# Yosemite/Mono Lake Ecology and Geology Field Trip Scavenger Hunt

You and your partner need to find evidence of the following ecological and geologic topics:

## **Stop 1: Tunnel View**

- Evidence of Yosemite Valley showing where the glacier began and ended and the traditional U shape that indicates Yosemite was created by a glacier.
- Evidence showing El Capitan, as an example of the largest granite monolith in North America. Great example of Yosemite granite.
- Evidence showing approximately where the terminal moraine is that allowed Lake Yosemite to form.
- Evidence of erosion and sediment at the base of Yosemite Valley.

# Stop 2 and 3: Olmstead Point and Tenaya Lake

- Evidence of a glacial cirque
- Evidence of a glacial arete
- Evidence of glacial polish
- Evidence of glacial erratics
- Image of Half Dome that will allow to explain how the other half of the dome was "plucked" off.
- Evidence of the large crystals that form in Yosemite granite (how do these large crystals increase its strength?)
- Lots of evidence of having a fantastic time on this field trip.

#### **Stop 4: Pothole Dome**

- Evidence of sedimentary rock being intruded by injections of molten granite.
- Evidence of erosion
- Cirque? Arete? Erratic? Fun?

#### Stop 5: Mono Lake

- Evidence to explain the formation of tufa towers.
- Evidence of the food chain that exists in the "dead lake".
- Evidence that this lake is formed in a volcanic region.
- Look behind you (away from the lake) and collect evidence of the extreme uplifting on the East side of the Sierras. Can you explain why this happened?

### **Stop 6: Panum Crater**

- Evidence to be used to explain the difference between pumice and obsidian and explain how they were both created.
- Evidence to be used to explain the story of Panum crater and the chain of volcanoes that surround it.

# Stop 7: Devil's PostPile

Evidence to be used to explain how Devil's PostPile was formed.

# Stop 8: Bodie

• Gather evidence to show examples of how the town of Bodie existed 100 years ago. What were their homes like, what types of businesses existed there? What was the major industry that caused the town to be so prosperous?