

Stage 1 - Desired Results		
<p>ESTABLISHED GOALS (CCSS)</p> <p>RST 9.3 - Follow precisely a complex multistep procedure when carrying out experiments, taking measurements, or performing technical tasks, attending to special cases or exceptions defined in the text.</p> <p>RST 9.4 - Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to <i>grades 9-10 texts and topics</i>.</p> <p>RST 9.7 - Translate quantitative or technical information expressed in words in a text into visual form (e.g., a table or chart) and translate information expressed visually or mathematically (e.g., in an equation) into words.</p> <p>WHST 9.1a - Introduce precise claim(s), distinguish the claim(s) from alternate or opposing claims, and create an organization that establishes clear relationships among the claim(s), counterclaims, reasons, and evidence</p>	Transfer	
	<p>Students will be able to independently use their learning to...</p> <p>Classify the world's volcanoes three different ways. Describe the different types of lava and lava flows. Identify examples of extraterrestrial volcanism.</p>	
	Meaning	
	<p>UNDERSTANDINGS Students will understand that...</p> <p>Different types of magma are produced at different places in the crust.</p> <p>These different magmas result in different types of volcanoes and eruptions.</p> <p>There is or has been volcanic activity on other worlds in our Solar System caused by different processes than those of earth.</p>	<p>ESSENTIAL QUESTIONS:</p> <p>What are some of the differences between felsic and mafic magma?</p> <p>How can you tell the difference between the 2 different lava flows?</p> <p>What are the 3 different types of volcanic eruptions and how can you tell the difference between them?</p> <p>Where can you find examples of each of the different types of volcanoes?</p> <p>Why does the chance of people being harmed by volcanic eruptions increase every day?</p> <p>What are some examples of volcanoes on other bodies in the Solar System?</p>
Acquisition		
<p>Students will know... That volcanoes can be classified by their type of eruption, their type of cone, and their probability of erupting again.</p> <p>Where the majority of earth's volcanoes are located.</p> <p>How volcanism can be caused by other events besides plate tectonics.</p>	<p>Students will be skilled at... Classifying volcanoes based on their physical characteristics.</p> <p>Creating a map that illustrates the locations of earth's volcanoes.</p> <p>Creating pie graphs that illustrate the chemical compositions of different types of volcanic rocks, and using that information to determine the origin of the rock.</p> <p>Identifying other types of volcanism within our solar system.</p>	

Stage 2 – Evidence				
Evaluative Criteria	Assessment Evidence			
PERFORMANCE TASKS	CURRICULUM EMBEDDED PERFORMANCE ASSESSMENT (PERFORMANCE TASKS): Plot and label locations of volcanoes, specifically around the Pacific Ring of Fire, and categorize them as being high, medium, and low in silica.			
	Create pie graphs of several volcanic rocks that show their chemical composition, then use the graphs to determine the type of lava from which they were produced.			
	Given physical characteristics, correctly place various volcanoes in the right classification.			
CLAIMS	<u>CLAIM 1</u>	<u>CLAIM 2</u>	<u>CLAIM 3</u>	<u>CLAIM 4</u>
DEPTH OF KNOWLEDGE LEVELS	<u>DOK 1</u>	<u>DOK2</u>	<u>DOK 3</u>	<u>DOK4</u>
ACHIEVEMENT LEVEL DESCRIPTORS	<u>ALD 1</u>	<u>ALD 2</u>	<u>ALD 3</u>	<u>ALD 4</u>

Stage 3 – Learning Plan
<p>Notes/discussion on types of lava, types of lava flows, types of eruptions, types of cones, active vs dormant vs extinct, and extraterrestrial volcanism.</p> <p>Demonstrate types of eruptions using simple ingredients</p> <p>Volcanoes: Where and Why map activity</p> <p>Volcanic Rocks and Their Formation activity</p>