Field Trip Guide

we will be making four stops to study the physical and process geography.

four stops include:

Cobb Estate

Venice Beach

Brand Park

Eaton Canyon

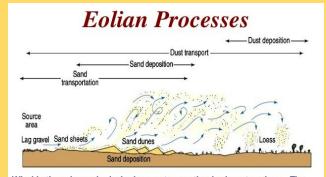
Stop 1

Atmosphere (air)

The Cobb Estate

why is it so windy?

The wind is caused by **aeolian processes**. Eolian processes, involving erosion, transportation, and deposition of sediment by the wind, occur in a variety of environments, including the coastal zone, cold and hot deserts, and agricultural fields.



Wind is the primary hydrologic agent operating in desert regions. The low viscosity of wind makes it a highly effective sorting agent. Particles that cannot be transported, such as gravel and course sand are left behind as desert pavement. Medium and fine sand are piled into dunes. Silt and clay are blown high into the atmosphere and settle elsewhere as loess.

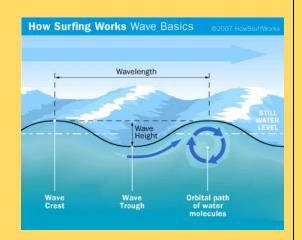
Stop 2

Hydrosphere (water)

Venice Beach

what causes the waves?

Water waves are a manifestation of energy moving through the ocean. The high water levels are the wave crests and the low water levels are the wave troughs. Erosion, transportation and deposition are all a part of the process.



Stop 3

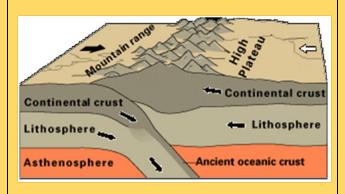
Lithosphere (land)

Brand Park

how did the *mountains* form?

Movements of tectonic plates

create volcanoes along the plate boundaries, which erupt and form mountains. A volcanic arc system is a series of volcanoes that form near a subduction zone where the crust of a sinking oceanic plate melts.



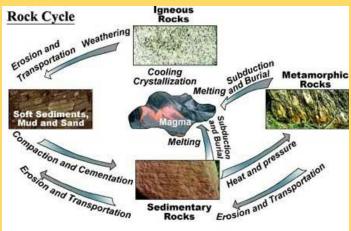
Stop 4

Biosphere

Eaton Canyon Falls

how were the **rocks** formed?

Igneous rocks form from *molten material* called magma. Sedimentary rocks form from *sediments* deposited out of water or the air. Metamorphic rocks form from the *alteration of other rocks* through temperature and pressure induced changes in the minerals.



Map

Stop 1: Cobb Estate, Altadena, CA

Stop 2: Venice Beach, Los Angeles, CA

Stop 3: Brand Park, Glendale, CA

Stop 3: Eaton Canyon Falls, Altadena, CA

