The Power of Plates

When **tectonic plates** shift, so do the land and water on its borders. Study the way plates move, then answer the questions below.

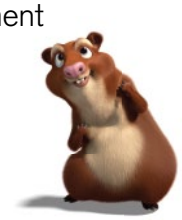
ACTIVITY

Look at the pictures below and write which type of plate movement caused each event.

Mt. Vesuvius, a volcano in Italy, erupted in 79 AD and covered the city of Pompeii in hot ash. What type of plate movement can create a volcano?

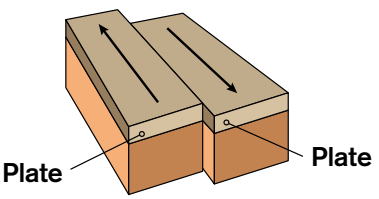
The **Eastern Rift Valley** in eastern Africa is a 4,000-mile-long series of lakes and valleys. What type of plate movement can cause a large rift?

In 1906, **the city of San Francisco** was rocked by a 7.9 earthquake. What type of plate movement can cause an earthquake?

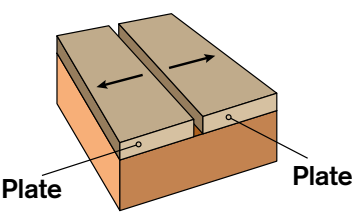


Moving Plates

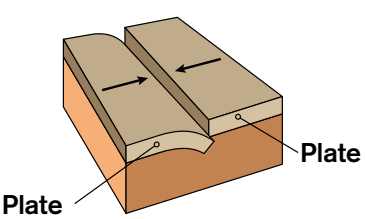
The borders of tectonic plates change depending on which way the plates are moving.



When two plates slide or rub against each other it's called a **lateral** movement. This can cause earthquakes as plates rub together and release energy.



When two plates separate, leaving a gap in between, they create a **divergent** movement. This can cause large rifts, or openings, as plates move apart.



When two plates push against each other and one plate goes under the other, they create a **convergent** movement. This can cause mountain ranges and volcanoes.