

Google Earth® Volcano Tour

Earth Science/Geology

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/virtuالتour/global.php>. Click on %tectonic Plates of the World.+ Google Earth® should load. Under %layers,+select the drop down arrow for %geographic features.+Click the checkbox titled %volcanoes.+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: Find Shield Volcanoes

Find 3 shield volcanoes and fill in the following chart. Use *Google Earth®* for this.

	Volcano #1	Volcano #2	Volcano #3
Volcano Name			
Location (City, State, Country)			
Latitude & Longitude	Lat.: Lon:	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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Part 2: Find Cinder Cone Volcanoes

Find 3 cinder cone volcanoes and fill in the following chart. Use *Google Earth®* for this.

	Volcano #1	Volcano #2	Volcano #3
Volcano Name			
Location (City, State, Country)			
Latitude & Longitude	Lat.: Lon:	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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Part 3: Find Stratovolcanoes/Composite Volcanoes

Find 3 stratovolcanoes and fill in the following chart. Use *Google Earth*® for this.

	Volcano #1	Volcano #2	Volcano #3
Volcano Name			
Location (City, State, Country)			
Latitude & Longitude	Lat.: Lon:	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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Part 4: Find Calderas

Find 3 caldera super volcanoes and fill in the following chart. Use *Google Earth®* for this.

	Volcano #1	Volcano #2	Volcano #3
Volcano Name			
Location (City, State, Country)			
Latitude & Longitude	Lat.: Lon:	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 Paragraph

1. What does the theory of 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?