

Metals, Metalloids Non-metals Lab Sheet C1-A

Procedure Lab C1

1. Observe and record the colour of each element into Table 1. Be specific when recording your observations, is the sample orange, grey, silver etc.?
2. Observe and record the luster of each element into Table 1. Is it lustrous, slightly shiny, or dull? Make sure you are using a fresh surface to observe this.
3. Record any other physical properties that you observe about each element into Table 1.
What form does it take? Is it crystalline? Flaky, rough, smooth, flat, rocky or in strips?
4. Determine if the sample is malleable or brittle. Then record your observations into Table 1. Elements that can be hammered into thin sheets or pulled into long thin strings or pellets are malleable. Elements that break into jagged edges or powder are considered brittle.
5. Use the conductivity apparatus to test the conductivity of the samples. Touch both electrodes to the element being tested, being sure that the electrodes not touching each other. If the bulb lights brightly the sample conducts electricity well (strongly). If it lights up dimly, the sample is considered a poor or weak conductor. If the bulb does not light up at all it is a non-conductor of electricity. Record your results in Table 1.

Table 1. Observations of the Physical Properties of Samples A-H

Sample	Colour	Luster	Malleable or Brittle	Electrical Conductivity	Other Physical Properties	
A						
B						
C						
D						
E						
F						
G						
H						

Analysis and Conclusion:

- 1) Based on your data, complete Table 2 identifying the samples as metals, metalloids or non-metals.

Table 2: Analysis of data sorting samples into metals, non-metals and metalloids based on my observations.

Metals	Metalloids	Non-metals