

Putting Down Roots in Earthquake Country:  
San Francisco Bay Region

Name \_\_\_\_\_  
Date \_\_\_\_\_ Period \_\_\_\_\_

Scavenger Hunt:

(Answers can be found in the handbook; look for titles, topics highlights, and maps.)

1. What do we know about large and damaging earthquakes that are certain to occur in the future?
2. What percent of households have disaster plans or disaster supply kits?
3. What is the name of the subduction zone offshore from Oregon and Washington State?
4. How far away from the magnitude 9 earthquake which occurred offshore from northern California in January, 1700, was damage reported?
5. In 1857, a portion of the San Andreas fault in southern California shifted by about 30 feet. Yet there was little damage. Why?
6. Where was the most intense shaking during the April, 1906, earthquake?
7. Why won't the portion of California west of the San Andreas fault fall into the Pacific Ocean after an earthquake?
8. What is the probability for at least one magnitude 6.7 or greater earthquake between 2003 and 2032 in the Bay Area?
9. How many earthquakes occurred in the Vacaville area during 1892? \_\_\_\_\_ What was the magnitude of the earthquakes? \_\_\_\_\_
10. Which major fault in the Bay Area has the highest probability of a large earthquake before 2032?
11. Which earthquake that occurred in September 2000 that had its focus on a previously unknown fault?
12. What 3 factors control the intensity of shaking that a structure will experience during an earthquake?
  - A.
  - B.
  - C.
13. What type of soil amplifies earthquake shaking the most?
14. Where are the worst soft soils in the Bay Area found?

15. What county in the area has the lowest expected level of shaking from future earthquakes?
16. What percentage (approximately) of high schools in the Bay Area will likely Experience damaging earthquake shaking in the next 30 years?
17. List 4 reasons why earthquakes in urban areas are often followed by destructive fires.
  - A.
  - B.
  - C.
  - D.
18. What is liquefaction?
19. What is the website address where people can view seismic hazard zone maps for the Bay Area?
20. Compared to the 1906 San Francisco earthquake, how much energy was released during the 1989 Loma Prieta earthquake?
21. What is the expected Modified Mercalli Intensity Shaking Severity Level in the city of Oakland where Interstate 980 meets Interstate 880?
22. What is the range in numbers of the expected homes and apartment units to become uninhabitable from a magnitude 6.9 earthquake on the Hayward Fault?
23. On what pages will you find the Seven Steps to Earthquake Safety?
24. What is the definition of a foreshock?
25. Define "retrofit".