










(Magnitude 12.2)

TRALFAMADORE MAP
(To print and hand in)

MAP LEGEND			
EARTHQUAKE FOCI		0-70 km	 Land area
		70 –300 km	 Ocean
		300 + km	 Volcano
		1.	Feature reference number (For assignment Questions)
		U	Volcano reference letter (For assignment Questions)
		i	Plate Tectonic movement direction reference letter (For assignment Questions)

MAP INSTRUCTIONS

PART I Sketch the location of the following plate boundaries that can be identified on the basis of the distribution of earthquakes:

- a) Show any trenches that you think might be present as continuous **RED lines**. (5 points)



- b) Show any oceanic ridges that you think might be present as continuous **BLACK lines**. (5 points)



- c) Show the location of any transform faults that you think might be present as continuous **GREEN lines**. (5 points)



Note: Be very precise in the placement of your lines for these tectonic boundaries.

PART II Based on the pattern of depth of earthquakes:

- a) Identify where subduction is taking place on the map **at the steepest angle from the horizontal** (label this location *with an arrow and with the letter “A”*). (2 points)
- b) Identify where subduction is taking place on the map **at the lowest angle from the horizontal** (label this location *with an arrow and with the letter “B”*). (2 points)
- c) Can you recognize any location where there may be a “**seismic gap**”? If you think that there is one label this location *with an arrow and with the letter “C”*. (2 points)

Note: Be very precise in the placement of your ‘letters’ – The letter size should be APPROXIMATELY THE SIZE shown above (ie. ~18 pt font)

Once you have completed Part I and II save the map as a PDF document and UPLOAD to the “Tests and quizzes” tool on Sakai.

PART III Questions in the assignment document will refer to the feature reference numbers, volcano reference letters and Plate tectonic movement direction reference roman numerals posted on the Talfamador map. For ease of recognition and reference, each number or letter has been provided as well on a separate map.

ANSWERS for these questions must be entered in the “Tests and quizzes” tool on Sakai.