

Name: _____ Date: _____

Moving Earth Quiz for 4th Grade

Lithospheric mapping and tectonic forces. See how shifting plates create the mountains and valleys that shape our world.

1. Imagine you are exploring the Ring of Fire in the Pacific Ocean. Why are there so many volcanoes in this specific area?

- A. The ocean water is warmer there, melting the rocks.
- B. Oceanic plates are sliding under continental plates, creating magma.
- C. The moon's gravity pulls the lava out of the ground.
- D. Scientists drilled too many holes in the crust there.

2. The Earth's outer shell, called the lithosphere, is made of one solid piece of rock that never moves.

- A. True
- B. False

3. When two plates move away from each other at a ____ boundary, like in the middle of the Atlantic Ocean, new seafloor is created.

- A. Convergent
- B. Transform
- C. Divergent
- D. Subduction

4. Which instrument do geologists use to measure the strength and vibrations of an earthquake?

- A. Barometer
- B. Seismograph
- C. Thermometer
- D. Anemometer

5. The ____ of an earthquake is the specific point on the Earth's surface directly above where the underground rock first broke.

- A. Epicenter
- B. Magma chamber
- C. Crater
- D. Mantle

6. Earthquakes can happen far away from plate boundaries, though they are much more common at the edges of plates.

- A. True
- B. False

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7. What happens when two continental plates of the same density collide at a convergent boundary?

- A. They create a deep ocean trench.
- B. They both sink into the mantle.
- C. They crumble and push upward to form tall mountains.
- D. They disappear into the core.

8. The hot, melted rock that stays underground is called magma, but once it erupts onto the surface, it is known as ____.

- A. Ash
- B. Tsunami
- C. Lava
- D. Granite

9. A tsunami is a giant ocean wave often caused by an underwater earthquake.

- A. True
- B. False

10. If you find a 'shield volcano' with broad, sloping sides like a warrior's shield, what kind of eruption likely formed it?

- A. A violent explosion of ash and steam.
- B. Thin, runny lava that flows easily over long distances.
- C. A sudden collapse of a mountain peak.
- D. Falling ice and snow from the atmosphere.