Name Period Date

Unit 3 | Handout _____ | *Igneous Fudge Lab - Analysis and Conclusion*

Purpose: The purpose of this lab is to observe the relationship between how long a substance has to cool (e.g. magma or lava) and the size of the crystals

Problem: How does the cooling rate of a hot liquid affect the size of the crystals that grow from it?

Data and Observations: Copy the table from your first lab sheet to the table below. Write neatly and clearly!

Hints for the table below:
** For cooling time, use general terms (ex: long, short, etc.)*
** For crystal size, use scientific terms (ex: coarse, fine, etc.)*
** For general describe, just describe what you see!*

Location	Cooling Time	Crystal Size	General Description
Freezer			
Counter Top			
Incubator			

Analysis

1. What was the crystal size of the petri dish with the shortest cooling time? _____

2. What was the crystal size of the petri dish with the longest cooling time? _____

Analysis questions continue on back.

Analysis Cont.

3. Which petri dish (freezer, counter top, incubator) is most like an intrusive rock? _____ How do you know?

_____

_____

_____

4. Which petri dish (freezer, counter top, incubator) is most like an extrusive rock? _____ How do you know?

_____

_____

_____

5. None of the petri dishes had porphyritic texture. In order for a dish to have porphyritic texture, what would have had to happen?(*Hint: look at your notes on porphyritic texture for help!*)

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Conclusion

1. What is the relationship between cooling time and crystal size? (*Ex: the faster a substance cools the....).*

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