

Topics: Geology, Maps, California Land Features

Materials List

- ✓ Map of California or other reference material dependent on topic
- ✓ Transparency sheets
- ✓ Binder clips or stapler
- ✓ Permanent markers, several colors
- ✓ Optional: Blackline master of outline of California, page 2

This activity can be used to teach:

 Maps of Earth's features (Next Generation Science Standards: Grade 4, Earth and Space Science, 2-2)



California Geographic Assembly

Piecing features together one layer at a time



Use transparent layers to diagram and represent different map details of California.

Assembly

- 1. Cut transparency sheets to desired size.
- 2. Arrange 2-4 layers of the transparency sheets on top of each other.
- 3. Secure together at the top with staples or binder clips.
- 4. Using a permanent marker trace the outline of California onto the bottom layer.
- 5. On the other layer(s) draw specific features of California. Ideas include mountain ranges, agricultural areas, forested land, fault lines or waterways.

To Do and Notice

- 1. Observe the patterns of land features and land use in California.
- 2. What percentage of space is available for crops or forests?
- 3. Notice the directional orientation of the mountain ranges.
- 4. Which mountain ranges coincide with fault lines?
- 5. Into which lakes, bays, estuaries, or oceans do the waterways flow?

Content behind the Activity

California exists on two geographic plates; its intense topography is a result of the interactions between these plates which produce earthquakes and volcanic ranges. California's diverse geography includes mountain ranges - the Coastal Range on the west side of the state and the Sierra Nevadas on the east - and the centrally located San Joaquin Valley where the Sacramento and San Joaquin Rivers flow to the delta. The Mojave Desert occupies a large area in the South East corner of the State.

Capital: Sacramento, **Land Area:** 403,932 km² (155,959 sq. miles), **Population:** 35,484,453, **Highest Point:** Mt. Whitney at 4418 m (14,494 ft), **Lowest Point:** Death Valley at -86 m (-282 feet)

Taking it Further

- This technique (diagramming in layers) can be used for an endless variety of life science and physical science subjects: The human body, cell models, ancient civilizations, the Ring of Fire.
- Challenge student to design a short book using this technique.

Web Resources (Visit www.raft.net/raft-idea?isid=23 for more resources!)

- Maps of California- http://geology.com/state-map/california.shtml
- Information on Maps http://www.usgs.gov/
- Ocean maps: http://www.nationalgeographic.com/xpeditions/lessons/03/g35/seasgis35.html

