



Assignment #2

The large geologic cross-section in the middle of the page shows the geology across the Colorado Plateau, from the Grand Canyon to Arches NP. The smaller cross-sections show the specific geology at five different parks.

Assignment: Using the smaller cross-sections, derive the geologic history of the Grand Canyon, Cedar Breaks, Zion, Capitol Reef, and Arches. To do this, make a list on the attached sheet of the events that affected each park as you can see on the individual cross-sections. Note that you will list multiple events for the Precambrian and Paleozoic at the Grand Canyon but will not for the others. For those, group the Precambrian as one event ("formation of Precambrian Rock") and the Paleozoic as one event ("Deposition of Paleozoic Rock") --but don't forget the unconformity between them!

Also, make sure you identify the major unconformities because they represent periods of either uplift and erosion or just erosion. Note that the fault at Capitol Reef is different than those near Bryce--the one at Capitol Reef slipped at the end of the Mesozoic. Assume the two faults near Bryce slipped at approximately the same time. Also note that the Claron Fm. is Eocene (=57 to 35 Ma). At Cedar Breaks NM, the Claron rests unconformably on Cretaceous rocks (the youngest Period of the Mesozoic).

Please include only those events visible on this cross-section.

This assignment is due in class on Tuesday, October 23.