In southern Oregon the Cascade Mountains are separated into the Western Cascades and the High Cascades. What is the difference?

What was the progression of igneous activity at nearby Mt. Thielsen? Is Thielsen considered to be active, dormant, or extinct?

Is Crater Lake really a crater? Explain.
Prior to the caldera producing eruption about 7000 years ago, what type of volcano was Mt. Mazama? What types of rocks did Mazama erupt? What current mountain in the Cascade Range is most similar in volume to Mt. Mazama prior to the 7000-year eruption?

Was Mt. Mazama glaciated prior to the 7000-yr eruption? What is the evidence?

The caldera producing eruption of 7000-years ago was what composition? How does it compare to other Cascade volcano eruptions in terms of the volume of tephra erupted?
Illustrate and explain how the Pinnacles in the southeast part of the Park were formed.

Describe the landforms under the lake surface as determined by the USGS. How were the landforms created?
In class we saw a slide of the “Devil’s Backbone” on the side of Crater Lake. What type of igneous feature is this ridge? Why are there horizontal joints in this feature?

In the photo to the right, we see a dike that becomes either a lava flow or a sill. How would we determine whether the horizontal part is a sill or a lava flow? (Assume we could get physical access to this location).