

Name: \_\_\_\_\_ Date: \_\_\_\_\_

## Answer Key: Shatter the Myth of a Still Earth: 5th Grade Geology Quiz

How do giant mountain ranges actually form? Identify the moving parts of our planet across 10 engaging foundational questions.

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**1. Imagine Earth is like a giant cracked eggshell. What do scientists call these massive, moving pieces of the Earth's outer layer?**

**Answer:** B) Tectonic plates

Earth's outer shell, the lithosphere, is broken into large sections called tectonic plates that float on the softer layer beneath them.

**2. True or False: Most earthquakes and volcanoes happen near the edges where two tectonic plates meet.**

**Answer:** A) True

Plate boundaries are very active areas because the plates are rubbing, crashing, or pulling away from each other, leading to geological events.

**3. When two tectonic plates suddenly slip past each other, the energy released causes the ground to shake. This event is called an \_\_\_\_\_.**

**Answer:** C) Earthquake

Earthquakes occur when stored energy is released as plates shift position along a fault line.

**4. What is the name for the melted, liquid rock that stays trapped \*underground\* before a volcano erupts?**

**Answer:** B) Magma

It is called magma when it is beneath the surface; once it breaks through the surface during an eruption, it is called lava.

**5. The 'Ring of Fire' is a famous area around the \_\_\_\_\_ Ocean known for having many volcanoes and earthquakes.**

**Answer:** D) Pacific

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The Pacific Plate is surrounded by many plate boundaries, creating a horseshoe-shaped zone of high volcanic and seismic activity.

**6. True or False: Tectonic plates move very quickly, about the same speed as a person running.**

**Answer:** B) False

Tectonic plates move very slowly, usually only about 1 to 10 centimeters per year, which is about the same speed as your fingernails grow.

**7. Which of these features is most likely to form when two continental plates crash into each other and push the land upward?**

**Answer:** C) A mountain range

Just like a rug bunching up when you push it, the Earth's crust folds and crumples into mountains when plates collide.

**8. A \_\_\_\_\_ is a scientist who specifically studies earthquakes and the vibrations of the Earth.**

**Answer:** B) Seismologist

Seismologists use special tools called seismographs to record the waves of energy produced by earthquakes.

**9. When tectonic plates pull apart under the ocean, what usually happens?**

**Answer:** B) New crust is formed by rising magma

As plates pull apart (diverge), magma rises to fill the gap, cools down, and creates brand new seafloor.

**10. True or False: Some volcanoes can form in the middle of a plate, far away from the edges, at places called 'hotspots.'**

**Answer:** A) True

Hotspots are thin spots in the plate where magma can punch through, like the area that created the Hawaiian Islands.