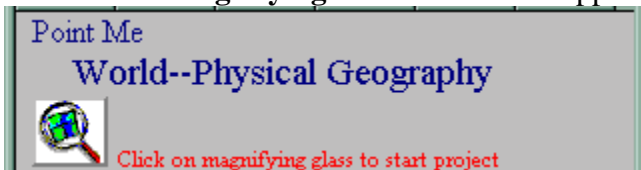


EXPLORING EARTHQUAKES, VOLCANOES AND FAULTS

Open ArcVoyager.

Under Point Me choose the **World - Physical Geography** project.

Click on the **Magnifying Glass** icon in the upper left corner.



When you open the project list the layers that are active.

1. _____

Do not add any layers yet. Predict where you think major earthquakes have occurred in the world. Write your answer here.

2. _____

Add the **Major Earthquakes, 1970 - 93** layer. Describe what you see. Are there any global patterns? Do they match your predictions in question number 2? What are they?

3. _____

Change the legend for this theme to yellow.

(Get your teacher's initials to show that you have made the changes. _____)

Zoom in to show the subcontinent of India.

(Get your teacher's initials to show that you have made the changes. _____)

Zoom out to show the whole world.

Where do you predict earthquakes occurred last year/

4. _____

Add the data layer for the most recent earthquakes. Choose **View**, then **Add Theme**. From the **Voyager** file choose **Data, Geo**, and then **World**. Then choose **quakes96.shp**. Where have the most earthquakes occurred in the last year? How did this information match your predictions?

5. _____

Identify the other layers that you think are related to earthquakes.

6. _____

Display the volcano layer. How are the volcano layers different from the earthquake layers?

7. _____
How are they similar?

Why do you think that there are so many earthquakes and volcanoes in Asia, the Rift Valley of Africa and Latin America?

8. _____

Add the layer for continental **faults**. Zoom in on regions to see the relationship between the layers. How are the earthquake, volcano, and continental fault layers related?

9. _____

Return to the view of the entire world.

10. Now add the **plates** layer to show the tectonic plates. Use the "I" for Identify tool to name each plate.

_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

How are the plates related to earthquakes and volcanic activity?

11. _____

Turn off the major lakes, major rivers, faults, all quakes, and volcanoes. Turn on the plates theme, then turn on the **country borders** theme. How are the plates related to the continental land masses?

