

Chapter 2 – Geology, Climate, and Soils

1. Plate tectonics and other geologic events
 - a. Describe the types plate boundaries in California, giving an example of each one.
 - b. Describe the plate boundary movements that contributed to the formation of:
 - i. The Sierra Nevadas
 - ii. The Coast Ranges
 - iii. The Peninsular Ranges
 - c. What kind of plate boundaries are active in our county that you know of?
 - d. What other geological features have contributed to California's landscape?
2. Rocks
 - a. What are the common local rocks in our area?
 - b. How were they formed (are they sedimentary, metamorphic, or igneous)?
 - c. How does California's state rock contribute to the native plants and animals living in our area?
4. Climate
 - a. How do our mountain ranges influence our climate?
 - b. Describe how our Mediterranean climate differs from most of the country's.
 - c. How does our climate impact our habitats?
5. Draw a generic example of soil stratification, with a description of each soil layer.
6. How do carbon and nitrogen move through the biosphere? Draw samples of their cycles to help yourself understand the complexities of these biochemical cycles.
7. How do your daily habits rely on the mining of minerals in our state? What are some of the negative aspects of the extraction of that product?
8. Sketch what you perceive is the relationship between mycorrhizae and native plants?

For class discussion: What process in this chapter is most affected by climate change?