

Earthquakes and Fault Zones



The ground is moving beneath us! Part of California is part of the Pacific Plate, which is inching toward the north every year. The rest of the state is part of the North American Plate and moving south.

The San Andreas Fault is the boundary between the two plates. As one massive plate scrapes against the other, energy builds up when the plates get stuck and can't move.

The energy eventually releases when they are finally able to break loose and continue their movement. This energy release can cause the land to shake, crack, or move.

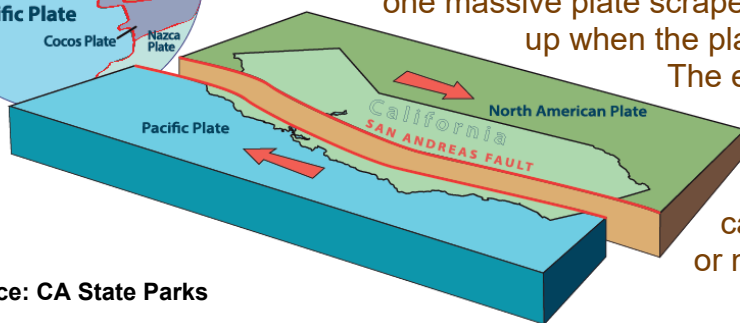


Image source: CA State Parks

Let's think more about earthquakes in space and time!

Explore page 9 of the atlas to get more information...

Write your answer, explain your thinking, or ask new questions

Are the earthquakes labeled as significant events the ones that are largest in magnitude?

Do more of the significant events fall to the east or west of the San Andreas Fault?

Based on historic evidence, are earthquakes equally likely to happen anywhere along the San Andreas Fault?

Imagine you are a writer who wants to interview people who lived through a major earthquake to learn about their experiences. Where is a good place to find people to interview?

How could what you know about where earthquakes have happened in California in the past help you prepare the people of California for future earthquakes?

Earthquakes and Fault Zones (cont.)



Geographer's Notebook

Now let's focus on time. Create a timeline that shows all of the significant events that are shown on the map.

1900 1910 1920 1930 1940 1950 1960 1970 1980 1990 2000 2010 2020

Are earthquakes spread evenly over time?

What's the longest stretch between two significant events on your timeline?

How could what you know about when earthquakes have happened in California in the past help you prepare the people of California for future earthquakes?

What questions do you have about earthquakes and fault zones?