**Directions:** Answer all questions on your own sheet of paper. Complete sentences are necessary. Use the listed websites to find the answers: <http://www.geo.utexas.edu/courses/303/303_lab/mineralsLab303.html>. If the link does not work just google: geo utexas minerals lab and click the first link

1. Describe how a hardness test works.

2. Using the Mohs hardness scale, what is the hardness of Kealingite, a newly discovered mineral that can scratch glass but is scratched by corundum?

3. What can cause hardness of a sample to vary from the index value? How can you tell two samples have hardness values very close to each other?

4. What is the difference between metallic and vitreous luster?

5. The note for color says that it is not the best identifier of a mineral. Why do you suppose that is so?

6. How is a streak test different than color? Why is streak a better indicator than color?

7. Why do some minerals cleave while others fracture?

8. How could you distinguish a crystal face from a cleavage face? (Search around the web for this one. There is a pretty simple thing to look for.)

9. Name at least two other miscellaneous “tests” that can be done on certain minerals.

<http://mineral.galleries.com/>

(Minerals here are sorted by name and by class.)

1. What is the largest class of minerals?

2. Which small group of silicates includes muscovite and biotite? (Search around the web for a decent picture of these, and you may recognize the general pattern.)

3. What are some common uses of quartz?

4. To which class of minerals does halite belong?

5. In what type of environment is halite found?

6. Galena has the same physical structure as what other mineral?

7. What are some common uses of galena?

8. Garnets are found in what type(s) of rock?

9. Under what conditions do garnets form?

10. Olivine is a mineral with the formula (Mg, Fe)2SiO4 . Can you tell, just by looking, to what mineral class this belongs?

11. Practice determining mineral class with these other minerals:

Dolomite CaMg(CO3)2

Ramsdellite MnO2

Blodite Na2Mg(SO4)2

Sylvite KCl

Molybdenite MoS2