

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 minerals found in your Mineral / Rock ID kit from an unknown hand samples using the mineral ID techniques and testing materials of your kit without the aid of written materials!

Mineral Name	Mineral Name
Apatite	Hornblende (Amphibole)
Augite (Pyroxene)	Kaolinite (China Clay)
Barite	Limonite
Biotite (Mica)	Magnetite
Calcite	Muscovite (Mica)
Chalcopyrite	Olivine
Chlorite	Orthoclase; Potassium Feldspar; Kspar
Corundum	Plagioclase (Feldspar) both black & light
Dolomite	Pyrite
Fluorite	Quartz
Galena	Talc
Gypsum	Topaz
Halite	
Hematite	

**An EXACT replica of the
GEL1010 MINERAL ID LAB PRACTICAL in-class EXAM**

is given below on the next two pages.

All the questions will be exactly the same.

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

Name:	
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For Instructor use only:

GRADE:	/50 =	%
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This is a closed book / note exam. You are NOT allowed to use ANY written material, 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 (<i>Using the mineral handsamples from the Instructor’s desk</i>):	Your Answer:
1.	3	Obtain mineral sample #27 and test for hardness. What is the most likely hardness of that mineral? <i>Note: Minerals may contain impurities. Make sure you test the actual mineral.</i>	Bubble in your correct answer: <input type="radio"/> 1 <input type="radio"/> 1.5 <input type="radio"/> 2 <input type="radio"/> 2.5 <input type="radio"/> 3 <input type="radio"/> 3.5 <input type="radio"/> 4 <input type="radio"/> 4.5 <input type="radio"/> 5 <input type="radio"/> 5.5 <input type="radio"/> 6 <input type="radio"/> 6.5 <input type="radio"/> 7 <input type="radio"/> 7.5 <input type="radio"/> 8 <input type="radio"/> 8.5 <input type="radio"/> 9 <input type="radio"/> 9.5
2.	3	Obtain mineral sample #2 and test for hardness. What is the most likely hardness of that mineral? <i>Note: Minerals may contain impurities. Make sure you test the actual mineral.</i>	Bubble in your correct answer: <input type="radio"/> 1 <input type="radio"/> 1.5 <input type="radio"/> 2 <input type="radio"/> 2.5 <input type="radio"/> 3 <input type="radio"/> 3.5 <input type="radio"/> 4 <input type="radio"/> 4.5 <input type="radio"/> 5 <input type="radio"/> 5.5 <input type="radio"/> 6 <input type="radio"/> 6.5 <input type="radio"/> 7 <input type="radio"/> 7.5 <input type="radio"/> 8 <input type="radio"/> 8.5 <input type="radio"/> 9 <input type="radio"/> 9.5
	5	What is the NAME of mineral sample #2? <i>You may write down two mineral names for ½ credit. Give one observed property that was key to ID this mineral (e.g. talc - soapy feel; garnet - scratched quartz; etc...)</i>	
3.	3	Obtain mineral sample #28 and test for hardness. What is the most likely hardness of that mineral? <i>Note: Minerals may contain impurities. Make sure you test the actual mineral.</i>	Bubble in your correct answer: <input type="radio"/> 1 <input type="radio"/> 1.5 <input type="radio"/> 2 <input type="radio"/> 2.5 <input type="radio"/> 3 <input type="radio"/> 3.5 <input type="radio"/> 4 <input type="radio"/> 4.5 <input type="radio"/> 5 <input type="radio"/> 5.5 <input type="radio"/> 6 <input type="radio"/> 6.5 <input type="radio"/> 7 <input type="radio"/> 7.5 <input type="radio"/> 8 <input type="radio"/> 8.5 <input type="radio"/> 9 <input type="radio"/> 9.5
4.	3	Obtain mineral sample #20, #21 AND #22. Which of these have/has metallic luster? <i>Note: Minerals may contain impurities. Make sure you test the actual mineral.</i>	Bubble in your correct answer: #20 <input type="checkbox"/> Metallic <input type="radio"/> Non-Metallic #21 <input type="checkbox"/> Metallic <input type="radio"/> Non-Metallic #22 <input type="checkbox"/> Metallic <input type="radio"/> Non-Metallic
5.	3	Obtain mineral sample #1, #2 AND #3. Which of these have/has distinct cleavage? <i>Note: Minerals may contain impurities. Make sure you test the actual mineral.</i>	Bubble in your correct answer: #1 <input type="checkbox"/> Distinct <input type="radio"/> Indistinct #2 <input type="checkbox"/> Distinct <input type="radio"/> Indistinct #3 <input type="checkbox"/> Distinct <input type="radio"/> Indistinct

Q#	Pts	Question (Using the mineral handsamples from the Instructor's desk):	Your Answer:
6.	5	Obtain one of the smaller pieces of mineral sample #5. What is the most likely specific gravity of that mineral? <i>Note: Minerals may contain impurities. Make sure you test the actual mineral.</i>	Bubble in your correct answer: <input type="radio"/> < 2.2g/cm ³ <input type="radio"/> 2.2 - 2.4g/cm ³ <input type="radio"/> 2.4 - 2.6g/cm ³ <input type="radio"/> 2.6 - 2.8g/cm ³ <input type="radio"/> 2.8 - 3.0g/cm ³ <input type="radio"/> 3.0 - 3.2g/cm ³ <input type="radio"/> 3.2 - 3.4g/cm ³ <input type="radio"/> 3.4 - 3.6g/cm ³ <input type="radio"/> 3.6 - 3.8g/cm ³ <input type="radio"/> 3.8 - 4.0g/cm ³ <input type="radio"/> 4.0 - 4.2g/cm ³ <input type="radio"/> 4.2 - 4.4g/cm ³ <input type="radio"/> 4.4 - 4.6g/cm ³ <input type="radio"/> 4.6 - 4.8g/cm ³ <input type="radio"/> 4.8 - 5.0g/cm ³ <input type="radio"/> 5.0 - 5.2g/cm ³ <input type="radio"/> 5.2 - 5.4g/cm ³ <input type="radio"/> 5.4 - 5.6g/cm ³ <input type="radio"/> 5.6 - 5.8g/cm ³ <input type="radio"/> > 5.8g/cm ³
	5	What is the NAME of mineral sample #5? <i>You may write down two mineral names for ½ credit. Give one observed property that was key to ID this mineral (e.g. talc - soapy feel; garnet - scratched quartz; etc...)</i>	
7.	5	Obtain one of the smaller pieces of mineral sample #19. What is the most likely specific gravity of that mineral? <i>Note: Minerals may contain impurities. Make sure you test the actual mineral.</i>	Bubble in your correct answer: <input type="radio"/> < 2.2g/cm ³ <input type="radio"/> 2.2 - 2.4g/cm ³ <input type="radio"/> 2.4 - 2.6g/cm ³ <input type="radio"/> 2.6 - 2.8g/cm ³ <input type="radio"/> 2.8 - 3.0g/cm ³ <input type="radio"/> 3.0 - 3.2g/cm ³ <input type="radio"/> 3.2 - 3.4g/cm ³ <input type="radio"/> 3.4 - 3.6g/cm ³ <input type="radio"/> 3.6 - 3.8g/cm ³ <input type="radio"/> 3.8 - 4.0g/cm ³ <input type="radio"/> 4.0 - 4.2g/cm ³ <input type="radio"/> 4.2 - 4.4g/cm ³ <input type="radio"/> 4.4 - 4.6g/cm ³ <input type="radio"/> 4.6 - 4.8g/cm ³ <input type="radio"/> 4.8 - 5.0g/cm ³ <input type="radio"/> 5.0 - 5.2g/cm ³ <input type="radio"/> 5.2 - 5.4g/cm ³ <input type="radio"/> 5.4 - 5.6g/cm ³ <input type="radio"/> 5.6 - 5.8g/cm ³ <input type="radio"/> > 5.8g/cm ³
	5	What is the NAME of mineral sample #19? <i>You may write down two mineral names for ½ credit. Give one observed property that was key to ID this mineral (e.g. talc - soapy feel; garnet - scratched quartz; etc...)</i>	
8.	5	What is the NAME of mineral sample #23? <i>You may write down two mineral names for ½ credit. Give one observed property that was key to ID this mineral (e.g. talc - soapy feel; garnet - scratched quartz; etc...)</i>	
9.	5	What is the NAME of mineral sample #13? <i>You may write down two mineral names for ½ credit. Give one observed property that was key to ID this mineral (e.g. talc - soapy feel; garnet - scratched quartz; etc...)</i>	
10.	2 Xtra Credit	Obtain mineral sample #13. What is the STREAK of that mineral? <i>Note: Minerals may contain impurities. Make sure you test the actual mineral.</i>	