Earthquakes

A. Choose the correct answer:

1. What causes an earthquake?

- (a) Movement of the Earth's tectonic plates
- (b) Strong winds
- (c) Melting of glaciers
- (d) Floods

2. The place where an earthquake begins beneath the Earth's surface is called the:

- (a) Focus
- (b) Epicenter
- (c) Crust
- (d) Mantle

3. The shaking of the ground during an earthquake is caused by:

- (a) Lightning
- (b) Volcanic eruption
- (c) Sudden release of energy
- (d) Ocean waves

B. Fill in the Blanks:

- 1. The point on the Earth's surface directly above the focus of an earthquake is called the _____.
- 2. The shaking of the Earth caused by the sudden release of energy is called

3. Earthquakes are usually measured using a ______.

C. Case Study:

A city experienced a strong earthquake, and buildings started to shake. The local earthquake center recorded the event and found that the focus of the earthquake was deep beneath the Earth's crust. People felt the shaking strongly in the city, which was located near the epicenter.

Case Study Questions:

- 1. What is the focus of an earthquake, and where was it located in this case?
- 2. What is the epicenter, and how does it relate to the earthquake's effects on the city?

- 3. Why did the city experience strong shaking during the earthquake?
- 4. How can earthquakes be measured?

D. Short Answer Questions:

- 1. What is an earthquake?
- 2. What is the difference between the focus and epicenter of an earthquake?
- 3. Why do earthquakes occur mostly at the boundaries of tectonic plates?

E. Long Answer Questions:

- 1. Explain how earthquakes are formed and describe the different layers of the Earth involved in the process.
- 2. Describe how the Richter scale is used to measure the strength of an earthquake.
- 3. Discuss the effects of an earthquake on human settlements and how we can protect ourselves from them.