

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

# What is an Earthquake?



An earthquake is the sudden shaking of the ground caused by the movement of the Earth's tectonic plates beneath the surface. These movements can occur along faults, which are fractures in the Earth's crust. When stress builds up along a fault and is released suddenly, it causes seismic waves that shake the ground.

Earthquakes can happen anywhere in the world, but they are most common along plate boundaries. The point beneath the Earth's surface where the earthquake starts is called the focus, and the point directly above it on the surface is called the epicenter. Earthquakes vary in strength. Some are so small that people cannot feel them, while others can cause massive destruction, damage buildings, and trigger tsunamis or landslides.

Scientists use instruments called seismographs to detect and measure earthquakes. The strength of an earthquake is measured using the Richter scale or the moment magnitude scale (Mw). Earthquake preparedness is important to save lives. People are advised to drop, cover, and hold on during an earthquake, stay away from tall buildings and heavy objects, and have an emergency plan.

Earthquakes are natural events, but with proper planning, early warning systems, and education, the damage to life and property can be minimized. Studying earthquakes also helps scientists understand the Earth's structure and predict future seismic activity.

## Fill in the blanks:

An earthquake is the sudden shaking of the ground caused by the movement of the Earth's \_\_\_\_\_.

The point beneath the Earth's surface where an earthquake starts is called the \_\_\_\_\_.

The point directly above the focus on the surface is called the \_\_\_\_\_.

Scientists use \_\_\_\_\_ to detect and measure earthquakes.

The strength of an earthquake is measured using the \_\_\_\_\_ scale.



## Multiple Choice Questions :



What causes an earthquake?

- a) Strong winds
- b) Movement of tectonic plates
- c) Heavy rainfall
- d) Ocean waves

What is the epicenter of an earthquake?

- a) The instrument that measures earthquakes
- b) The point on the Earth's surface directly above the focus
- c) The deepest part of the ocean
- d) The top of a mountain

Which instrument detects earthquakes?

- a) Thermometer
- b) Barometer
- c) Seismograph
- d) Anemometer

Which scale is used to measure earthquake strength?

- a) Beaufort scale
- b) Celsius scale
- c) Richter scale
- d) Fujita scale

What is the safest action during an earthquake?

- a) Stand near windows
- b) Drop, cover, and hold on
- c) Run outside immediately
- d) Climb tall buildings



**Short Answer Questions:**

Explain what an earthquake is.

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Name the two important points related to an earthquake .

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How do scientists measure earthquakes?

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What are some dangers caused by strong earthquakes?

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Why is earthquake preparedness important?

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