

Lab 9 - Mineralogy - KEY

1. **Metallic Luster**
 - galena
 - magnetite
 - hematite
 - pyrite
- Nonmetallic Luster**
 - talc
 - gypsum
 - muscovite
 - biotite
 - calcite
 - fluorite
 - apatite
 - orthoclase
 - plagioclase
 - augite
 - hornblende
 - quartz
 - corundum

2. hematite - 'rust' doesn't seem obviously metallic

3. H between 4 and 6 (things of the same hardness scratch each other)?

4. magnetite, pyrite, orthoclase, plagioclase, augite, hornblende, quartz, corundum

5. talc, gypsum, muscovite

6. Most minerals come in more than one color

7. Almost any non-metallic mineral comes in more than one color

8. hematite - brick red
 pyrite - black
 galena - dark gray
 magnetite - black

9. because corundum is harder than the streak plate and will not powder

10. 1 cleavage 2 cleavages 3 cleavages 4 cleavages
 - talc - orthoclase - calcite - fluorite
 - muscovite - plagioclase - galena
 - biotite - augite
 - gypsum - hornblende

11. Cleavage breaks in smooth, reproducible planes, fracture breaks unevenly

12. Crystals need time and room to grow to be large enough to see.
13. Minerals with a metallic luster - galena, magnetite, pyrite
14. talc feels very soft and soapy.