

Earth Science Part D- Lab Final

This part of your regent's exam is hands on and based from the information gathered in laboratories that we have completed in class. This section is worth 16 points and can help or hurt depending on how you do. Typically an 11 or better is doing good, while below that number it begins to help your overall score less and less. So this part is very important.

- 1.) Three stations:
 - a. Rocks and minerals
 - b. Earthquake Location
 - c. Ellipses
 - 2.) At these stations you will be asked to follow a set of directions given.
 - a. Be sure to read ALL directions and charts given.
 - 3.) Check your UNITS!!!!
 - 4.) You have 9 minutes per station that's all so work fast if you finish look back at your work.
 - a. Check to be sure it can be read
 - b. Check to be sure it answers the questions
 - 5.) ANY copying, damaging or altering the setups will result in a zero for your grade.
 - 6.) You will need only a pencil/pen to complete this part of your final. No reference tables or calculators all other instruments will be supplied.
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Information to know:

Rocks and minerals

- 1.) What is a mineral? How do they form?
- 2.) How to ID a mineral. The steps and material used to ID a mineral.
- 3.) What are rocks? How do they form?
- 4.) Rock ID.
 - a. How do Igneous rocks form and characteristics
 - b. How do Sedimentary rocks form and characteristics
 - c. How do Metamorphic rocks form and characteristics
- 5.) Know your ESRT charts. (pages 6/7)

Earthquakes

- 6.) What is an earthquake? How do they form? Parts of an Earthquake.
- 7.) How to read a seismograph. EQ waves?
- 8.) How to find an epicenter.

Ellipses and eccentricity

- 9.) What is an ellipse?
- 10.) How to calculate eccentricity
- 11.) Minimum and minimum values and Drawing

READ, READ, READ.... the directions, this of this test is a reading test, very little actual knowledge.

Station 1: Identify each sample in your kit

Rock _____

What features do you see in it?

What features do you see in it?

What features do you see in it?

What type of rock is it?

What mineral is it?

What type of rock is it?

How do you know?

How do you know?

Rock _____

Mineral _____

Rock _____

What features do you see in it?

What features do you see in it?

What features do you see in it?

What type of rock is it?

What mineral is it?

What type of rock is it?

How do you know?

How do you know?

Mineral _____

Rock _____

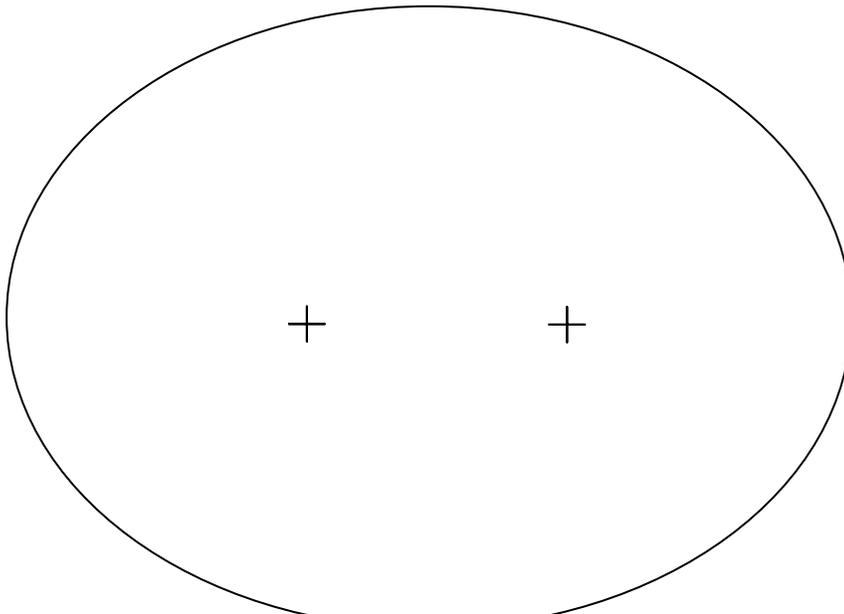
Station 2 Use attached page and fill in chart and location of earth quake epicenter.

Station 3 Find the eccentricity of the ellipse below and

Formula? _____ Solve: _____

What planet is it closest to? _____

Compare it to Jupiter's eccentricity of orbit; is it more or less elliptical? _____



Station 2 **Fill in the chart and locate the earthquake epicenter on the map.**

Station Name	P-Wave Arrival Time (00:00:00)	S-Wave Arrival Time (00:00:00)	S - P Time (00:00:00)	Distance to Epicenter (Km)	P-Wave Travel Time (00:00:00)	Origin Time (00:00:00)
Seattle	13:08:10	13:10:50	00:02:40	1600	00:03:20	13:04:50
Denver	13:07:35	13:09:50				
Anchorage	13:11:50	13:17:15				

Put an X where the epicenter is located.

