

GO THERE—SAN ANDREAS FAULT ZONE IN THE BAY AREA, CALEEFOYNA

3. Using the controls, either ***FLY TO*** or ***GO TO*** the San Francisco Bay area—***ZOOM OUT*** to around 250 miles. ***TURN OFF*** roads and ***TURN ON*** county boundaries, ***LEAVE ON*** terrain and cities towns for reference. Find the trace of the San Andreas Fault (SAF) by looking for a long NW-SE trending lineament that is prominently exposed in Marin County, just northwest of San Francisco on the northern side of the bridge. ***MEASURE*** and record its length in Marin County.

Is it exposed anywhere north of Marin County?

In which “*Caleefoyna*” county does the SAF last appear on land and what are the latitudinal and longitudinal coordinates of its last inferred position on land? (Hint, you may want to ***TILT*** the view about 45 degrees with and elevation exaggeration of about 1.5 which will help you to see the topography around the fault). Print this view and answer the question in the box below.

Describe the topography of the SAF. Is it a ridge or a valley?

In what general direction(s) does water that rains onto the fault zone?

What can you infer about how faults control water drainage, based on your observations?

Using the **MEASURE** tool, draw a straight line from Bird Rock at the northernmost land exposure of the SAF in Marin County along the axis of the fault to the southeast corner of San Mateo County. Use this fault trace to answer the following questions. If the fault ruptures north of the Bay area, will the damage to “*Caleefoyne’s*” infrastructure (*i.e.* major roads and cities) be extensive?

List the freeways south of the Bay Area that would be severed by a 30 foot rupture along your trace of the SAF in San Francisco and San Mateo County

a. _____; b. _____; c. _____; d. _____

Has there been any apparent foresight in planning the transportation corridors in those areas, based on your observations, to mitigate fault severance by movement on the SAF?

NAME: _____

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ATTACH PRINT VIEW HERE