

Name: _____ Date: _____

Crack the Crust: Tectonic Trial for Third Grade

How does the ground beneath your feet change shape? Analyze plate movements and seismic shifts through this multi-format challenge.

1. Imagine you are an explorer who finds a row of mountains that look like giant folded blankets. What most likely caused this to happen?

- A. The wind blew the rocks into a pile
- B. Two plates crashed together and pushed the land up
- C. A giant river carved the mountains out
- D. The plates stayed perfectly still for millions of years

2. When two plates slide past each other sideways, they often get stuck. When they finally jerk forward, they release energy called an _____.

- A. Explosion
- B. Avalanche
- C. Earthquake
- D. Eruption

3. True or False: Most volcanoes and earthquakes happen in the middle of plates rather than at the edges where they touch.

- A. True
- B. False

4. The Earth's outer layer is broken into giant pieces called tectonic plates. What is the best way to describe how these plates move?

- A. They move as fast as a car on a highway
- B. They move about as fast as your fingernails grow
- C. They only move once every thousand years
- D. They spin in circles like a top

5. If you find a new island in the ocean made of hardened black rock, it was likely created by an underwater _____.

- A. Tornado
- B. Earthquake
- C. Glacier
- D. Volcano

6. True or False: Scientists can use special tools to measure exactly how much the ground moves during a tremor.

- A. True

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B. False

7. If two plates are moving away from each other (divergent), what is most likely happening in the gap between them?

- A. A hole is created that goes to the center of the Earth
- B. Melted rock rises up to create new crust
- C. The gap fills with giant piles of sand
- D. The plates eventually disappear

8. The deep, hot melted rock found underground before it erupts is called _____.

- A. Lava
- B. Magma
- C. Ash
- D. Vapor

9. True or False: Earthquakes only happen on land and never happen under the ocean.

- A. True
- B. False

10. Which of these is a way that a volcano can quickly change the landscape for plants and animals?

- A. By freezing the ground with ice
- B. By raining fresh water on the forest
- C. By covering the area in ash and liquid rock
- D. By making the sun shine brighter