**Disclaimer:** These reviews are courtesy of the instructor. While care has been taken to include everything that might be tested, omissions or oversights may have occurred. The instructor shall NOT be liable for any missed answer on your part just because the topic is not explicitly mentioned. It is still the STUDENT'S RESPONSIBILITY to know and be able to use concepts addressed during lectures, labs, or required texts.

Be able to identify the following rocks found in your Mineral / Rock ID kit from unknown hand samples using the ID techniques and testing materials of your kit <u>without the aid of written materials!</u>

Igneous Rocks	Sedimentary Rocks	Metamorphic Rocks	
Rhyolite	Sandstone	Slate	
Andesite	Arkose	Schist	
Basalt	Shale	Gneiss	
Granite	Limestone	Marble	
Diorite	Coal	Quartzite	
Gabbro	Gypsum		
Obsidian	Chert		
	Conglomerate		

## An EXACT replica of the GEL1010 ROCK ID LAB PRACTICAL in-class EXAM is given below starting on the next two pages.

## All the questions will be exactly the same.

## Only the rock samples associated with each question will be randomized and different!

**NOTE FOR # 4 last question** "give a detailed description using the correct associated adjectives! The description should contain at least 3 observable rock attributes."

Igneous Rocks	Sedimentary Rocks	Metamorphic Rocks
aphanitic, phaneritic, porphyritic, felsic, mafic, intermediate, intrusive, extrusive, volcanic, plutonic, etc	fine-grained, medium grained, coarse grained, conglomeritic, siliceous, carbonaceous, clastic, chemical, rounded, well rounded, angular, subangular, well sorted, poorly sorted, fossiliferous, laminated, massive, etc	foliated, non-foliated, slaty, phyllitic, schistose, gneissic, high metamorphic, low metamorphic, coarse, fine, garnet bearing, etc

BE SURE TO DESCRIBE the rock! DO NOT explain how it formed! Here are some correct sample terms

Name:

For Instructor use only:

This is a closed book / note exam. You are <u>NOT allowed to use ANY written material</u>, including booklets, pamphlets, and trifold brochures that came with your Mineral / Rock ID kit. You may use calculators (NO cell-phone!) and ALL the tools from your Mineral / Rock ID kit! You may also use the samples from your Mineral / Rock ID kit as long as:

- there is NO writing on rocks or minerals such as numbers or samples pasted on labels
- NO minerals or rocks are sorted into compartment boxes
- OK with multiple specimens in Ziplock bags as originally packaged in your Mineral / Rock ID kit

Unsure about an answer? You may "buy" a letter from the instructor for -2 points!

Please Answer Below:

Q#	Pts	Question (Using the rock handsamples from the Instructor's desk):	Your Answer:
1.	2	Obtain rock sample #11. What is the rock type of the sample?	Bubble in your answer:OIgneous - intrusiveOIgneous - extrusiveOSedimentary - ClasticOSedimentary - ChemicalOMetamorphic - foliatedOMetamorphic - non foliated
	5	What is the NAME of rock sample #11? You may write down two rock names for ½ credit. Give one observed property that was key to ID this rock (e.g. foliation; fossils; etc)	
2.	2	Obtain rock sample #25. What is the rock type of the sample?	Bubble in your answer:OIgneous - intrusiveOIgneous - extrusiveOSedimentary - ClasticOSedimentary - ChemicalOMetamorphic - foliatedOMetamorphic - non foliated
	5	What is the NAME of rock sample #25? You may write down two rock names for <sup>1</sup> / <sub>2</sub> credit. Give one observed property that was key to ID this rock (e.g. foliation; fossils; etc)	
3.	2	Obtain rock sample #19. What is the rock type of the sample?	Bubble in your answer: OIgneous - intrusiveOIgneous - extrusiveOSedimentary - Clastic OMetamorphic - foliatedOSedimentary - Chemical OMetamorphic - non foliated
	5	What is the NAME of rock sample #19? You may write down two rock names for ½ credit. Give one observed property that was key to ID this rock (e.g. foliation; fossils; etc)	

%

## GEL1010 ROCK ID LAB PRACTICAL in-class EXAM

Q#	Pts	Question (Using the rock handsamples from the Instructor's desk):	Your Answer:
4.	2	Obtain rock sample #3. What is the rock type of the sample?	Bubble in your answer:OIgneous - intrusiveOIgneous - extrusiveOSedimentary - ClasticOSedimentary - ChemicalOMetamorphic - foliatedOMetamorphic - non foliated
	5	What is the NAME of rock sample #3? You may write down two rock names for <sup>1</sup> / <sub>2</sub> credit. Give one observed property that was key to ID this rock (e.g. foliation; fossils; etc)	
	3	Obtain one of the smaller pieces of rock sample #3. What is the most likely specific gravity of that rock?	Bubble in your correct answer: $\bigcirc < 2.0 \text{g/cm}^3$ $\bigcirc 2.0 - 2.2 \text{g/cm}^3$ $\bigcirc 2.2 - 2.4 \text{g/cm}^3$ $\bigcirc 2.4 - 2.6 \text{g/cm}^3$ $\bigcirc 2.6 - 2.8 \text{g/cm}^3$ $\bigcirc 2.8 - 3.0 \text{g/cm}^3$ $\bigcirc 3.0 - 3.2 \text{g/cm}^3$ $\bigcirc 3.2 - 3.4 \text{g/cm}^3$ $\bigcirc 3.4 - 3.6 \text{g/cm}^3$ $\bigcirc > 3.6 \text{g/cm}^3$
	6	For rock sample #3, give a <u>detailed</u> description using the correct associated adjectives! The description should contain at least 3 observable rock attributes. <i>DESCRIBE the rock! DO NOT explain</i> <i>how it formed!</i>	<u>One more time:</u> <b>DESCRIBE the rock!</b> DO NOT explain how it formed! - I can't tell you how many students will do this wrong when answering right here and tell how the rock formed! <b>DESCRIBE THE</b> <b>ROCK</b> using 3 associated adjectives as explained above!!!
5.	2	Obtain rock sample #37. What is the rock type of the sample?	Bubble in your answer:OIgneous - intrusiveOIgneous - extrusiveOSedimentary - ClasticOSedimentary - ChemicalOMetamorphic - foliatedOMetamorphic - non foliated
	5	What is the NAME of rock sample #37? You may write down two rock names for <sup>1</sup> / <sub>2</sub> credit. Give one observed property that was key to ID this rock (e.g. foliation; fossils; etc)	
	6	For rock sample #37, give a <u>detailed</u> account of the rock diagenesis! Your analysis should contain at least 3 steps showing how this rock was made. <i>Explain HOW the rock formed! DO NOT</i> <i>describe the rock!</i>	<u>One more time:</u> Tell me <b>HOW THE ROCK</b> <b>FORMED</b> ! DO NOT describe it! - I can't tell you how many students will do this wrong when answering right here and start describing the rock! <b>HOW DID THE ROCK FORM</b> in 3 steps!!!!