

Name: _____

Date: _____

Graded Assignment Lab Report 1.08

Submit by September 21 for full credit.



In this lab, you will discover how scientists can use models to investigate relationships. The question we are trying to answer is, **“Which melts faster, a conglomerate rock model (left) or a plain rock model (right)?”** Watch the lab video and use the Student Guide to answer the questions below!

Follow these steps to get started:

Step 1: Download the [Student Guide](#).

Step 2: Watch the following video from the SCI113 Course: [Modeling Earth Science Processes Lab Video](#)

Step 3: Answer all questions fully (**in complete sentences**) using the above lab video.

Step 4: Turn the lab into the Dropbox by September 21 for full points. (Click the link for [Instructions to use Dropbox](#))
Any work submitted after the midnight deadline will be counted for up to 70% of the points possible (30% off).

Note: If you get confused, please send your teacher a kmail asking for help – make sure to ask a *specific question* in your kmail so I can help you best!

This activity is a **VIRTUAL LAB!** That means you do **not** need to go gather the materials and conduct the lab at home. Just use the [video](#) to answer the questions!!

(5 points)

1. Fill out the table below entirely using the Student Guide and the video above.

The data for Mass and Volume can be found in the [Student Guide](#) 😊.

Show how you determined the density for each rock model, **and then state which one is denser.**

Note: You will need to calculate density, using the following formula: **Density = mass ÷ volume**

Answer:

Score

Rock Model	Mass (g)	Volume (cm ³)	Density (g/cm ³)
Conglomerate			
Plain			

(3 points)

2. Do you think the density of the ice affected the melting rate of the ice, or do you think adding the objects affected the melting rates? **Be sure to include data (numbers) to support your answer.**

Score

Answer:

(3 points)

3. **Show your data (numbers) below** for the melting rate of the conglomerate model **and** of the plain model below. How are they similar? Different?

Score

Then, on a separate sheet of paper, graph your data. (Click the link for [Graphing Paper](#).) You do not need to turn in the curve, but you will need to describe the rate of change over time.

Extra Credit Opportunity: Turn in your graph to the Unit 1 Extra Credit Dropbox for 3 points extra credit!

Answer:

a) Conglomerate Model Melting Rate Data:

b) Plain Model Rate Data:

c) How are the two models similar in melting rate? How are they different?

(5 points)

4. Describe how your graph shows how the ice melted over time in terms of your curve. Is this what you had predicted would happen?

Score

Answer:

Your Score	___ of 16
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