

Analyze and Apply:

1. After you plot the data, describe any observed relationship between the location of earthquake epicenters and the depth of earthquake foci. (In other words, compare the depth of the earthquakes with the areas east and west of the coast line?)

2. Based on the graph create a hypothesis about what is happening to the plates at Earth's surface in the vicinity of the plotted earthquake foci? (In other words, what is happening above the foci at the surface?)

3. In your opinion, what process is causing the earthquakes plotted on your graph? (In other words, what is going on that is triggering these earthquakes?, support your answer)

4. Based on the data you have plotted from the data table, is the continent located east or west of the edge of the section of Earth's crust? (Hint: think about the density of continental and oceanic plates from Ch. 10, explain how you know your answer)

5. Hypothesize why none of the plotted earthquakes occurs below 700 km. (Support your answer, there is a definite answer for why no quakes occur that deep)

6. Based on what you have observed and plotted, do all earthquakes occur at the same depth? (You may answer "yes" or "no", but you must support your answer)

7. Based on what you observed, is there a relationship between earthquake depth and the movement of sections of Earth's crust? (In other words, explain the type of plate boundary and how you know)
