**Oregon Field Guide – Seismic Hazards of the Pacific Northwest Review Questions NAME\_\_\_\_\_\_\_\_\_\_\_\_\_**

1. What type of plate tectonic boundary exists along the Coast of the Pacific Northwest.
2. True or False: The Pacific Northwest has little to no risk of great earthquakes in the future.
3. What is the average amount of time between great earthquakes recorded in the sediment record of the Oregon Coast.
4. Explain how the tsunami record is preserved in coastal sediments of the Pacific Nortwest, draw a sketch to illustrate your answer.
5. How have “ghost” trees been used to age data and record ancient seismic activity in the Pacific Northwest.
6. What is the name of the US Geological Survey Scientist who discovered the tree-ring seismic records in the Pacific Northwest.
7. When was the last great earthquake in the Pacific Northwest, list two pieces of evidence to support your answer.
8. Draw a sketch showing how Pacific Northwest seismic cycles are related to plate tectonic activity on the coastal zone.
9. True or False: there have been extensive recordings of seismic activity in the Pacific Northwest over the last 100 years.
10. Explain how Canon Beach, Oregon has prepared a seismic warning system.
11. List two pieces of evidence that the Oregon Coast is being squeezed by subduction and creating a seismic hazard.
12. True or False: there are many faults in the Portland area that are capable of generating local earthquake sources.
13. List three existing risks to the public health and welfare associated with potential earthquake damage in the Portland area.
14. Describe two methods by which engineers are attempting to reduce destruction to public infrastructure in Portland area, in the event of a seismic event.
15. What are the primary engineering problems associated with building construction techniques in relation to seismic risk in the Portland area.
16. Describe two examples in which buildings can be reinforced to withstand an earthquake event.
17. How does the sediment and rock material upon which buildings are constructed, affect the risk of damage during an earthquake.
18. What is the prediction for the next great earthquake in western Oregon?