**Task**: In-depth case studies of natural hazards derived from plate movement, management of these natural hazards, and the strategies that could limit damage and death. Consider how the hazards both affect and are managed differently by LEDC (less economically developed country) or MEDC (more economically developed country). Natural hazards include major earthquakes (e), volcanic eruptions (v), tsunamis (t), landslides (l), ground deformation, volcanic ash, lava, hot ash clouds (nuee ardentes.)

The strategies to manage natural hazards differ based on LEDC or MEDC, so research the following: For both (e) and (v), include: historic records, frequency, seismic evidence, rescue and aid. For (e) only, include: building design. For (v) only, include: tilt meters.

You may add additional events to your case studies compilation, but definitely should include these earthquakes: Mexico City (1985), Armenia (1988), Loma Priete (1989), Mt. St. Helens (1989), Kobe (1995), Columbia (1999). It's not included in the AICE syllabus, but I would add the earthquakes from 2009 and 2010.

You may add additional events to your case studies compilation, but definitely should include these volcanic eruptions: Ruepehu (1965, 1975, 1995), Mt. Uzun (1991), Pinatubo (1999), Monserrat (1995), Etna (2001), Grimsvotu Jokulhaup (Glacial burst) 1996. It's not included in the AICE syllabus, but I would add the eruptions from 2009 and 2010.

***AICE paper tasks might use the following phrases:***

* Select one major earthquake or volcanic event with which you are familiar. Describe the effects of the event on the area it affected and evaluate the extent to which its effects were managed.
* What kind of methods can be adopted to limit damage and death, use examples from case studies for both LEDC and MEDC.
* What kind of difficulties do relief organizations face?

***Concepts/terms that will be considered during class and for homework:***

* Cause and effect of tectonic plate movements
* Seismic waves characteristics and properties
* How to interpret seismograph records and the pattern of P, S, and L waves
* Earthquake focus and how to interpret epicenter graphs; how to predict EQ focus using epicenter graphs
* Types of volcanic eruptions and the difference between magma & lava
* How to predict volcanic eruptions using seismic activity, ground deformation, and gas emissions
* How seismic activity patterns change from before, at onset and during seismic events