Yosemite National Park

What is the overall structure of the Sierra Nevada Mountains? Contrast the eastern and western sides of the range.

Describe the oldest rocks of Yosemite. What indicates that these rocks are the oldest? What is their age?

What type of plate boundary was along the western margin of North America during the Jurassic and Cretaceous?

The Mesozoic history of Yosemite is complicated by multiple intrusions of granitic plutons. What techniques could be used to determine the relative age sequence of these intrusions?
You will see the same photograph above on the screen during class. Determine the relative age sequence of these "granitic" rocks. Defend your sequence (explain your reasoning).

One of the famous landmarks is El Capitan in Yosemite Valley. What is the "Map of North America" on the side of El Capitan?
Explain the different types of joints in the granitic rocks and how joints have influenced the landscape we see today.

Explain how the spectacular waterfalls of Yosemite (such as Yosemite, Bridalveil, and Nevada falls) were formed.

What is the evidence that a lake existed in Yosemite Valley at the end of the last ice age? Why is that lake not present today? How did the lake change the appearance of today's Yosemite Valley?
What is a truncated spur and how does it provide evidence for the glaciation of Yosemite Valley? What other types of glacial features are evident in Yosemite Valley?