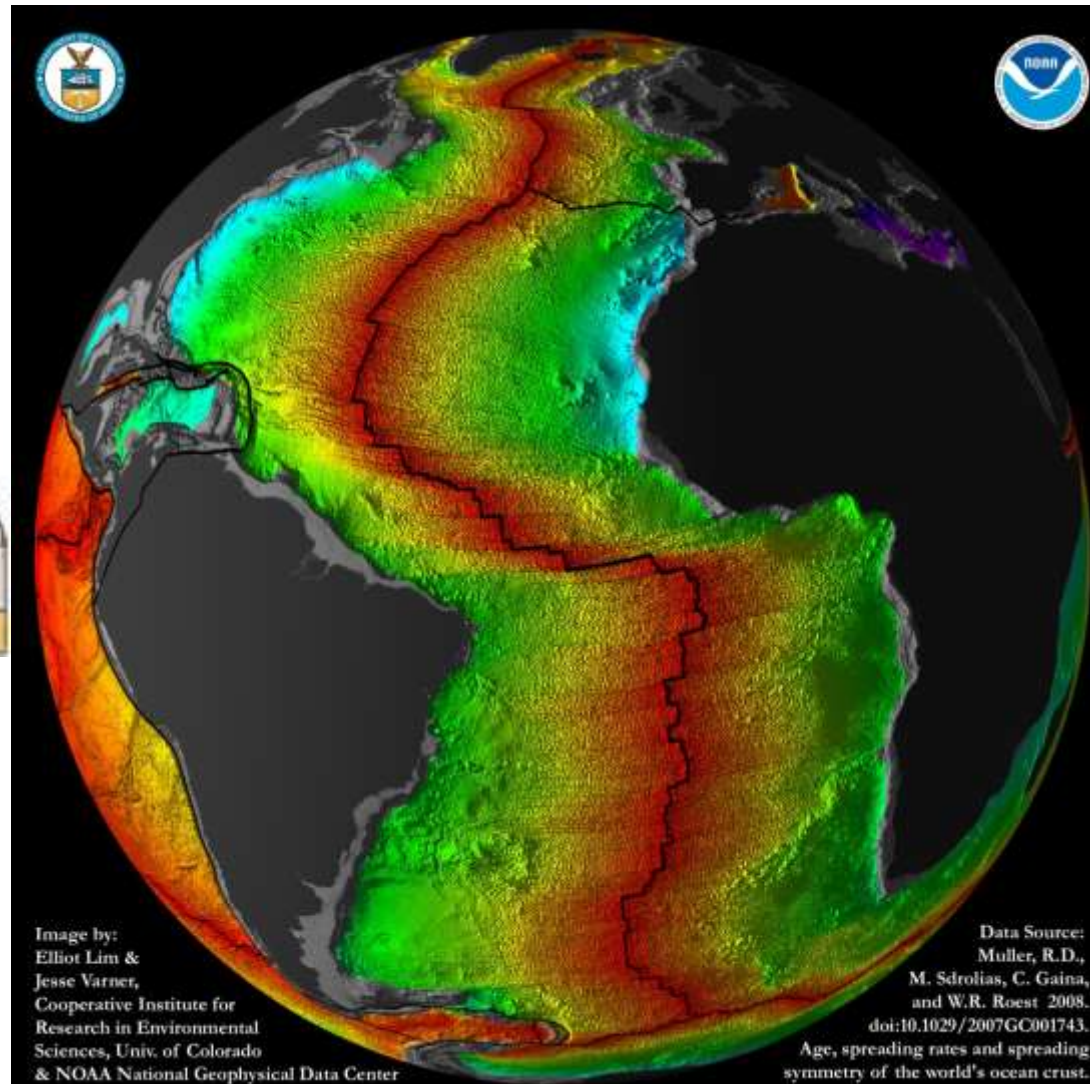
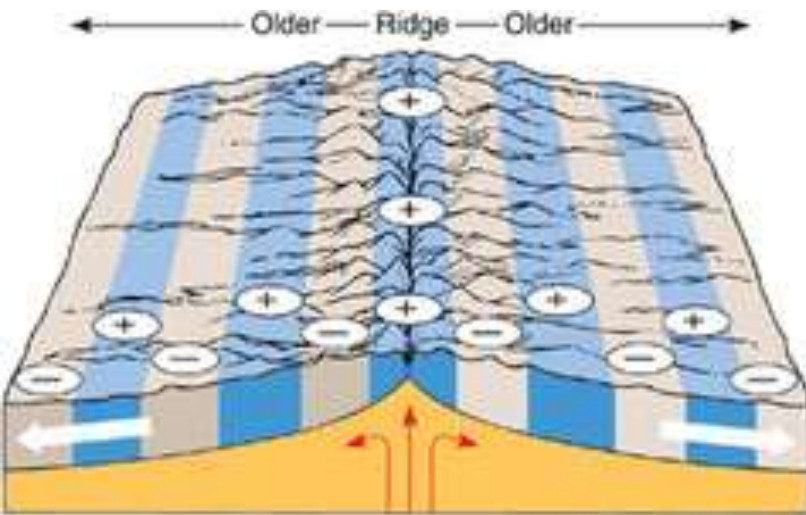


7. Where were the fossils from the extinct land reptile called *Mesosaurus* found?

- They were found in both South America and western Africa

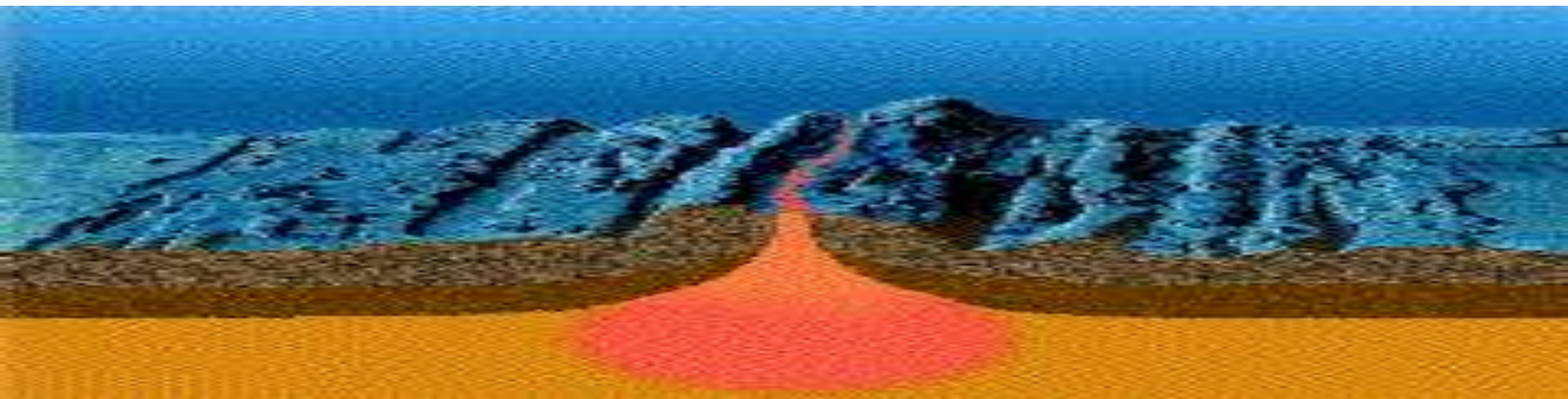


16. Compared to rocks farther from a ridge, rocks closer to a ridge are younger.

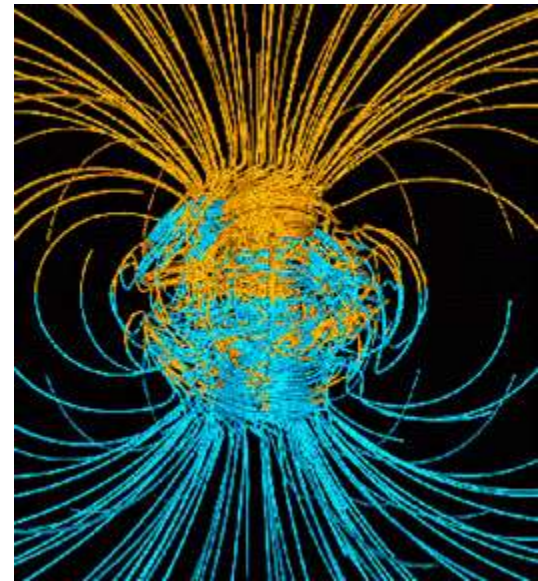
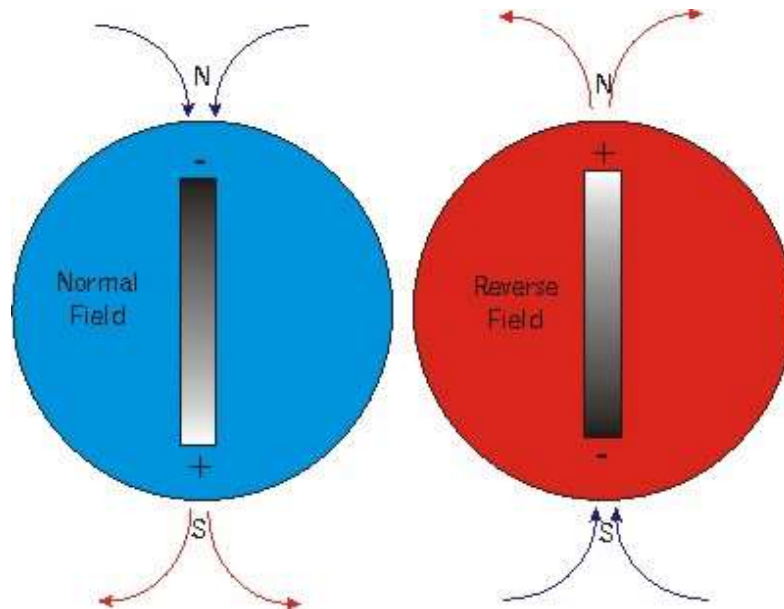
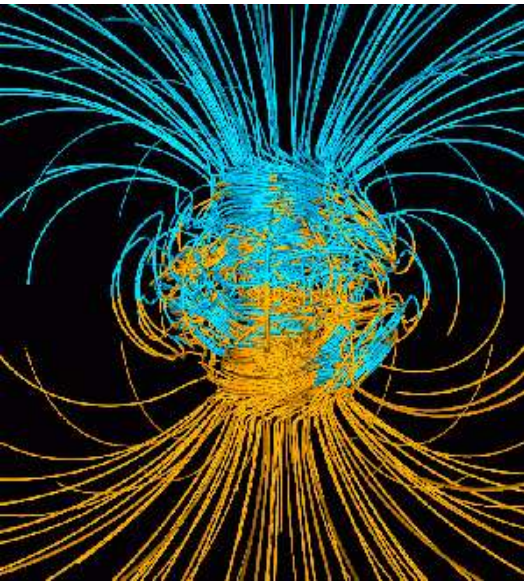


18. Describe the process of sea-floor spreading.

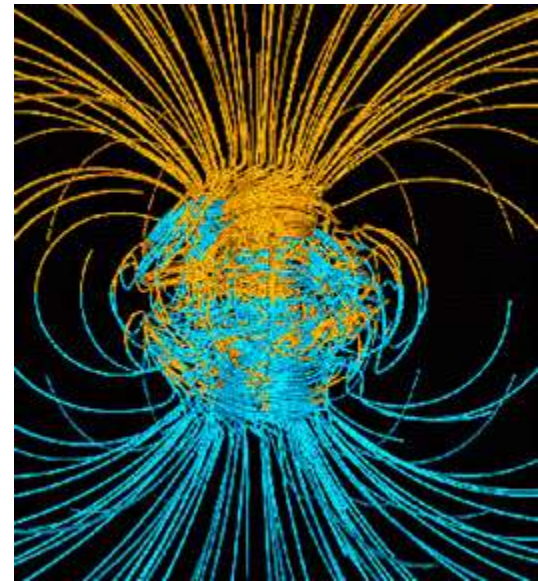
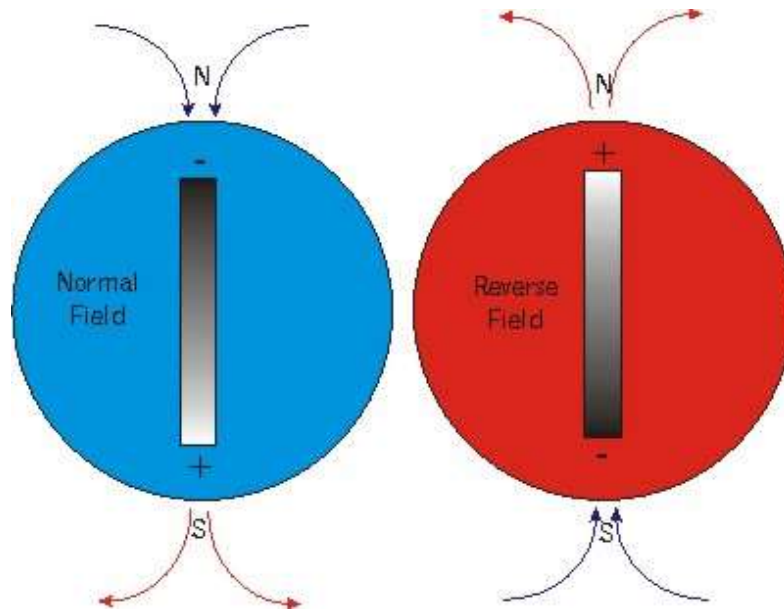
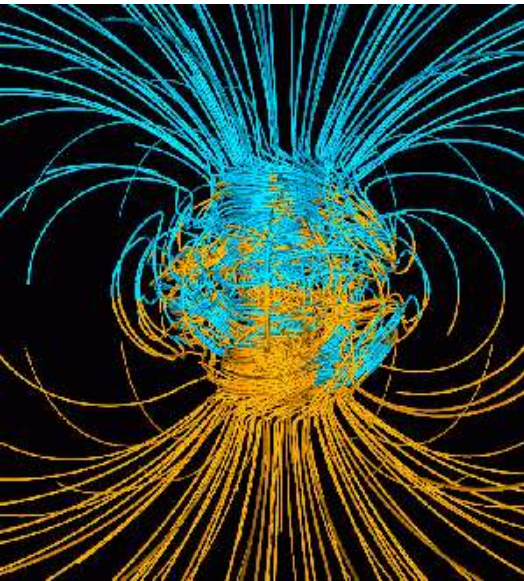
- The process by which new oceanic lithosphere (sea floor) forms as magma rises to Earth's surface and solidifies at a mid-ocean ridge.



21. Rocks with magnetic fields that point north have normal polarity.

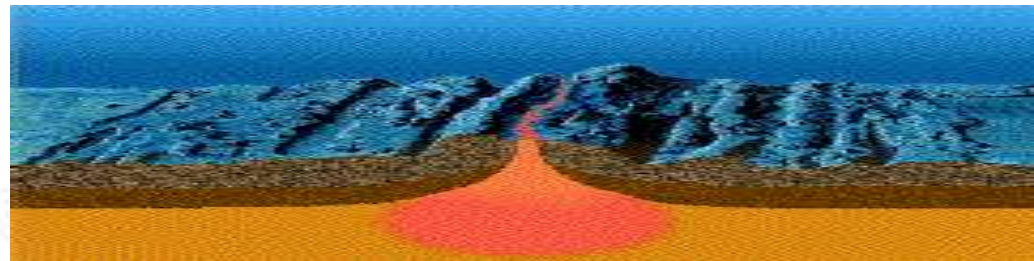
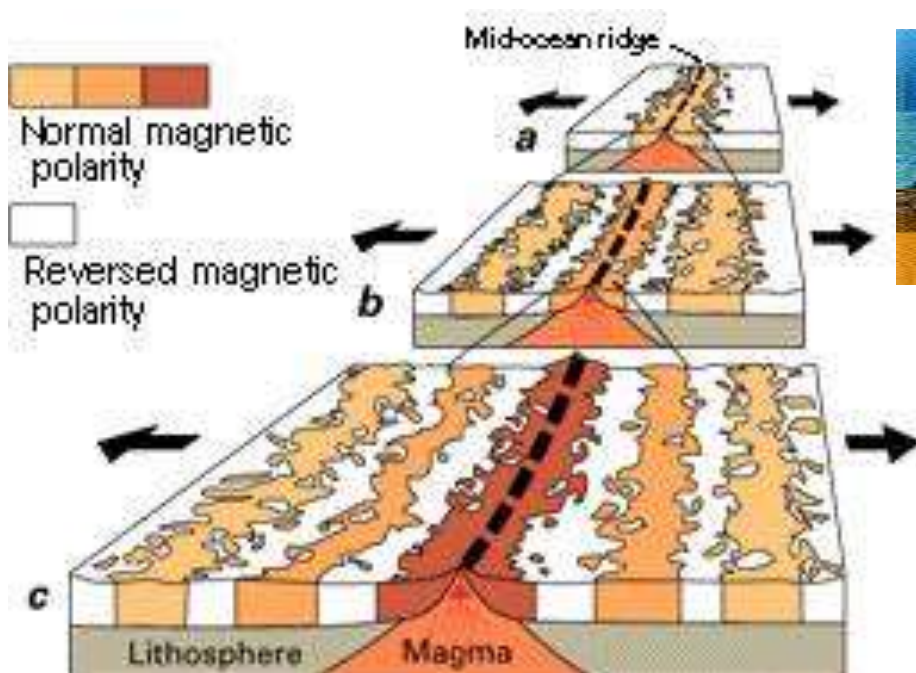


22. Rocks with magnetic fields that point south have reversed polarity.



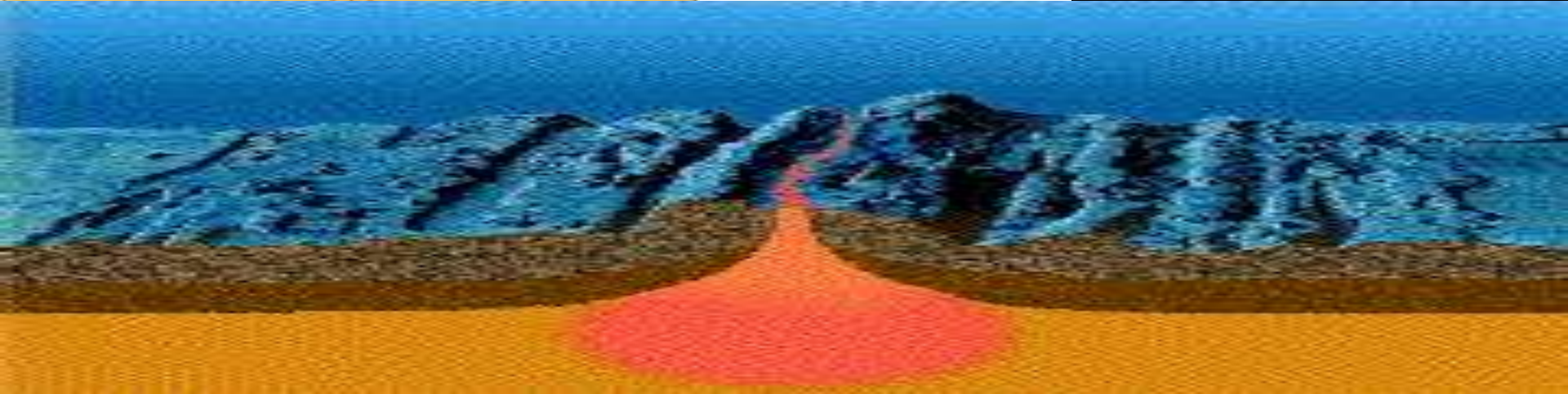
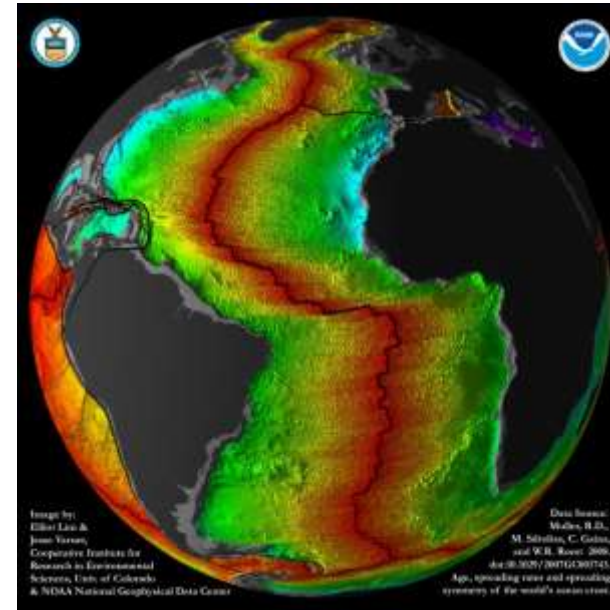
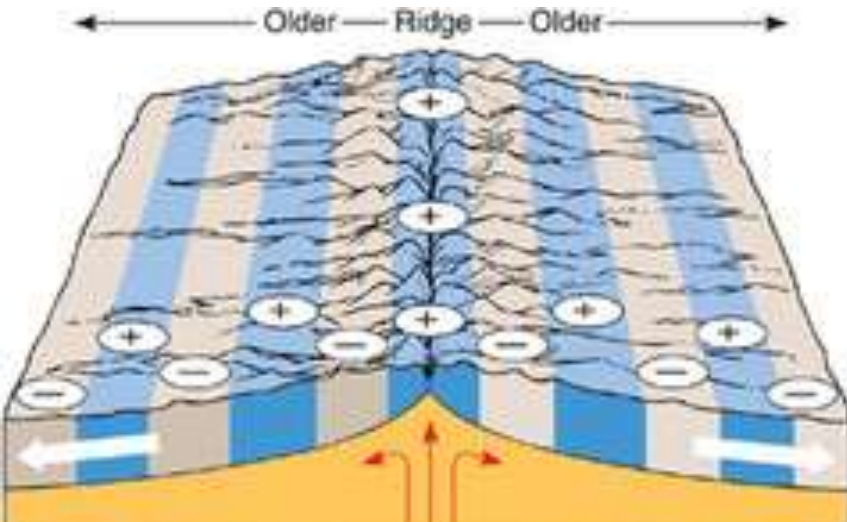
24. What did scientists think happened to cause the magnetic patterns they found?

- Scientists suggested that as new sea floor forms at a mid-ocean ridge, the new sea floor records reversals in Earth's magnetic field.



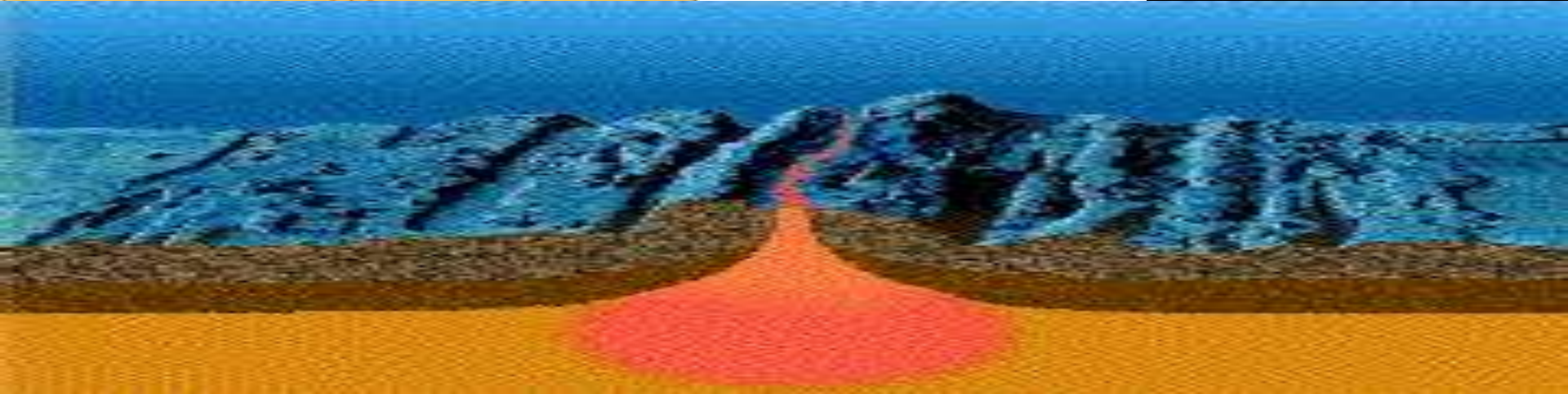
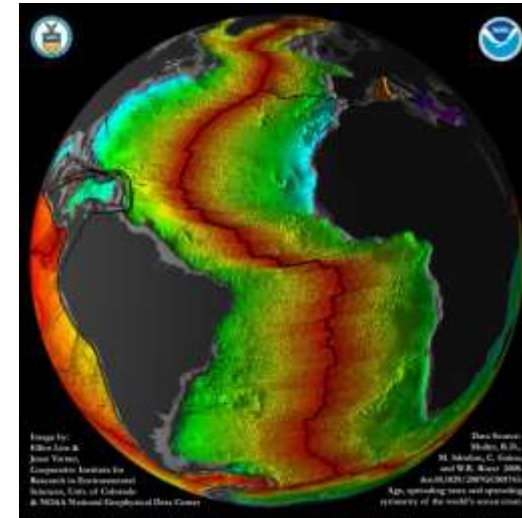
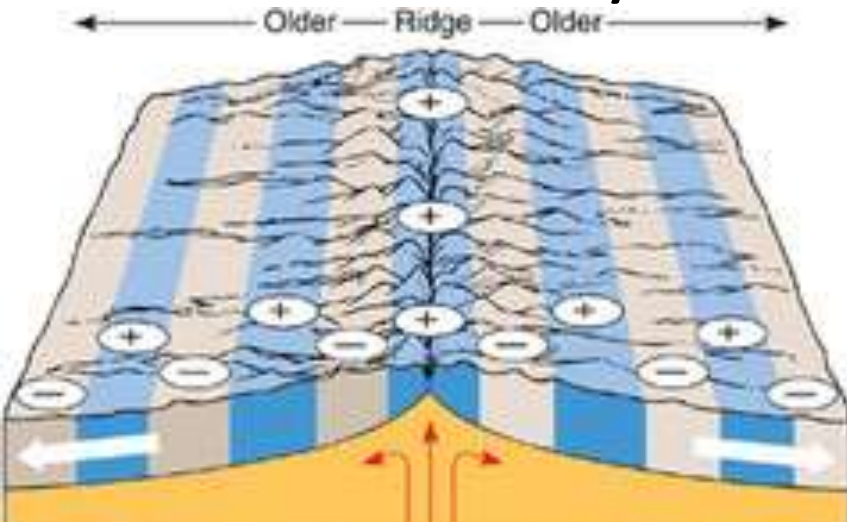
25. Where were the youngest rocks on the sea floor?

- At the center of the ridge



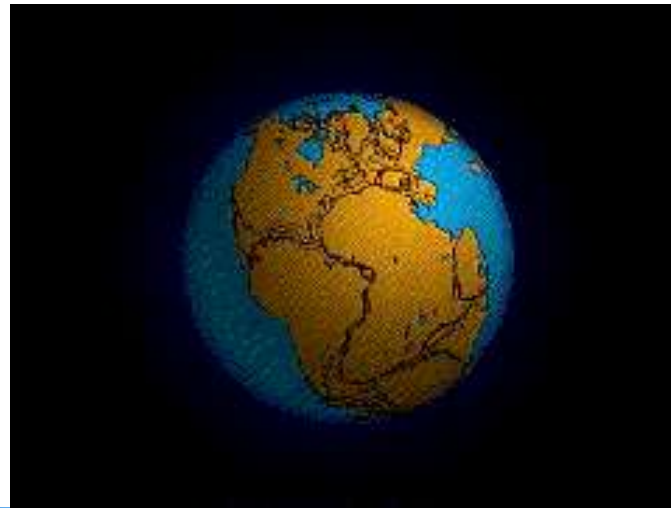
26. Where were the older rocks on the sea floor?

- Farther away on either side of the ridge.

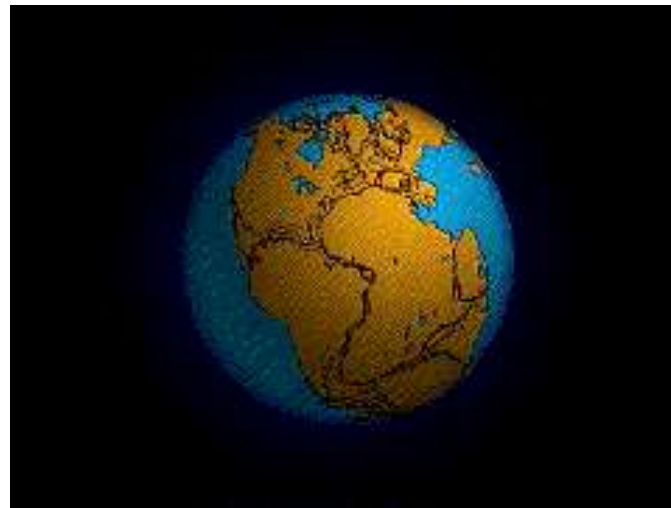


29. Continents move over Earth's surface

- By the widening sea floor, which acts as a conveyor belt.



30. The mechanism that verifies Wegener's hypothesis of continental drift is Sea-floor spreading.

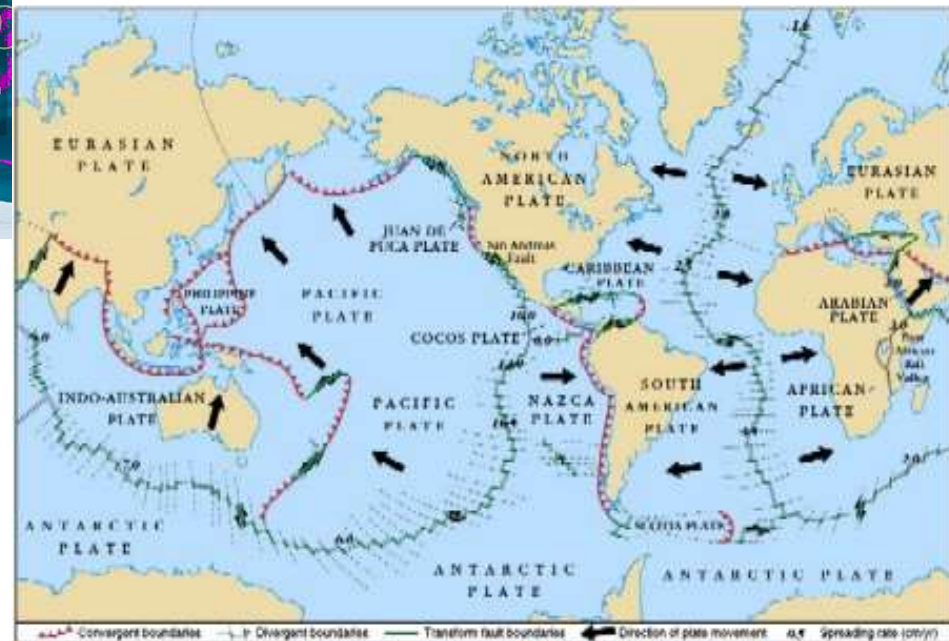
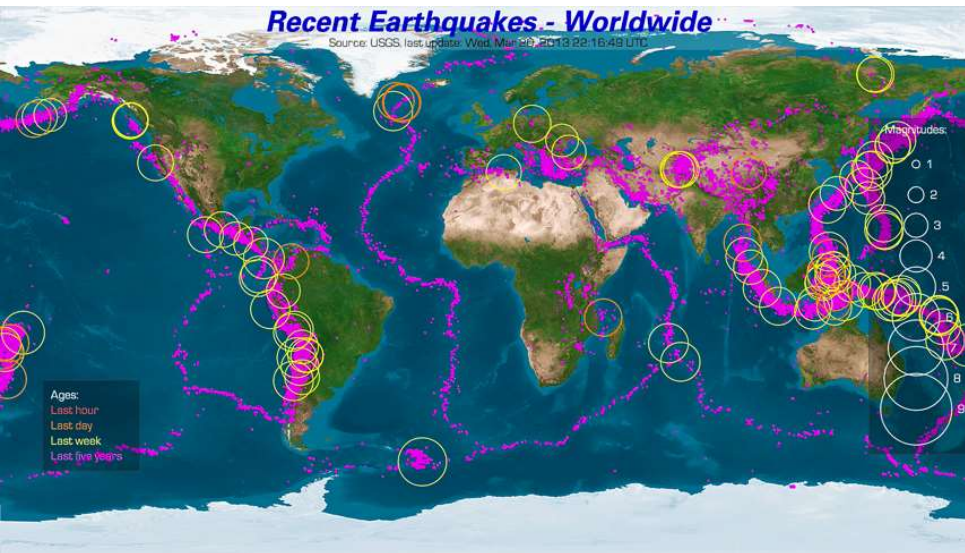


Handout 2 (salmon) Plate Tectonics

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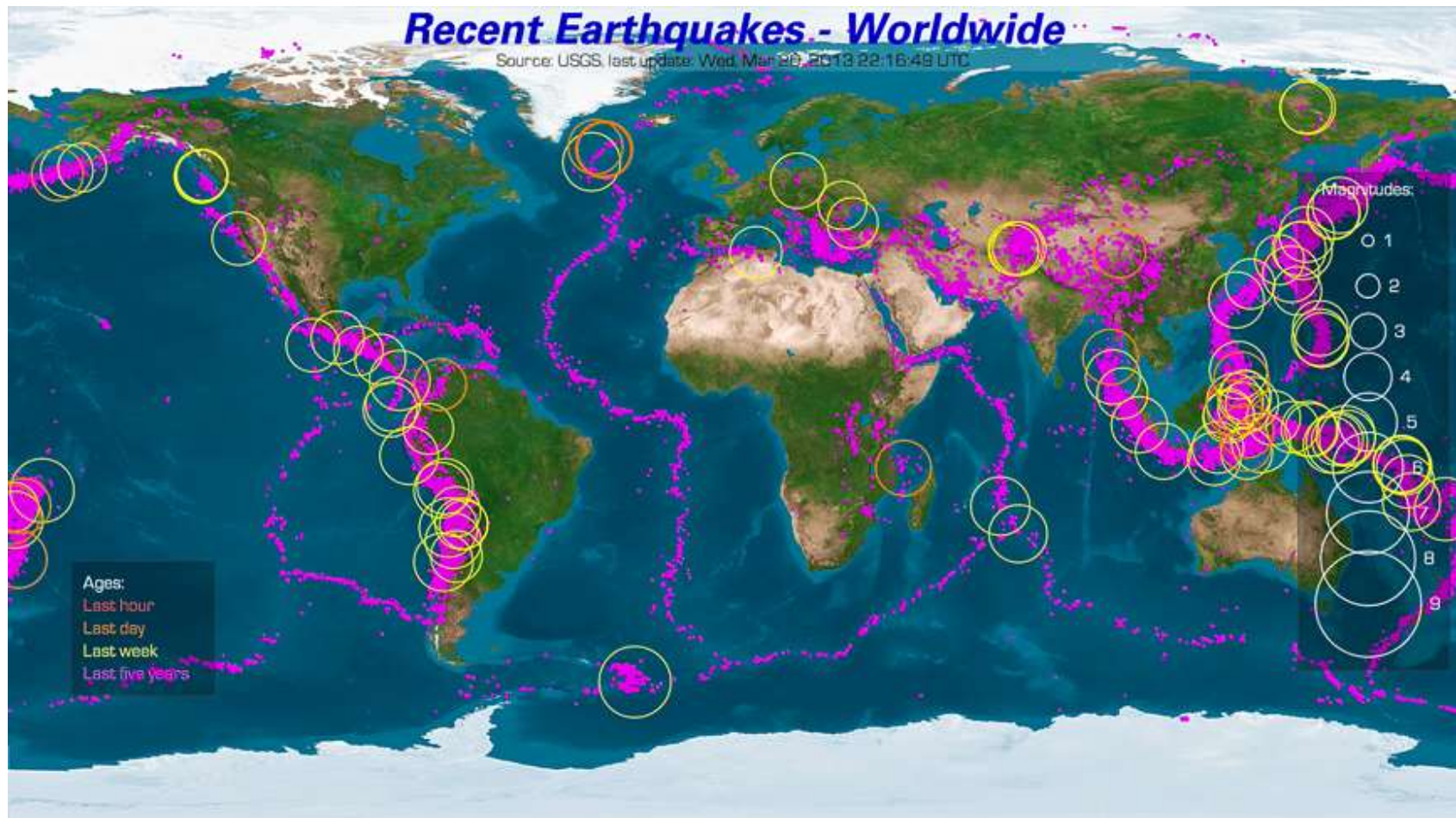
8. How do scientists identify plate boundaries?

- By studying data from earthquakes



10. Frequent earthquakes in a given zone are evidence that

- Two or more plates may meet in the area.



Matching 11-

11. divergent

a. boundary between tectonic plates that are sliding past each other horizontally

12. convergent

b. region where one plate moves under another

13. transform

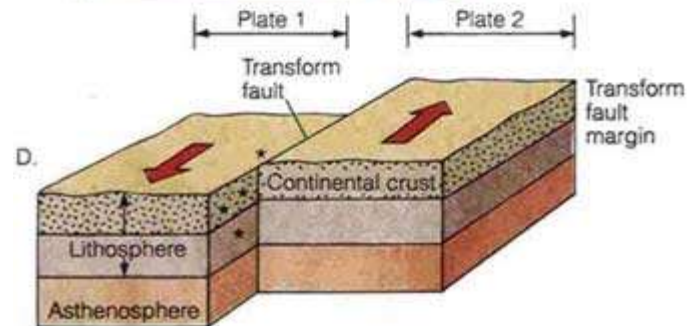
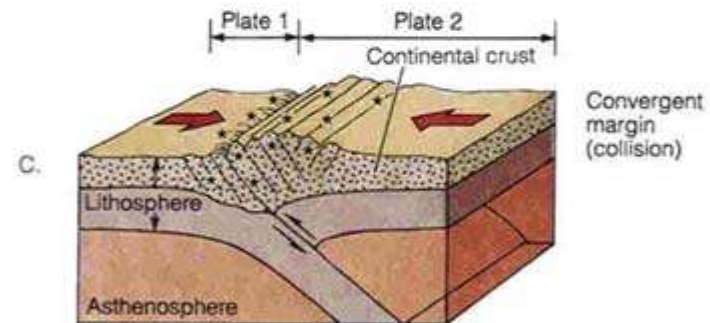
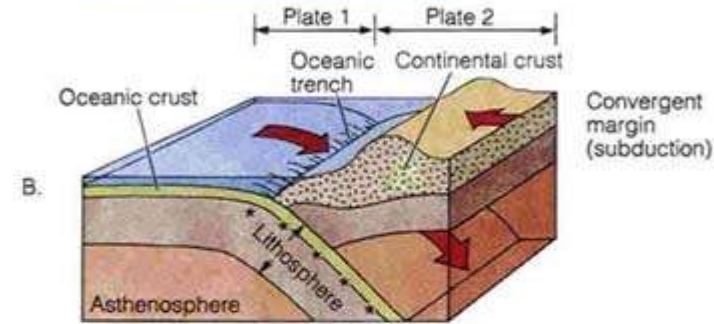
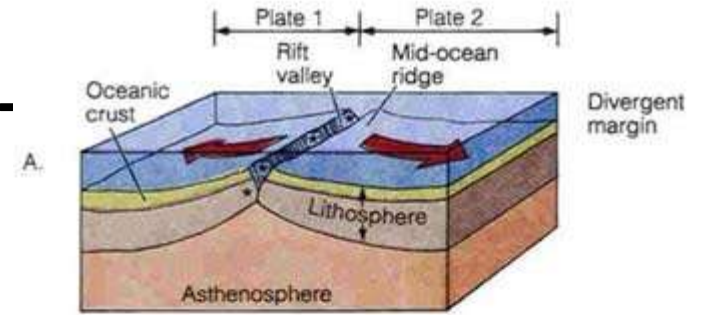
c. boundary between tectonic plates that are moving away from each other

14. mid-ocean ridge

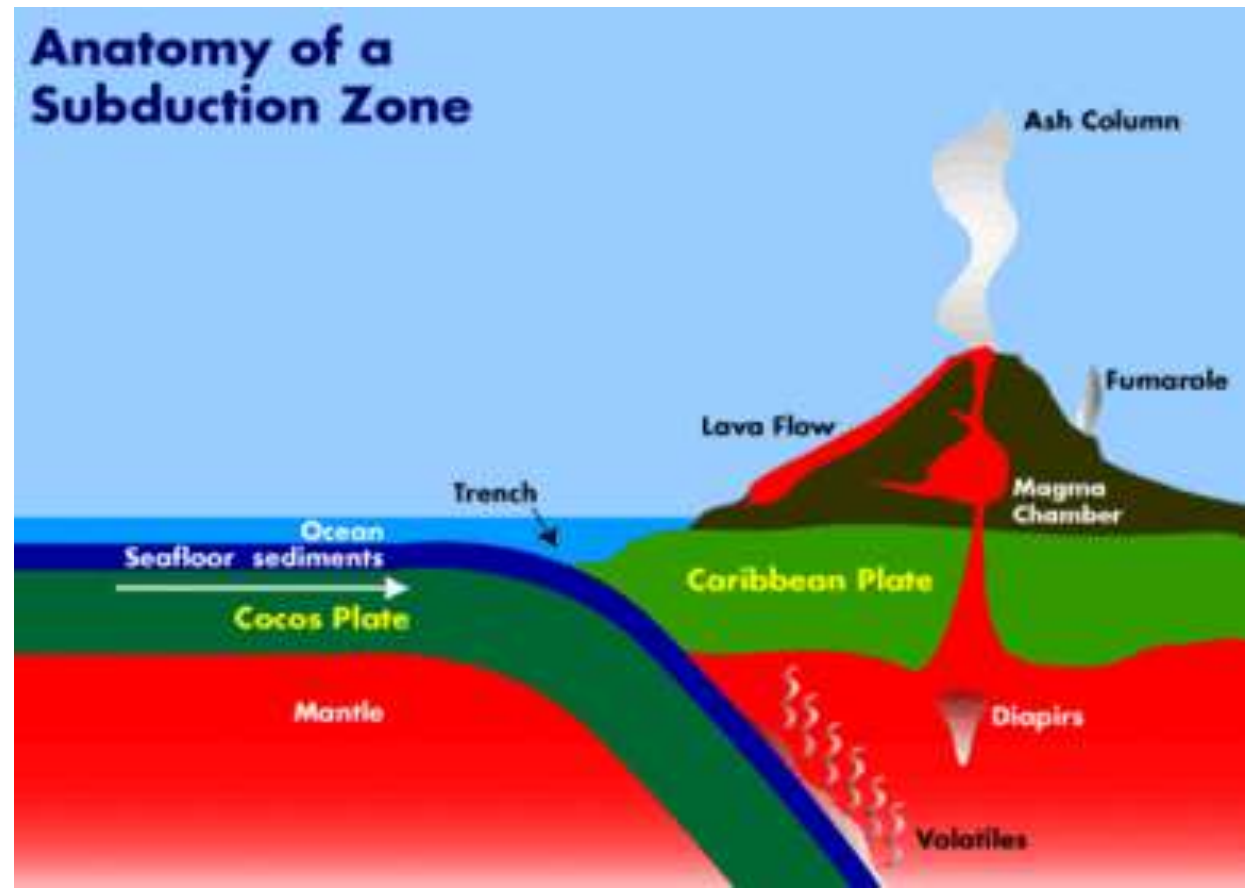
d. undersea mountain range

15. subduction zone

e. the boundary between tectonic plates that are colliding

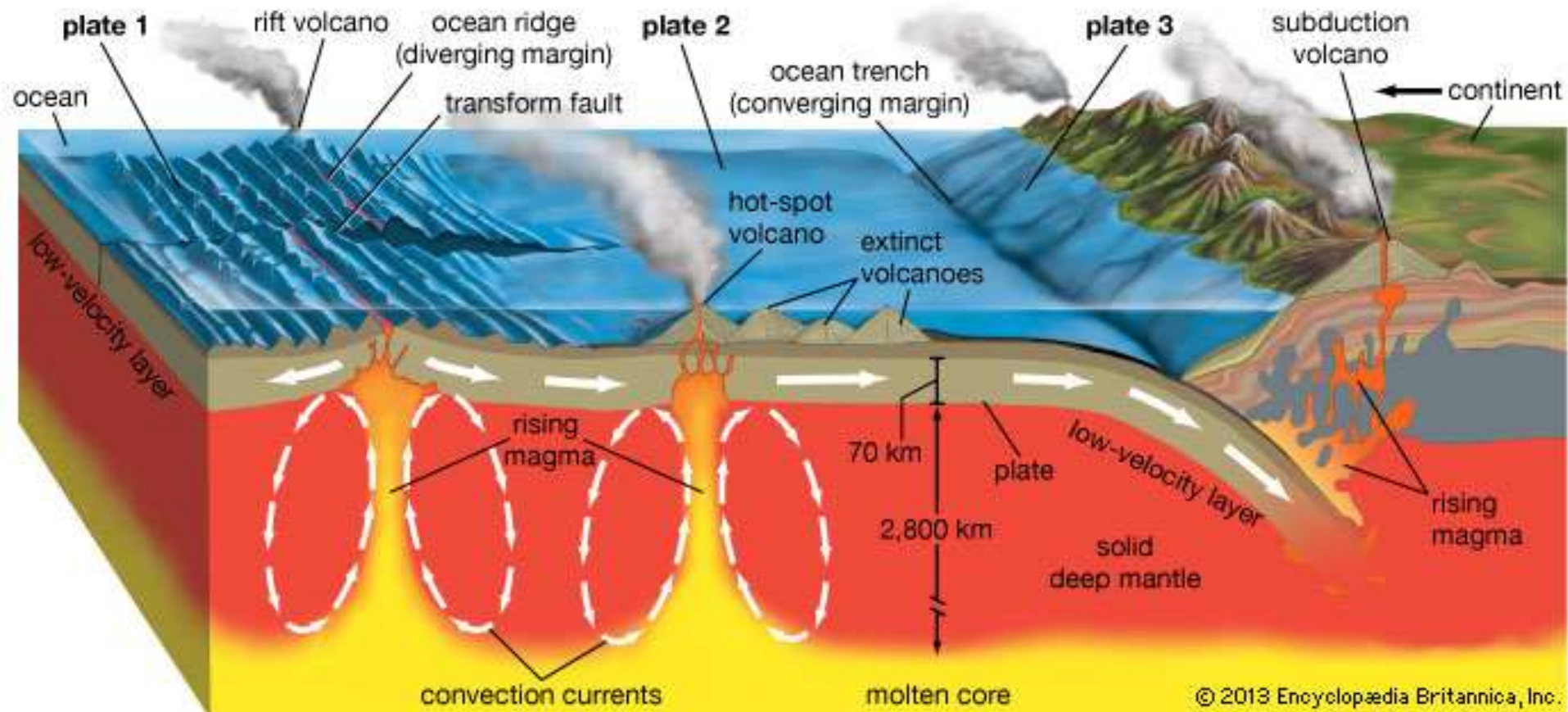


16. When oceanic lithosphere collides with continental lithosphere, the oceanic lithosphere is denser than the continental lithosphere, so it sinks, or subducts.

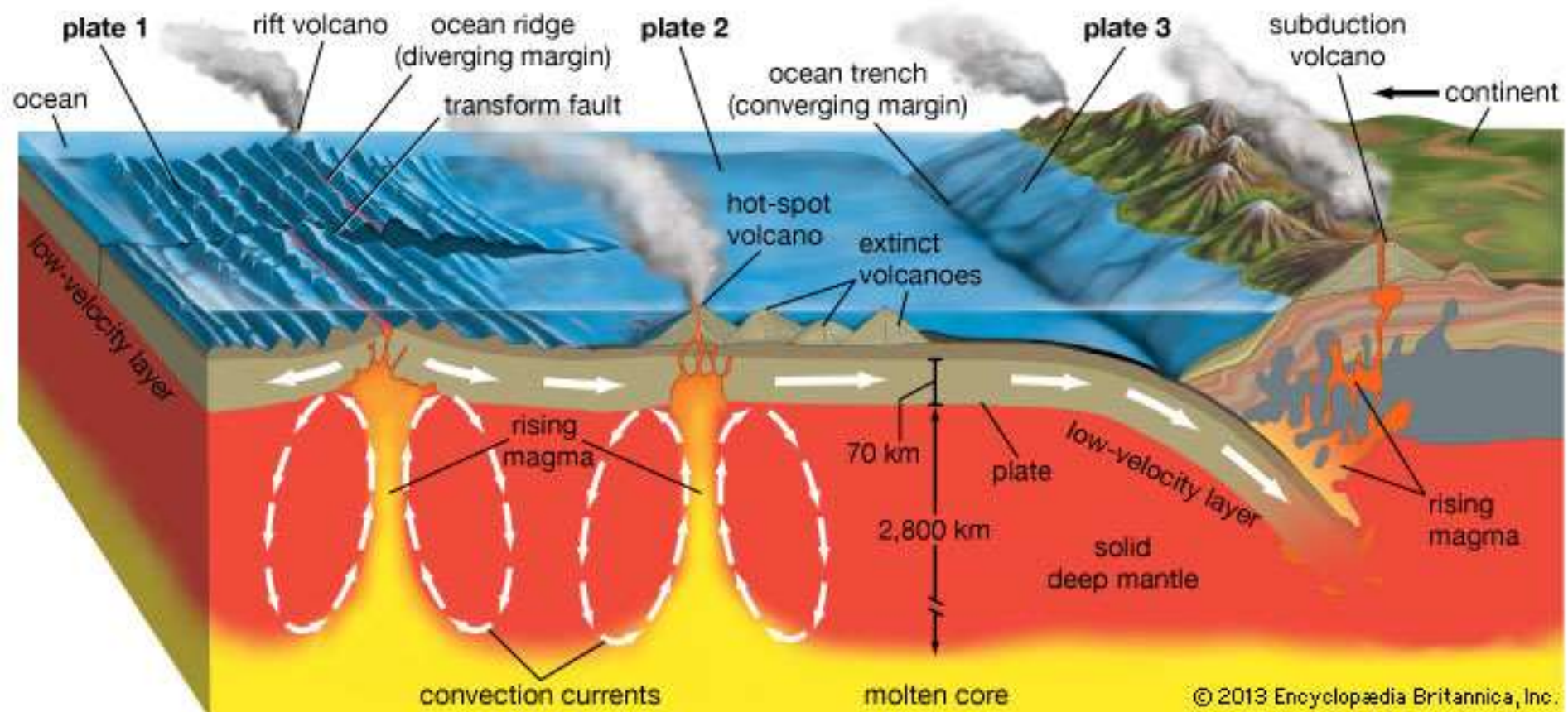


17. What deep-ocean feature forms at subduction zones?

- deep-ocean trench

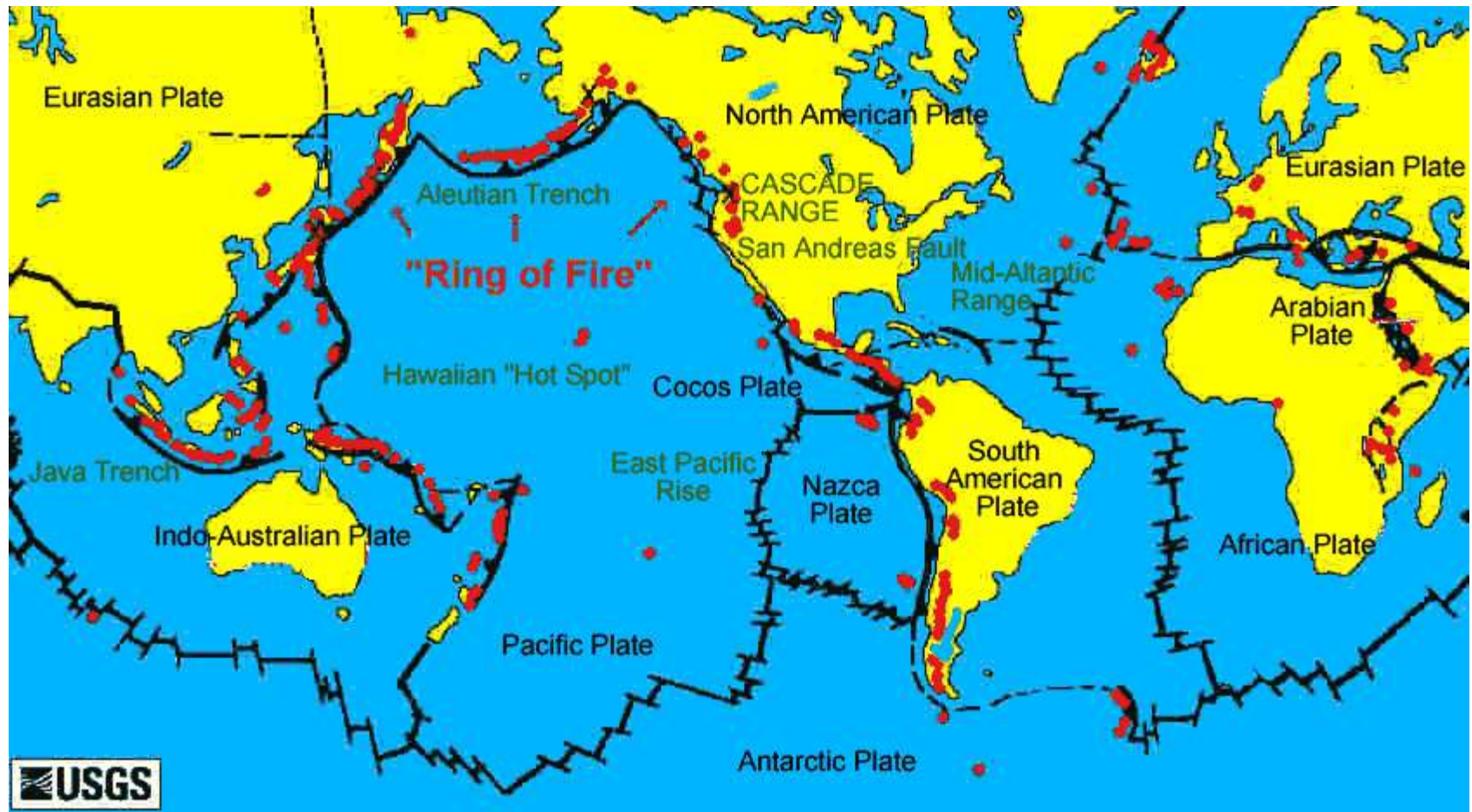


18. As the oceanic plate subducts, it releases fluids into the mantle, causing magma to form and rise to the surface, forming volcanic mountains .



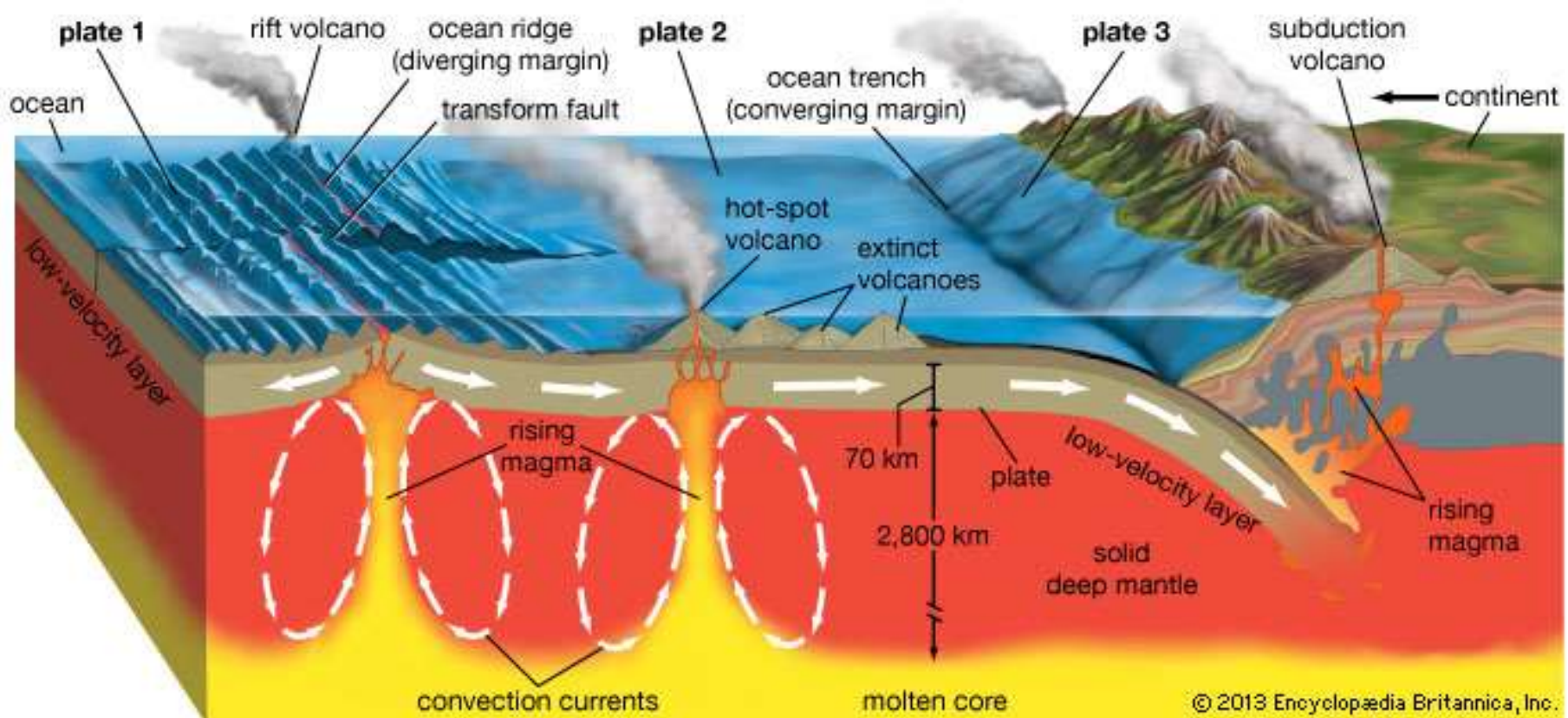
28. A major zone of active volcanoes encircling the Pacific Ocean is called

- c. the Pacific Ring of Fire.



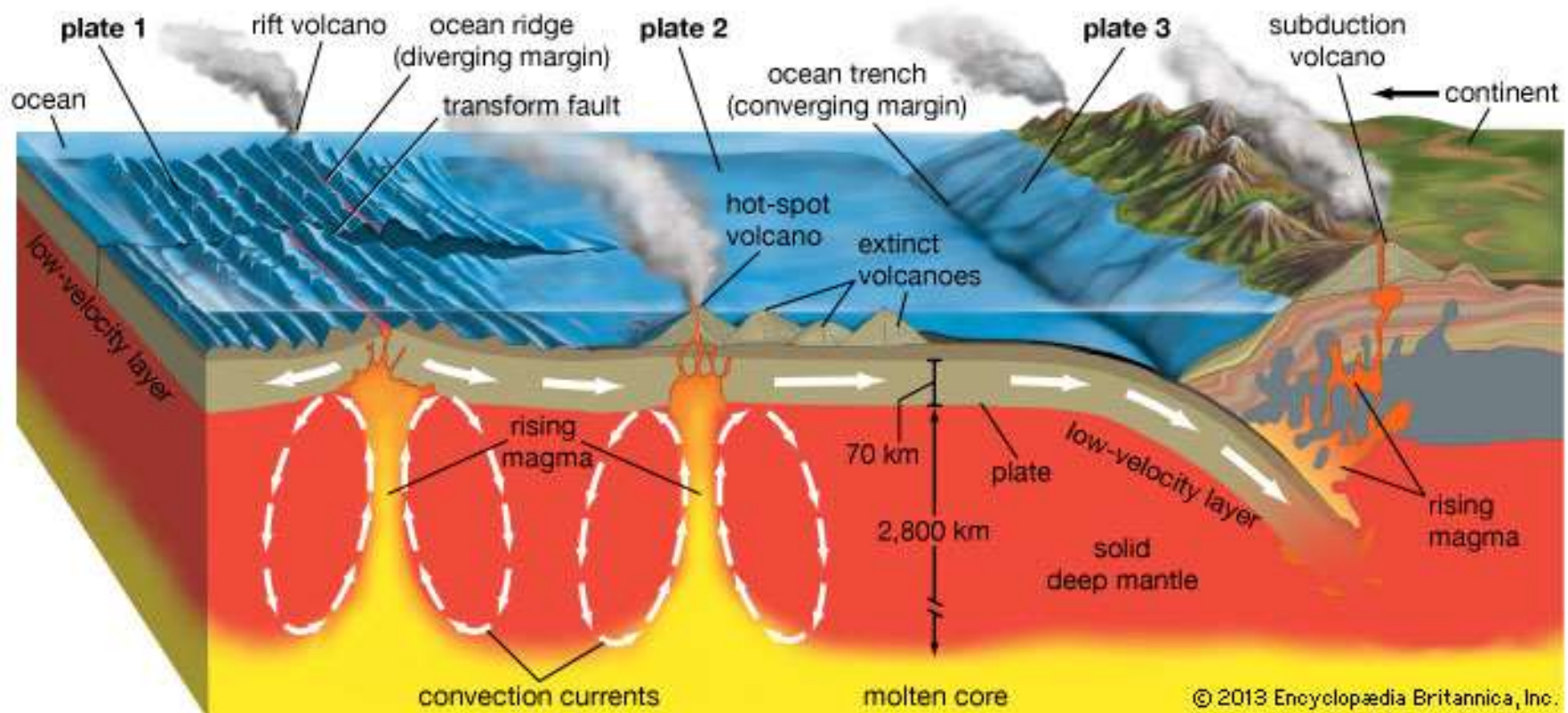
30. One tectonic plate moves under another along a(n)

- **b.** subduction zone.



31. On the ocean floor, along the edge of the continent where the plate is subducted,

- **a.** a deep trench forms.



38. Describe what happens to volcanic activity when the lithospheric plate above a mantle plume continues to drift.

- When the lithospheric plate above the mantle plume begins to drift, the volcano on the surface drifts too, and the volcano is carried away from the mantle plume. The activity of the old volcano stops, and a new volcano forms over the mantle plume.