

Lab 09 - Key

- 1 & 2. Galena - lead-gray - medium in hardness
 Hematite - brick-red - soft in hardness
 Magnetite - black - hard in hardness
 Pyrite - greenish-black - hard in hardness
3. Galena, with cubic cleavage
4. Pyrite has a cubic crystal form; it's how the mineral grew.
 Galena has a cubic crystal form; it's how it breaks.
5. A high specific gravite (density)
6. several possible answers based on the chart
7. basal or one direction of cleavage
8. Talc
9. Calcite - rhombic cleavage
 Fluorite - octahedral cleavage
 Apatite - fracture (no cleavage)
10. several possible answers based on the chart
11. cleavage forms smooth, parallel surfaces when broken; fracture has rough, uneven surfaces when broken
12. several possible answers based on the chart
13. Minerals need both time and space in order to form large, visible crystals.
14. Orthoclase, Plagioclase, Augite, Hornblende