
Earthquakes

Topic 5



Measuring Earthquakes

- Seismologists use a special machine called a seismograph to measure earthquakes
- Seismographs must be attached to bedrock in order to feel the earthquake vibrations



RICHTER SCALE of earthquake energy:

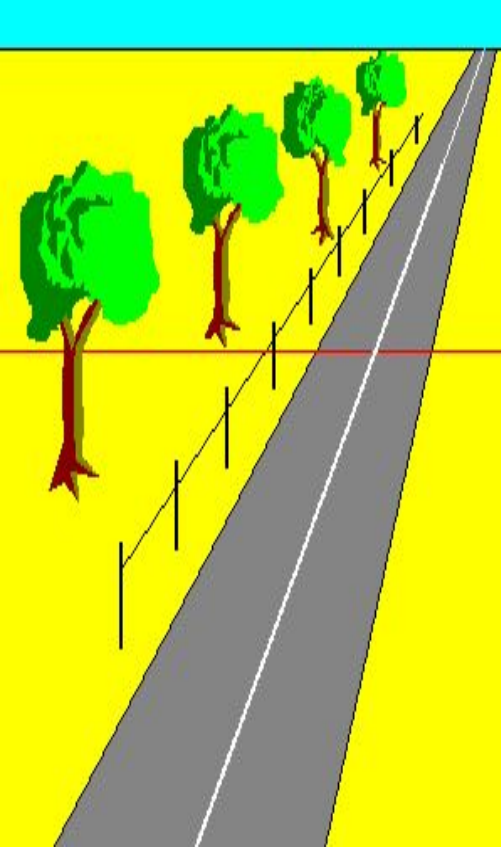
Each level is **10** times stronger than the previous level

	Description	Occurrence	In Population	Movement
1	SMALL	DAILY	every minute	small
2	SMALL	DAILY	every hour	small
3	SMALL	DAILY	every day	small
4	SMALL	DAILY	every week	moderate sudden
5	MODERATE	MONTHLY	every 10 years	strong sudden
6	MODERATE	MONTHLY	every 30 years	strong sudden
7	MAJOR	MONTHLY	every 50 years	severe sudden
8	GREAT	YEARLY	every 100 years	very severe
9	GREAT	YEARLY	every 300 years	very severe
10	SUPER	RARELY	every 1000 years	extreme

Measuring Earthquakes

- Seismologists use a measurement known as the Richter Scale to measure the intensity of earthquakes
- The scale goes from 0 to as high as needed, but has reached a 9.5 at its strongest





Earthquake Waves

- Seismic waves are energy waves that travel outward from the source of the quake
- These aftershocks are smaller earthquakes and can cause damaged buildings to collapse
- Sometimes there are over 600 aftershocks



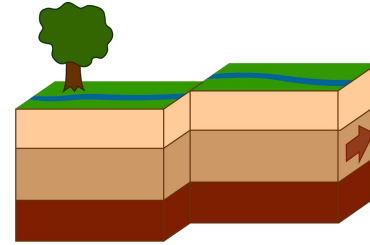
Earthquake Causes

- When the rock in Earth's crust breaks from the pressure, it can create a fault
 - Fault zones exist where tectonic plates meet
 - There are 3 types of faults that can be created
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Fault Types

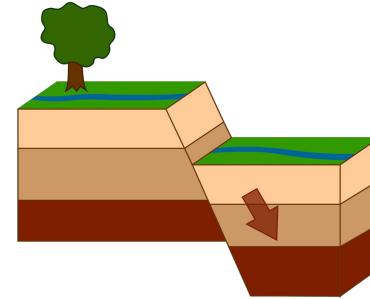
Strike Slip

A



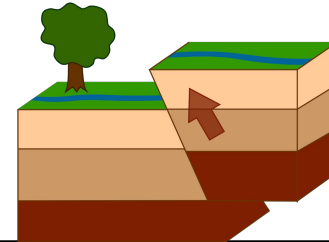
Normal

B



Reverse

C



Other Effects of Quakes

- [Tsunamis](#) are often triggered by underwater earthquakes
 - These underwater quakes can also cause the loosening of sand, creating a temporary quicksand
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Earthquake Zones





Eventually Los Angeles will slides past San Francisco!



Questions

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