
How earthquakes are made

The planet has four major layers: the inner core, outer core, mantle and crust.

The crust makes up a thin skin on the exterior of our planet, but this skin is not all in one part, it's made up of many pieces similar a puzzle coating the surface of the earth. Not only that, but these puzzle pieces keep slowly drifting around, gliding by one another and bumping into each other. We call them tectonic plates, and the edges of the plates are called the plate boundaries.

The plate boundaries are made up of many faults, and most of the earthquakes around the Earth appear on these faults. Since the edges of the plates are rough, they get stuck while the rest of the plate keeps moving. Finally, when the plate has moved far enough, the edges unstick on one of the faults and there is an earthquake.

The size of an earthquake depends on the dimension of the fault and the amount of slip on the fault, but that's not something scientists can simply measure with a measuring tape since faults are many kilometers deep beneath the earth's surface. They measure earthquakes by using the seismogram recordings made on the seismographs at the surface of the earth to determine how large the earthquake was. A short line that doesn't curve very much means a small earthquake, and a long line that curves a lot means a large earthquake. The length of the curve depends on the size of the fault, and the size of the curve depends on the amount of slip.

Earthquakes are usually caused when the plates underground suddenly break along a fault. This sudden release of energy causes the seismic waves that make the ground shake. When two plates are rubbing against each other, they stick a little. They don't just slide smoothly; the plates catch on each other. The plates are still pushing against each other, but not moving. After a while, the plates break because of all the pressure That's built up. When the plates break, the earthquake occurs. During the earthquake and afterward, the plates start moving, and they continue to move until they get stuck again. The spot underground where the plate breaks is called the focus of the earthquake. The place right above the focus is called the epicenter.

Need help with the assignment?

Our professionals are ready to assist with any writing!

[GET HELP](#)