One class Period:

Hayward Fault California Watch in class and discuss.

Task: Watch the film and take notes. Focus on location, origin of seismic activity, potential danger and what is being done about it.

One class Period: <u>Seismogram Analysis</u> Watch in class and discuss <u>Seismograph Analysis</u> <u>Earthquake Lab Practice (Paper)</u> or <u>online</u> Do at home or bring your laptop to class <u>Richter Scale I</u> and <u>Richter Scale II</u> Do at home

Two class Periods: Alaska Way Viaduct Earthquake Simulation Watch in class and discuss Buildings and Earthquakes Simulation and applications. Home Preparation and class work Earthquakes and engineering Group Project Building a shake table. See your teacher for a <u>set of instructions</u> or do your own research. Tsunami Simulation Tsunami Banda Aceh Tsunami Resources Building for earthquakes For Self Study

Required Background Reading Foreshock, Main shock, After Shock Seismic Waves Earthquake Lab Bridge to classroom Seismicity Animations Students should choose at least two of these and prepare an oral report with a presentation to the class.

Assignment:

Research Vancouver's seismic vulnerability and write a 500 word report in which you discuss the reasons for seismic vulnerability in the Vancouver area, potential damage, and what has been done to mitigate damage and loss of life and what else can be done in the future.

Use these resources to start and find additional resources on your own

Liquefaction Infrastructure Inventory Seismic Hazards Abatement Program Mapping crustal stress and strain in southwest British Columbia What will be left standing when the shaking stops? The Big One Earthquake Scenario: 7.3 in Georgia Strait Atlas of Megathrust Earthquake Risk in Metro Vancouver Earthquake Preparedness Vancouver Vancouver Earthquake Map

Practice Test

Preview onto the next unit: What is the link between seismic activity such as earthquakes and plate tectonics?