Why Are There Earthquakes?

By Rachelle Kreisman

The ground starts to shake. Buildings begin to sway. Watch out—here comes an earthquake!

Earthquakes are natural events. They usually happen very quickly. In fact, most earthquakes last less than thirty seconds.

You may be surprised to hear that earthquakes are not rare. In fact, earthquakes happen every day somewhere in the world. Most of them are weak. There are times, however, when an earthquake is very powerful and causes a lot of damage. One strong earthquake can destroy houses, bridges, railroad tracks, and more.

Earthquakes are caused by the movement of huge pieces of rock under Earth's surface. The pieces are called *tectonic plates*. These plates are found in the top layers of Earth, called the crust and the upper mantle. Tectonic plates have rough edges and are always moving. Usually, they move slowly. But there are times when the plates get stuck against each other. If that happens, pressure builds up. When the two plates finally get "unstuck," they release energy. Often, a small amount of energy is released. That will mean a small earthquake. However, sometimes a lot of energy is released. When that happens, the earthquake that follows will be strong…and dangerous!

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Name: _____ **Date:** _____

1. What are earthquakes?

A) buildings that sway
B) huge pieces of rock under Earth's surface
C) natural events

2. Earthquakes are caused by the movement of huge pieces of rock under Earth's surface. What is an effect of earthquakes?

A) Energy is released.
B) Tectonic plates move slowly.
C) Tectonic plates get stuck against each other.

3. Read this sentence from the article.
"Earthquakes can be dangerous."

What evidence in the article supports this statement?

A) "Most earthquakes last less than thirty seconds."
B) "Earthquakes are caused by the movement of huge pieces of rock under Earth's surface."
C) "One strong earthquake can destroy houses, bridges, railroad tracks, and more."

4. What might the amount of energy released by two plates that get "unstuck" tell you about how strong an earthquake will be?

A) The more energy that is released by the plates, the weaker the earthquake will be.
B) The more energy that is released by the plates, the stronger the earthquake will be.
C) The less energy that is released by the plates, the longer the earthquake will last.

5. What is the main idea of this article?

A) A powerful earthquake can destroy houses, bridges, railroad tracks, and more.
B) Tectonic plates are huge pieces of rock found under the surface of Earth.
C) Earthquakes are natural and sometimes dangerous events caused by the movement of tectonic plates.

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6. Read these sentences from the article.
"When the two plates finally get 'unstuck,' they release energy. Often, a small amount of energy is released. That will mean a small earthquake. However, sometimes a lot of energy is released. When that happens, the earthquake that follows will be strong…and dangerous!"

What does the word "released" mean here?

A) let out
B) held inside
C) broken down

7. Choose the answer that best completes this sentence.
Most earthquakes are weak, _____ some are strong.

A) so
B) because
C) but

8. What are tectonic plates?

9. What happens when two tectonic plates get stuck against each other?

10. Explain how the movement of huge pieces of rock under Earth's surface can cause an earthquake.

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