Name:_____

Plate Tectonics Map Activity

1. Look over the attached plate tectonic map. There are 9 volcanoes labeled. Note what type of plate boundary each volcano is near and write that in the table below. Based on the location of the volcano and what you know about how volcanoes form at different plate boundaries, determine the type of magma you would expect to find in each volcano. Finally, write your prediction for what type of volcano it is and what type of eruptions it has.

	Type of plate boundary (subduction zone, divergent, mid-plate)	Type of magma (mafic, intermediate, felsic)	Type of volcano (shield, composite, cinder cone)	Type of eruption (non-explosive, explosive, both)
Kilauea				
Mt. St. Helen's				
Fuego				
Nevado Del Ruiz				
Villarrico				
Eyjafjallajökull				
Mt. Vesuvius				
Kilimanjaro				
Pinatubo				

2. Pick one of the volcanoes listed. Research the volcano to see if you were correct about the type of volcano and type of eruption. Answer the following questions about the volcano.
    a. How close are the nearest towns?

    b. Have past eruptions destroyed buildings, property, etc.?

    c. What type of volcanic hazards are the biggest concern for people living nearby (lava flows, pyroclastic flows, mudslides)?

    d. What are scientists doing to monitor the volcano?

    e. When do scientists predict it will erupt again?

3. Using the information from above, write a hazard analysis for the volcano. This should include information on how likely a major eruption is likely to occur, which towns could be impacted by a future eruption, and what can be done to minimize human life loss and property damage near the volcano. This should be 2 paragraphs in length.


1.
PACIFIC
2.
NORTH AMERICAN
Juan de Fuca
Rivera
Galapagos
3.
Caribbean
Cocos
4.
Northern Andes
Panama
SOUTH AMERICAN
Easter
Nazca
Altiplano
Juan Fernandez
5.
Scotia
Sandwich
Shetland
ANTARCTIC
6.
EURASIAN
7.
Anatolia
AFRICAN
Arabian
8.
Somali
INDIAN
Amurian
Okhotsk
Yangtze
Okinawa
Mariana
PACIFIC
Burma
9.
Philippine
Sunda
Caroline
North Bismarck
Manus
South Bismarck
Futuna
Maoke
Woodlark
Balmoral Reef
Niuafobu
Timor
Molucca Sea
Solomon Sea
Banda Sea
New Hebrides
Tonga
Conway Reef
Kermadec
AUSTRALIAN
MAP KEY
MAJOR PLATE
Minor Plate
Microplate
Convergent
Subduction
Divergent
Transform
Select hotspots (small and large)
Direction/speed of movement (longer arrows indicate faster moving plates)