What Makes an Earthquake?

Read the passage. Then answer the questions in full sentences.

Name _____ Date _____

An earthquake is a strong shaking of the ground. It is caused by movements in Earth's outermost layer.

Earth has four layers: a solid crust, a hot, nearly solid mantle, a liquid outer core and a solid inner core. The crust and the stiff top of the mantle are broken into giant puzzle pieces called tectonic plates. They drift on the mantle below, which flows very slowly.

The plates never stop moving, and this puts stress on the crust. When the stress gets too large, the rock cracks. These cracks are called faults. An earthquake is a sudden movement of the crust at a fault. The shaking can be felt hundreds or even thousands of miles away.

An earthquake's energy travels through Earth as vibrations called seismic waves. Scientists measure them with a seismometer, which records the waves as zig-zag lines.

1. **What are Earth's four layers?**

2. **What does a seismometer do?**

3. **How does a fault form?**

4. **Why can people far from an earthquake sometimes feel it?**

Answer key

What Makes an Earthquake?

1. What are Earth's four layers?
   The crust, the mantle, the outer core and the inner core.

2. What does a seismometer do?
   It measures seismic waves and records them as zig-zag lines.

3. How does a fault form?
   The moving plates put stress on the crust, and when the stress gets too large, the rock cracks.

4. Why can people far from an earthquake sometimes feel it?
   Sample answer: because its energy travels through Earth as seismic waves, which can be felt hundreds or even thousands of miles away.