

\_Date:\_\_\_\_

Hour:

## **VOLCANO WEBQUEST**

Using the internet, find the information required to complete this web quest. Some useful websites:

> http://www.volcanolive.com/ http://pubs.usgs.gov/gip/volc/types.html

**OBJECTIVE #1 – VOCABULARY:** Define the following.

https://volcanoes.usgs.gov/vsc/glossary/

volcano
lava
magma
crater
hot spot
silica
pyroclastic flow
active volcano
extinct volcano
dormant volcano
Aa
Pahoehoe

## **OBJECTIVE #2:** Provide FULL answers to the following questions.

https://www.nationalgeographic.org/encyclopedia/volcano/

- 1. In general, how do volcanoes form?
- 2. Describe how volcanoes form at divergent boundaries.
- 3. Describe how volcanoes form at convergent boundaries.
- 4. What is an island arc? Give at least two examples of major island arcs.
- 5. How did the Hawaiian Islands form?
- 6. How is Yellowstone different than the other volcanoes in the table above? Is it located on a hot spot or a boundary? Is it expected to erupt again soon?
- 7. What causes a volcano to erupt?

## **OBJECTIVE #3: CURRENT EVENT:**

- 8. What is the name of the major volcano that erupted in 2010? Where is this volcano located?
- 9. What type of volcano is it?
- 10. Was the eruption silent of explosive?
- 11. What types of problems did this volcano cause across the world?

<u>**OBJECTIVE #3 – EARTH'S VOLCANOES**</u>: Make a list of the top 10 <u>**LARGEST**</u> volcanic eruptions around the world. Fill in the information of each one in the chart below. Use the following website as a reference: <u>http://www.volcanolive.com/large.html</u>

Name of Volcano	Country/Location	Type of Volcano	Year of Last Eruption	Active, Dormant, or Extinct

**OBJECTIVE #4: THE RING OF FIRE:** Locate the above volcanoes on the blank map below. Use a world map to determine these locations.



**Questions:** 

- 1. What do you notice about the placement of these volcanoes in relation to the plate boundaries?
- 2. How do volcanoes relate to plate tectonics and earthquakes?
- 3. What is the "Ring of Fire"?
- 4. How many active volcanoes are there currently?

**OBJECTIVE #5: VOLCANO STRUCTURE:** Draw and label the following structures in the space below: *crust, lava, magma chamber, side vent, ash cloud, conduit (pipe), vent* 

## **OBJECTIVE #6– TYPES OF VOLCANOES:** Use the internet and search for the 3 main

Type of Volcano		
How they form		
Type of eruption (explosive, quiet, etc.) and lava		
Physical description		
Sketch (drawing)		

types of volcanoes and fill in the table below.