GLY 4200C   Name _____
30 points   September 24, 2012
16 took exam
Numbers to the left in red are number of incoreect responses

LAB QUIZ - Labs 1-3 KEY

You may use the printed handouts from labs 1 - 3, as well as the write-ups you turned in for labs 2-3. You may perform standard tests including hardness, specific gravity, acid, UV, and magnetism, and may note other properties as appropriate. NO OTHER RESOURCES MAY BE USED ON THIS QUIZ. 1 point per question or identification.

Mineral Properties - Answer questions 1-10 which concern the properties of minerals.

1-2   Estimate the hardness of each of the following minerals. Give a single number estimate, not a range.

4   1.   H = _____4 (Fluorite)_____

13   2.   H = _____8 (Beryl)_____

3-4   Estimate the specific gravity of each of the following mineral. Give a single number estimate, not a range.

8   3.   SG = ___3.3 (Hornblende)___

10   4.   SG = ___4.6 (Stibnite)_____

5-6   Give the cleavage or fracture of the following two minerals:

1   5. Conchoidal (Quartz)_____   1   6. ___Basal   (Biotite)_____

7-8   Give the luster of the following two minerals:

5   7. ___Silky (Gypsum, var. Satin Spar)   3   8. ___Metallic (limonite)_____

9-10   Name one significant property which may be used to identify the following minerals. These properties may not be color, streak color, luster, hardness, cleavage, or specific gravity.

2   9. ___Magnetic (Magnetite)_____   3   10. ___Acid rxn., transparent to

                                                   tranlucent, Double refraction, florescent

1

Mineral Identification - Identify each mineral specimen. Answer any additional questions concerning the specimens.

2   11. Cinnabar

5   12. Name one significant property that helps to identify this mineral.

       Red streak, red color (idiochromatic)

5   13. Pyrrhotite

2   14. Name one significant property that helps to identify this mineral.

       Magnetic

4   15. Chalcopyrite

7   16. Name one significant property that helps to identify this mineral.

       H = 3 (not pyrite), metallic gold color with some irridescence

3   17. Sphalerite

7   18. Name one significant property that helps to identify this mineral.

       Multi-directional cleavage, not at rt. angles

1   19. Galena

Name two significant properties that help to identify this mineral.

2   20. S.G. > 7   and

4   21. 3D@90° cleavage

2   22. Corundum

Name two significant properties that help to identify this mineral.

5   23. H= 9   and

7   24. 6 directional parting

8   25. Hematite, var. specular

3   26. Orpiment   (Yellow mineral)

3   27. Pyrolusite

0   28. Bauxite

2   29. Brucite

6   30. Gahnite   (Black mineral)

Lab Midterm Grades

28.5	A
27.0	A-
26.5	
26.0 - 3	B+
25.0 - 2	B
24.5	
24.0	B-
21.0	C-
19.0 - 2	D
18.5	
18.0	D-
17.0	
15.5	F

MEDIAN = 24.5

MEAN = 22.7 (75.8%)

Lab Grade, Q1, Previous Years

5th out of 10

Term	Mean Grade in percent
Fall, 2012	75.8
Fall, 2011	69.9
Fall, 2010	74.2
Fall, 2009	76.5
Spring, 2009	73.2
Fall, 2007	67.1
Fall, 2006	73.6
Fall, 2005	76.7
Fall, 2004	83.3
Fall, 2002	82.4

Quizzes prior to 2002 were covering different material or were in a substantivally different format, and are not comparable.