

Plate Tectonics Self-Test: 15 questions

Special Instructions:

Using your mouse, click on the one, BEST answer. Upon completion of the exam, click the SUBMIT button, and the exam will be graded for you. You will also have the opportunity to review how well you answered each question.

1. At convergent plate boundaries of oceanic and continental crust

- oceanic crust is subducted
- continental crust is subducted
- oceanic crust is created
- no associated volcanism occurs
- crustal rifting occurs

2. Magnetic stripes were found to be symmetrical about:

- the magnetic South Pole
- the geographic South Pole
- the San Andreas Fault
- the Rocky Mountains
- the Mid-Atlantic oceanic ridge

3. One remarkable realization associated with the discovery of seafloor spreading was that:

- the crust of continents is denser than that of oceans
- mountains are denser than the mantle
- compared to continents, the crustal floor of the oceans is very young
- the Earth's magnetic field arises from the upper mantle
- the Earth's magnetic field is restricted to oceanic ridges

4. Which one of the following statements best defines Pangaea?:

- all of the Earth's continental masses together
- all of the continents of the Southern Hemisphere, only
- all of the continents of the Northern Hemisphere, only

- Africa, Madagascar, and the Indian subcontinent, only
- Europe, Greenland, and North America, only

5. Magnetic reversals:

- have not been encountered in the geologic record
- cannot be detected in the remanent magnetism of rocks
- occur when the Earth's rotational poles flip in position
- are recorded in rocks forming at locations worldwide
- cannot be utilized to date rocks

6. Which one of the following plate boundary types is responsible for the Cascade volcanic chain?:

- continental-continental
- continental-oceanic
- oceanic-oceanic
-
-



7. Los Angeles (above) is:

- moving away from San Francisco
- on the American Plate
- adjacent to a divergent plate boundary
- adjacent to a dextral wrench fault
- adjacent to an oceanic trench

8. Tillites:

- are instruments used for measuring magnetic inclination
- are instrument used for measuring magnetic declination
- represent lithified glacial rubble
- were large amphibians common to Gondwanaland
- were distinctive trees common to Gondwanaland

9. Which one of the following land masses would NOT be included in Gondwanaland?:

- India, south of the Himalayas
- Antarctica
- Australia
- South America
- North America

10. Where is oceanic crust destroyed?:

- at the oceanic ridges
- at the oceanic trenches
- in the inner core
- in the outer core
- it cannot be destroyed due to its light density

11. The Earth's largest volcano is:

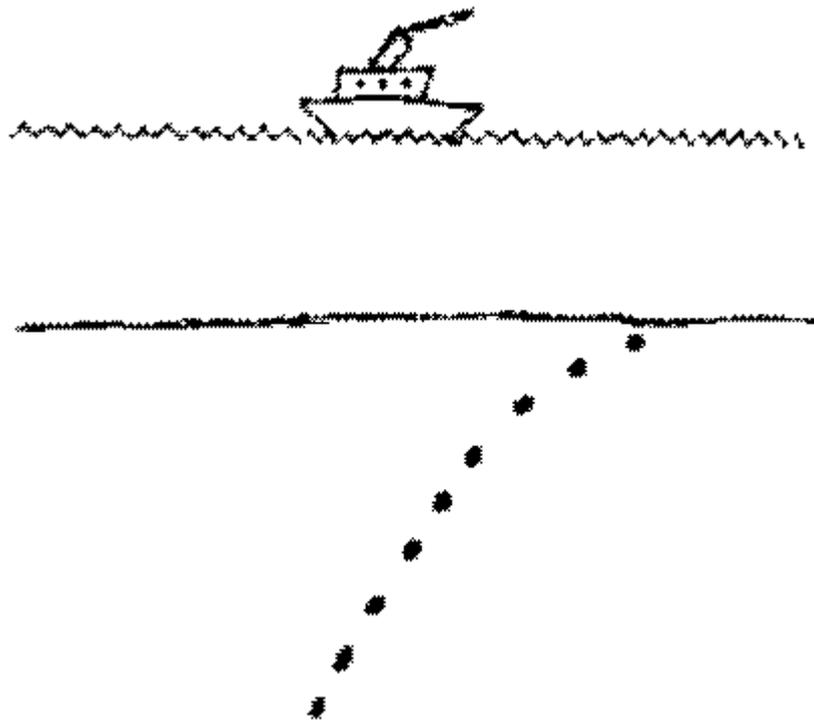
- associated with a hot spot in the middle of a continental plate
- associated with a hot spot in the middle of an oceanic plate
- along an oceanic ridge
- at a continental-continental convergent plate boundary
- at a divergent plate boundary

12. Loihi excites geologists because it represents a:

- new instrument for detecting volcanic gases
- new instrument for detecting lava composition
- satellite that can monitor worldwide volcanic activity
- satellite that can monitor worldwide earthquake activity
- volcano that will become a new Hawaiian island

13. Sediments derived from the weathering of a continent and deposited on the continent, itself. This is a definition for which one of the following adjectives?:

- marine
- continental
- suspect
- ophiolitic
- fluvial



14. The pattern of earthquake foci shown in the cross-section above outlines a:

- Wegener zone
- divergent plate boundary
- oceanic ridge
- Benioff zone
- hot spot

15. Deep marine sediments and volcanics would characterize:

- andesites
- alluvium
- ophiolites
- continental sediments
- transform faults

