## Lab 10 - Key

- 1. this is true
- 2. ferromagnesian
- 3. both
- 4. nonferromagnesian
- 5. fine crystals (porphyritic texture) or glass on the surface large crystals (phaneritic texture) below the surface
- 6. on the surface (the very top of a lava flow)
- 7. basalt is gentle; andesite may be both; rhyolite is violent
- 8. Granite light colored metals means nonferromagnesian silicates
- 9. sandstone is medium; shale is fine
- 10. sandstone is quartz; shale is clay
- 11. sandstone is beach or river; shale is swamp
- 12. yes, because the red hematite is the cement
- 13. sea shells and plant remains
- 14. Coal, because it is made or organic material
- 15. a foliated texture is aligned mineral grains, nonfoliated texture does not
- 16. Shist quartz, muscovite
   Gneiss biotite, orthoclase, quartz
   Marble calcite
   Quartzite quartz
- 17. Shist shale protolith
  Gneiss granite protolith
  Marble limestone protolith
  Quartzite sandstone protolith