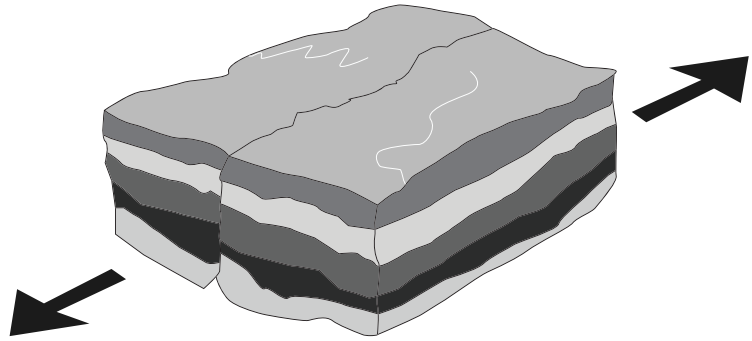


Earthquakes

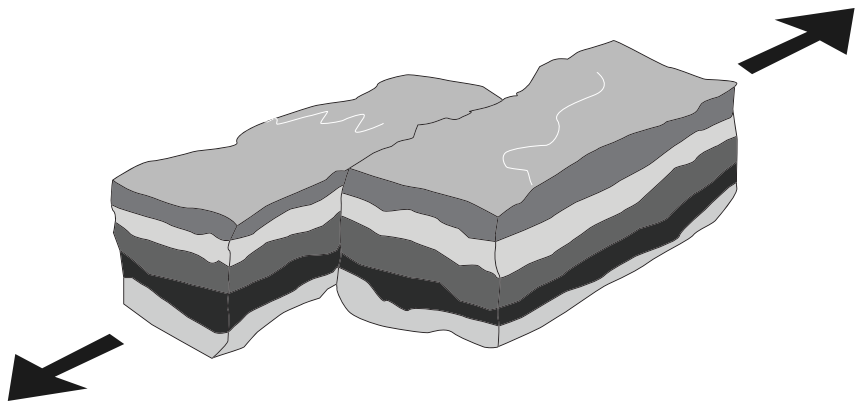
Why Earthquakes Happen

Under the surface of Earth there are huge slabs of rock. These slabs are called **tectonic plates**. These plates move very **slowly**. Tectonic plates can **rub** against each other as they move in **different directions**.



Force builds as two plates that are stuck keep trying to move.

Sometimes two tectonic plates get stuck as they rub against each other. **Force** builds up as the plates keep trying to move. Finally, there is enough force to make the plates move again. All the force that has built up makes the plates **move quickly** for a few moments. This movement causes the **surface of Earth** to **tremble** and **shake**. An earthquake is happening!



Finally, enough force builds up to make the plates move quickly.

Think about a time when you had trouble unscrewing the lid of a jar. The lid and the top of the jar were stuck together. You used your hand to put more and more force on the jar lid to make it move. Finally, there was enough force to make the lid move. This example gives you an idea of how force builds up to make tectonic plates move after they have been stuck together.

How Earthquakes Affect People

Some earthquakes are more **powerful** than others. In some places, earthquakes happen often, but the earthquakes are very weak. These earthquakes make the ground tremble just a tiny bit. People do not even notice that an earthquake has happened because they could not feel the ground moving. These earthquakes do not do any damage.

A powerful earthquake causes the ground to shake a lot. This shaking can do a lot of **damage** to **buildings** and other **structures**, such as bridges. In places where earthquakes tend to happen often, there are rules for building new structures strong enough to stand up to most earthquakes. Many older structures were built before the rules were put in place. Often, the worst damage from an earthquake happens to older buildings.