

PlateTectonics/Earth'sInterior/Volcanism Teams Groups Trivia Review
Questions

1. Is the Inner or Outer core of the Earth the hottest?
2. Why is the inner core solid, even though it's higher temperature than the outer core?
3. A volcano forms within a continent. Will its magma be felsic or mafic?
4. Mafic rocks typically form what type of volcano?
5. Highly felsic magmas form what type of volcano?
6. Alternating layers of lava flows and pyroclastic flows form what type of volcano?
7. Do Felsic magmas form volcanoes with high or low pressure?
8. A pyroclastic flow contains many things. Name one.
9. As magma moves toward the surface of the Earth, pressure on it drops, which causes it to become:
10. Pyroclastic items which are thrown through the air from a volcano's vent are called:
11. What type of volcano is typically the largest?
12. In terms of dangerous eruptions, what type of magma is involved?
13. Lithospheric plates which pull apart are called:
14. Earthquakes happen in California due to what type of plate boundary?
15. A subduction zone happens as a result of what?
16. What forms as a result of subduction?
17. When two continental lithospheric plates converge, what happens?
18. Are Oceanic plates high or low in Silica?
19. Are Continental plates high or low in Silica?
20. P waves move (about) how fast?
21. An earthquake happens 32km away from your location. How long until P & S waves arrive?
22. A new moon happens when the Sun, Earth, and Moon are in what order?
23. The crust is in what region of the Earth's interior?
24. Is Oceanic crust thinner or thicker than continental crust?
25. The discontinuity between solid crust and (slightly) softer lithosphere is called:
26. Beneath the lithosphere is the very top of the mantle. It is called the:
27. The outer and inner cores of the Earth are made of:
28. What region within Earth's interior is the largest by volume?
29. How do we know different layers exist within the Earth?
30. What types of waves travel the fastest?
31. What type of wave is the most damaging to buildings? (S, P, or surface)
32. How are earthquake epicenters located? Be specific.
33. When you are farther from an earthquake, will the S and P waves get closer together or farther apart?
34. Yellowstone is an example of a volcano formed by a:
35. Hawaiian volcanoes seem to be moving to the SouthEast very slowly if you look at their history. This means the pacific plate is moving what direction?

(answers - see page 2)

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Answers

1. Inner
2. Pressure
3. Felsic
4. Shield
5. Cinder cone (sometimes composite)
6. Composite
7. High
8. Ash, superheated gases, hot tephra, etc.
9. more liquid/less viscous: Decompression melting – it melts because there's no longer pressure keeping it solid.
10. Tephra
11. Shield
12. Felsic
13. Divergent
14. Transform
15. An oceanic plate and continental plate converging. The oceanic plate is more dense, so it subducts.
16. A deep ocean trench and a volcanic arc
17. Mountain building
18. Low
19. High
20. 8km/s.
21. P: 4 seconds. S: 8 seconds
22. Sun, Moon, Earth. When they're perfectly aligned, this makes a solar eclipse for the Earth.
23. Lithosphere
24. Thinner
25. Mohorovicic (or Moho)
26. Asthenosphere
27. Metal (mostly iron)
28. Mantle
29. Seismic waves bend as they change speeds and travel through different layers.
30. P waves
31. Surface
32. Using the time between P and S waves of 3 locations, the epicenter is triangulated.
33. Farther Apart
34. Hot Spot
35. NorthWest