**Name:** _____ **Date:** _____

## Plate and Peak Rumble for 8th Grade

Examine Earth's mechanics through 10 targeted questions on crustal shifts and seismic activity. Not just definitions—real-world geological patterns and evidence.

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**1. Which layer of the Earth, known for its plastic-like flow, allows the lithospheric plates to move across the planet's surface?**

A. Inner Core
B. Asthenosphere
C. Mesosphere
D. Crust

**2. The _____ is a massive underwater mountain range formed by a divergent boundary where the seafloor is actively spreading.**

A. Mariana Trench
B. Appalachian Trail
C. Gakkel Ridge
D. San Andreas Fault

**3. True or False: Most earthquakes occur in the middle of tectonic plates rather than at the boundaries.**

A. True
B. False

**4. When an oceanic plate collides with a continental plate, it sinks into the mantle because it is more dense. What is this process called?**

A. Conduction
B. Subduction
C. Erosion
D. Rifting

**5. The _____ of an earthquake is the specific point on the Earth's surface directly above where the first rupture in the crust occurs.**

A. Focus
B. Hypocenter
C. Epicenter
D. Magma Chamber

**6. True or False: Composite volcanoes (stratovolcanoes) are typically known for explosive eruptions due to the high gas content and thick magma.**

A. True
B. False

**Name: _____ Date: _____**

**7. Which of these is the most likely result of two continental plates colliding at a convergent boundary?**

A. A deep-sea trench
B. A volcanic island arc
C. Folding and mountain building
D. The creation of a rift valley

**8. During an earthquake, _____ waves are the first to arrive at a seismic station because they travel the fastest through the Earth.**

A. Secondary (S)
B. Primary (P)
C. Love
D. Rayleigh

**9. Shield volcanoes, like those found in the Galapagos Islands, are primarily formed by which type of lava?**

A. Thin, runny basaltic lava
B. Thick, sticky rhyolitic lava
C. Solidified ash and cinders
D. Pyroclastic flow debris

**10. True or False: The theory of Plate Tectonics was widely accepted by scientists immediately after Alfred Wegener proposed Continental Drift in 1912.**

A. True
B. False