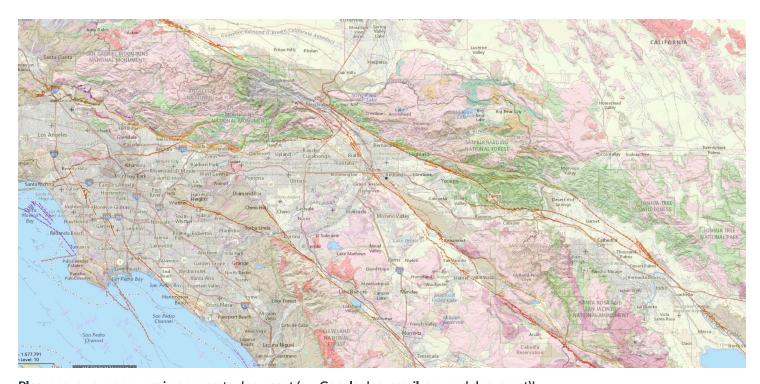




Unlimited Attempts Allowed

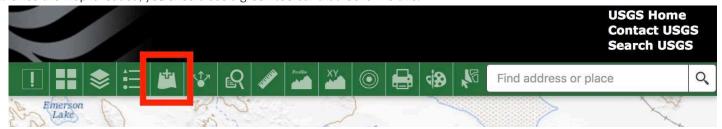
∨ Details



Please save your answers in a separate document (ex: Google doc, email, or word document)!

- 1. Visit the National Map Viewer here: https://viewer.nationalmap.gov/advanced-viewer/)

 (https://viewer.nationalmap.gov/advanced-viewer/)
 - If the map does not load, try these steps
 - Try a different browser
 - Try reloading
 - Try a different computer
 - Head to campus and use one of the computers in the library, STEM-MESA Center, or PS-111 (I will have to sign you in to the computers in PS-111, so be sure I am going to be there:)
 - Try on a different day
- 2. Once the map is loaded, you should see a green toolbar that looks like this:



- 3. Click Add Data (the icon in the red box, above)
- 4. Find the Microsoft_Building_Footprints layer by scrolling through the featured layers, or searching for it in the Add Data search bar. Once you have found the layer, click ADD in the lower righthand corner.
- 5. Do the same for the USGS Earthquake Faults layer.
- 6. Once you have added both layers, close the Add Data box.

- 7. Search for **San Bernardino Valley College** in the search bar (where it says **Find address or place** in the sample image, above). The address is 701 S. Mt. Vernon Ave.
- 8. In the Search Result box, click **Zoom to**.
- 9. Close the Search result box.
- 10. Answer the following questions in a separate document. Feel free to number them or use bullet points. Here is a link to the campus map (https://www.valleycollege.edu/about-sbvc/maps-directions-parking.php) for reference.
 - The Planetarium, the Auditorium, and the Liberal Arts (LA) buildings are some of the oldest buildings on campus. How are
 the footprints of the new buildings different from the footprints of the older buildings, and from many of the buildings we
 see in the area? (4 points)
 - Name the fault (or fault zone) that runs through campus. Click the dotted red line to reveal the metadata, which contains the name. It is the San Bernardino section of the _____ zone. (2 points)
 - Based on the information that is visible on the map, would you assume there is a relationship between the presence of the fault line and the orientation (footprint direction) of the new buildings? Why or why not? (4 points)
- 11. Reopen the Add Data box. Find the Microsoft_Building_Footprints layer and click REMOVE.
- 12. Keep the USGS Earthquake faults layer and **ADD** the **State Geologic Map Compilation...** layer. The full name is "The State Geologic Map Compilation (SGMC) Geodatabase of the Continental United States".
- 13. This layer is opaque. We will increase the transparency until we can view map labels through this layer. Click **Layer List** on the green toolbar (two icons to the left of Add Data).
- 14. Click the three dots to the right of the new layer (The State Geologic...) and select **Transparency**. If the dots show you a loading symbol, click it again.
- 15. Move the slider to about the 60-70% range, until you can read the map labels for cities and see some of the roads on the map below (you may need to zoom out as well)
- 16. Answer the following questions:
 - Find Loma Linda, CA on your map. You can click and drag, adjust the zoom, or enter Loma Linda in the search box in the upper righthand corner.
 - View the metadata for the brown area that begins in Loma Linda by clicking somewhere within the polygon. What are the two major types of rock found in this area (see Major 1 and Major 2). (2 points)
 - Adjust the zoom and click and drag your map until you can see an area that includes Santa Clarita to the west (the left) and Palm Desert to the east (the right). On my computer screen, this equates to a zoom level of 9, which you can find in the lower right corner, in between the fractional and graphic scale. See the image at the top of these instructions for an example.
 - The San Andreas fault zone runs through the map from the top left to the bottom right. Locate the San Gabriel Mountains and the San Bernardino Mountains. They are on either side of Cajon Pass. Both are mostly pink and green on the map.
 - View the metadata for several of the pink polygons found over the San Bernardino and San Gabriel Mountains. **What is one** major and one minor rock type that can be found in the areas covered by pink polygons? (2 points)
 - What is one major and one minor rock type that can be found in the green areas around these same mountains? (2 points)
 - What is one major type of rock that can be found in the gray areas in these mountains? (2 points)
 - Click on one of the lines that comprise the San Andreas fault zone. According to the metadata, what type of fault is this? Find it under Spil Sense. (2 points)
 - The San Andreas fault separates the North American tectonic plate (on the east side) from the Pacific Plate (on the west side). Based on the information about the geology of the area (the rocks and the type of fault line), and the visual appearance of the area (including the San Gabriel and San Bernardino mountains), which tectonic plate is moving to the northwest? How do you know? (8 points)
 - Metadata question: About how old is the San Andreas fault in our area? (2 points)
- 17. Now you will export a beautiful map. You can export the current view, or use your skills to recenter the map on an area that is of more interest to you (your house, your hometown, etc.).
 - Click the Print icon (three icons to the left of the search bar).
 - Give your map a title that includes your first and last or your preferred name.
 - Click Layout and select A3 or A4 (Portrait or Landscape) depending on your preference. Portraits are tall; landscapes are wide.
 - Select PDF or JPG depending on your preference.

- Next, click Advanced.
- Be sure that Include legend is selected (there should be a check mark next to it)
- Click Print and wait for your file to generate. Once your file is ready:
- Click on your file to open it in a new window or tab. Save your image by right clicking and selecting the appropriate option, or by finding the print option in your browser's menu.
- **Upload your map file** to this assignment, or email it to me if you have technical difficulties and use the assignment title in the subject line of your email. **(10 points)**

Choose a submission type













(https://sbccd.instructure.com/courses/55385/modules/items/3224466)

