

Unit 4 Geography – Content Assignments

4.1 Layers in the Earth		
	Activity	Date Completed
	VIDEO: Structure of the Earth	
	VIDEO: Why does the Earth have layers?	
	<p>VIDEO: DIY science earth's layers pop up card</p> <p>ACTIVITY: In this video Rob demonstrates how to create a simple pop up card which identifies the layers of the earth. I challenge you to create a similar pop up card. Your project MUST include the following layers: inner core, outer core, lower mantle, upper mantle and crust.</p> <p>Your project will also include a brief description of each layer (ex. what is it made of? is it solid or liquid? how thick is it?).</p>	
4.2 Plate Tectonic Movement		
	Activity	Date Completed
	VIDEO: The Early Earth and Plate Tectonics	
	<p>VIDEO: Plate Tectonics Explained</p> <p>While you watch this video, pay particular attention to the explanation of how tectonic plates move.</p>	
	<p>WORKSHEET: Earthquakes Living Lab: The Theory of Plate Tectonics</p> <p>Download and complete the Earthquakes Living Lab Worksheet (thanks to the teachengineering.org website), and complete questions 1,2,3,4,5,6,7 and 9.</p>	
	VIDEO: Tectonics of the Planet Earth	
	ONLINE ARTICLE: Theory of Plate Tectonics	
	<p>VIDEO: Modeling Plate Tectonics</p> <p>ACTIVITY: In this video watch how students model plate tectonics using graham crackers and icing.</p> <p>Now it's your turn, your task is to model plate tectonic boundaries. You may use whatever you like to model the three types of plate boundaries:</p> <ol style="list-style-type: none"> 1. Convergent (including continental-continental, oceanic-oceanic and continental-oceanic) 2. Divergent 3. Transform <p>Your model should also include a brief description (either written or oral) of each plate boundary. What is happening? Where is this happening? How is this happening?</p>	

4.3 Earthquakes and Volcanoes		
	Activity	Date Completed
	VIDEO: Volcanoes 101	
	VIDEO: How Volcanoes Form	
	VIDEO: Earthquakes 101	
	VIDEO: What is an earthquake?	
	VIDEO: Seismic Slinky	
	ONLINE ARTICLE: Seismic Zones in Western Canada	
	<p>RESEARCH PROJECT: Select ONE of the following topics to research:</p> <p>1) Research a significant earthquake that has occurred in British Columbia Present your research in the form of a poster on 11x17 paper. Your poster will include:</p> <ul style="list-style-type: none"> • At least two images (both must be referenced in the writing) • Date of the earthquake • Size of the earthquake • Result of the earthquake (What was the damage? Where people displaced? Etc) • Location of the earthquake (including epicenter and depth of focus) • Type of fault the earthquake occurred on • Describe the three types of earthquake waves: primary(P-waves), secondary(S-waves) and surface waves (L-waves) • All references must be listed (including image source) <p>2) Research a volcano located in British Columbia Present your research in the form of a poster on 11x17 paper. Your poster will include:</p> <ul style="list-style-type: none"> • At least two images (both must be referenced in the writing) • When was the volcano last active • Where is the volcano located • Has the volcano ever erupted? If so what damage did it cause? • What is the nearest community (or communities) to the volcano? • What damage would the volcano cause if it erupted? • Is the volcano likely to erupt? • What type of volcano is it • All references must be listed (including image source) 	
4.4 Major Geological Events of Local Significance		
	Activity	Date Completed
	VIDEO: Megaquake Could Hit North America	
	ONLINE ARTICLE: Get Ready for the Big One	
	<p>ONLINE ARTICLE: Indian Ocean Tsunamis in Legend ACTIVITY: Another way in which First Peoples preserve their history is through stories. In the article titled Dating the 1700 Cascadia Earthquake: Great Coastal Earthquakes in Native Stories, the authors Ruth S. Ludwin et al. describe how historical stories from First Peoples about earthquakes and flooding are being taken seriously by the scientific community. In their article on page 144 read one such story titled Indian Ocean Tsunamis in Legend.</p>	
	<p>AUDIO: Unearthing Proof of a Tsunami in the Northwest Listen to this National Public Radio broadcast about the 2005 Indian Ocean Tsunami.</p>	
	ONLINE ARTICLE: Ghosts of Tsunamis Past	
	ASSIGNMENT: Pick up the Cascadia Mystery Assignment from your teacher	