Study Guide/Homework Revised

Practice on extended response

Please write the answers on a separate piece of paper.

1. What are the two ways you can find the epicenter of an earthquake (one inferred and one mathematically)? Describe how scientists determine the epicenter of an earthquake using triangulation. Include these terms: *seismograms*, *arrival times*, *primary waves*, and *secondary waves*.
2. The list below includes three terms that are related to ways that earthquakes can cause damage. Define them and describe how they can cause damage.
   1. aftershock
   2. liquefaction
   3. tsunami
3. Write a short paragraph that describes the differences between the Richter/Moment Magnitude Scale and the Mercalli Intensity Scale. Be sure to discuss what each scale measures specifically, how the information is gathered. Be sure to give specific details for each scale for full credit.
4. Describe each type of wave – Primary (P wave), Secondary (S wave), and surface waves. Make a chart to show speed at which each wave travels, what materials they can travel through, how they move and if they are body or a surface wave. Which type of wave causes the most damage?
5. What is a focus? What is the epicenter? What type of earthquake causes more damage if of the same magnitude – a shallow focus one or a deep focus one? Why?