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|  |  | **Sample Number** | **Colour** | **Streak** | **Hardness** | **Luster** | **Key Distinguishing Properties (Please fill in!)** | **Mineral Name** |  |
|  |  | **1** |  |  |  |  |  |  |  |
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|  |  | **15** | Purple |  |  |  |  |  |  |
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| **Follow Up Questions:** | **Follow Up Answers:** |
| 1. If you found an unknown mineral, what procedure would you follow to identify it? |  |
| 2. If a mineral has no streak, is it metallic? Explain. |  |
| 3. Can a nonmetallic mineral have a streak? Explain. |  |
| 4. Will a quartz crystal scratch glass? diamond? your fingernail? |  |
| 5. Will calcite scratch glass? gypsum? your fingernail? |  |
| 6. Will biotite scratch muscovite? Explain. |  |
| 7. What mineral was used to make your favorite glass beverage mug? |  |
| 8. What mineral was used to make your favorite ceramic beverage mug? |  |
| 9. The minerals calcite, halite, and gypsum are nonmetallic, light, softer than glass, and have three directions of cleavage.  a. Give two ways calcite differs from halite.  b. Give two ways halite differs from gypsum.  c. Give two ways calcite differs from gypsum.  d. What is the economic significance (use) of calcite?  e. What is the economic significance (use) of halite?  f. What is the economic significance (use) of gypsum? |  |
| 10. What products in your house might be made from these minerals?  a. mica  b. gypsum  c. hematite, magnetite or limonite  d. graphite  e. galena  f. feldspar |  |
| 11. You are given three minerals: a dark plagioclase feldspar, pyroxene (augite), and amphibole (hornblende).  a. List four physical properties these minerals have in common.  b. What property best distinguishes amphibole from pyroxene and the plagioclase feldspar?  c. What property best distinguishes pyroxene from the plagioclase feldspar? |  |
| 12. You are given a specimen of orthoclase (K) feldspar and one of light plagioclase (Na/Ca) feldspar.  a. List four physical properties these two minerals have in common.  b. List one physical property that can be used to best distinguish orthoclase from plagioclase. |  |