

Chapter 10 and 11 Earthquakes Test Study Guide: Geology 1P, Mr. Traeger

Name: _____

Period: _____

Date: _____

Section	Major Questions to be asked and/or tasked to be measured	Where do I find the information and/or where did we learn this?
11.2	<p><u>How Mountains Form</u></p> <ul style="list-style-type: none"> ▪ What are the types of stress in the earth? ▪ What are synclines and anticlines? ▪ What is strike? What is dip? How can knowing both of them help a geologist to map the subsurface geology of sedimentary folds? ▪ Why does oil become trapped in anticlines? ▪ What are the types of faults in the earth's crust? ▪ What is a hanging wall? What is a foot wall? ▪ What is the difference between normal, reverse, thrust, and strike-slip faults? 	<ul style="list-style-type: none"> ▪ Section 11.2 HW ▪ It's Not My Fault, Graben, and Horst Lab ▪ Internet Investigations ES1102 and ES1106 ▪ Online Earthquake PowerPoints ▪ <i>Killer Quake</i> video and questions ▪ <i>Putting Down Roots in Earthquake Country</i> Booklet
11.3	<p><u>Types of Mountains</u></p> <ul style="list-style-type: none"> ▪ How do folded mountains form? ▪ How do dome mountain form? ▪ How do fault block mountains form? ▪ What is horst? What is graben? ▪ How were the mountains and valleys of the Basin and Range province of the Western United States formed? 	<ul style="list-style-type: none"> ▪ Section 11.3 HW ▪ It's Not My Fault, Graben, and Horst Lab ▪ Internet Investigations ES1102 and ES1106 ▪ Online Earthquake PowerPoints ▪ <i>Killer Quake</i> video and questions ▪ <i>Putting Down Roots in Earthquake Country</i> Booklet
10.1	<p><u>How and Where Earthquakes Occur</u></p> <ul style="list-style-type: none"> ▪ How do earthquakes relate to plate tectonics? ▪ What causes earthquakes? ▪ What are the different types of earthquake waves? What are their characteristics? 	<ul style="list-style-type: none"> ▪ Section 10.1 HW ▪ Seismic Waves and Plotting Earthquakes Lab ▪ Online Earthquake PowerPoints ▪ <i>Killer Quake</i> video and questions ▪ <i>Putting Down Roots in Earthquake Country</i> Booklet
10.2	<p><u>Locating and Measuring Earthquakes</u></p> <ul style="list-style-type: none"> ▪ What is a seismograph and how does it work? ▪ How do you interpret a seismogram? ▪ How do you locate the epicenter of an earthquake? Know how to read a seismogram, calculate P-S travel time differences, calculate the distance to an earthquake's epicenter. ▪ What is the difference between intensity and magnitude? What scales are used to measure each? What is the Mercalli Intensity Scale? ▪ By how much does the energy of an earthquake change between scales of magnitude? ▪ What is moment magnitude? What are the things that determine the moment magnitude of an earthquake? 	<ul style="list-style-type: none"> ▪ Section 10.2 HW ▪ Seismic Waves and Plotting Earthquakes Lab ▪ Magnitude versus Intensity Activity ▪ <i>Killer Quake</i> video and questions ▪ Online Earthquake PowerPoints ▪ <i>Putting Down Roots in Earthquake Country</i> Booklet
10.3	<p><u>Earthquake Hazards</u></p> <ul style="list-style-type: none"> ▪ What are hazards associated with earthquakes? ▪ What are tsunamis? How do they form? What should you do to avoid getting killed by one? ▪ How do you calculate the time it will 	<ul style="list-style-type: none"> ▪ Section 10.3 HW ▪ <i>Killer Quake</i> video and questions ▪ Magnitude versus Intensity Activity ▪ Online Earthquake PowerPoints ▪ <i>Putting Down Roots in Earthquake Country</i> Booklet

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	<p>take a tsunami wave to reach a distant shoreline from its point of generation? Hint: rate x time = distance</p> <ul style="list-style-type: none"> ▪ How does the ground type that you live on determine the intensity of the earthquake? ▪ What can you do to prevent earthquake damage and loss of life? ▪ What goes into a good earthquake safety kit? What makes a good earthquake safety plan? ▪ What should you do when an earthquake strikes? What shouldn't you do? ▪ What are the areas of major earthquake risk in the world? ▪ Can we predict earthquakes? If so, how? ▪ How do differences in engineering determine the amount of damage received by structures? 	