Google Earth® Volcano Tour

Earth Science Mr. Traeger

Name: _____ Period: _____ Date: _____

Background and Directions

In this exercise, you will take a virtual tour around the world in Google Earth® to look at different types of volcanoes. Launch Google Earth® with plate boundaries overlain by going to this link. http://earthquake.usgs.gov/regional/nca/virtualtour/global.php. Click on ñTectonic Plates of the World.ò Google Earth® should load. Under ñayers,ò click the plus sign next to ñGallery.ò Scroll down and click the checkbox titled ñVolcanoes.ò The volcanoes of the world should now appear if you zoom in far enough. Take a geographic journey around the world and report on the following types of volcanoes.

Part 1: Finding Different Volcanic Structures

Find examples of the following types of volcanoes and fill in the appropriate information for each one of them. Use *Google Earth*® for this.

	Shield Volcano	**Cinder Cone/Lava Dome Volcano**
Volcano Name	Mauna Loa	Sunset Crater
Location (City, State, Country)	Hawaii, USA	Flagstaff, Arizona, USA
Latitude & Longitude	Lat.: Lon:	Lat.: Lon:
Summit Elevation in meters?		
Appearance (steep sides, gentle sides?) Sketch it.		
Active, dormant, or extinct?		
Has it ever caused property damage and/or loss of life? If so, how bad?		
Is this volcano located at a hot spot, divergent zone, or convergent subduction zone?		
What type of eruption was caused? Gentle or explosive? Fluid lava flows or pyroclastic flows?		
Rock Type? Basaltic, Andesitic, Rhyolitic?		

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	Stratovolcano/Composite Volcano	**Caldera**
Volcano Name	Mt. Rainier	Yellowstone
Location (City, State, Country)	Washington, USA	Wyoming, USA
Latitude & Longitude	Lat.: Lon:	Lat.: Lon:
Summit Elevation in meters?		
Appearance (steep sides, gentle sides?) Sketch it.		
Active, dormant, or extinct?		
Has it ever caused property damage and/or loss of life? If so, how bad?		
Is this volcano located at a hot spot, divergent zone, or convergent subduction zone?		
What type of eruption was caused? Gentle or explosive? Fluid lava flows or pyroclastic flows?		
Rock Type? Basaltic, Andesitic, Rhyolitic?		

Part 5: Summative Assessment

1. What do plate tectonics have to do with the type and/or explosiveness of the volcanoes that you found? Do you notice any patterns? If so, what are those patterns?