NAME	DATE		
INSTRUCTOR	PERIOD	PARTNER	

UNIT 2: Earth Materials

LAB 2-3: IGNEOUS ROCK IDENTIFICATION

INTRODUCTION: The type of igneous rock formed when molten magma solidifies depends on the mineral composition and the rate at which the magma cools.

Igneous rocks which solidify deep underground are called intrusive or plutonic. They can be observed when erosion wears away overlying layers.

When magma reaches the surface it forms volcanic igneous rocks. The texture of these extrusive igneous rocks will vary greatly from ones formed by the same magma deep below the surface.

OBJECTIVE: You will investigate the propertivocabulary:	es by which igneous rocks can be identified.	
igneous:		
intrusive:		
extrusive:		
felsic:		
mafic:		
lava:		
magma:		
texture:		
porphyry:		

PROCEDURE:

- 1. Obtain the igneous rock samples from your instructor.
- 2. Arrange your samples in the order demonstrated by your instructor.
- 3. Complete the Report Sheet using your samples, the Scheme for Igneous Rock Identification in the Appendix, and the reference material provided by your instructor.
- 4. Observe the large igneous rock samples provided.

REPORT SHEET

Sample No.	-	2		4 Cydy if ys		ogiai svitavia 9	-
Color (Light or Dark)	Options) shooting	present to form	strated by Veru roles, the Sub-	c onter demine using your sai	pies in the on Sleet	ain the ignorm ares your sam	
Texture							qshod
How formed (Extrusive or Intrusive)						59.71	round felsic round level
Minerals Present	n peridentiha	nalson instend	a drinker yel sent	are the proper	gizevni li	37 33 A. J.(2)	
position or Mafic	r platonic. To		reli da miga rejecind un ca mylog la sess mes vocanic	of the rate at the track under the same of	ne solitade rea deliver masses n la antisea	mineral comp general mobile Observed when When magani usive (general	INTRO
Rock	HEATH			IT 2: Ea OUS R		8 2-3: 1	

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DISCUSSION QUESTION	S: (Answer in	n Complete	Sentences)
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1. How is the size of the mineral grains affected by the rate at which molten rock material cools? 2. How can you determine if an igneous rock has had an intrusive or extrusive origin? 3. In general, how does the characteristic mineral composition of a light colored igneous rock differ from that of a dark colored igneous rock? 4. In general, how does the density of a light colored igneous rock differ from that of a dark colored igneous rock? 5. What is the main difference between lava and magma? 6. Describe a pegmatite texture. CONCLUSION: On what basis are igneous rocks classified?