

Arroyo Seco Field Trip Scavenger Hunt

Earth Science

Mr. Traeger

Name: _____ Period: _____ Date: _____

Answer the following questions concerning today's field trip. You need to *listen* to me carefully to get the right answers.

1. What kinds of rocks are mostly found in the local area? Are they igneous intrusive, igneous extrusive, sedimentary, and/or metamorphic?
2. How can you tell the difference between all of the rocks in the local area? What would you look for?
3. How were the San Gabriel Mountains formed?
4. Why are there some areas of the Arroyo where the trees are green, even though the Arroyo itself is dry? Keep in mind that plants need water to stay green.
5. What is Devil's Gate Dam used for?
6. What will be the *first* thing to be carried away in a large flood? Silt, sand, gravel, rocks, or boulders? Why?
7. What will be the *last* thing to be carried away in a large flood? Silt, sand, gravel, rocks, or boulders? Why?
8. Did you see any signs that flooding had occurred in the Arroyo in the past? How do you know?
9. Describe the sedimentary column that we observed. Were the oldest rocks on the bottom or on the top?
10. How do large rocks get broken down into smaller rocks?
11. What causes some of the rocks to become rounded in shape?
12. What are the large rectangular pits (spreading grounds) used for?
13. Where does Southern California get a lot of its fresh water from?
14. What is an earthquake fault?
15. What is the name of the earthquake fault that we saw and where is it?

Conclusion (Homework): Summarize the formation and geology of the San Gabriel Mountains in a short essay of no less than ½ page. Attach the essay to this document when it is finished.

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Data Collection Chart

Use your GPS receiver to fill in this chart as we go along. You will enter this data into the GIS and make a geologic map of the Arroyo Seco.

Obs. #	Description of rock types and/or land features	Northing	Easting	Latitude	Longitude	Elevation (feet)
ex)	Igneous Granite mixed with Metamorphic Gneiss	3784210	391358	34.19324	-118.17909	1097
1.						
2.						
3.						
4.						
5.						
6.						
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8.						
9.						
10.						
11.						
12.						
13.						
14.						
15.						