

Investigation: Metal, Nonmetal, or Metalloid?

Name: _____

Date: _____

Purpose: Explore the physical properties of nine elements with the goal of classifying them as metals, nonmetals, or metalloids.

Background:

Physical Properties:

Metals	Non-metals

Metalloids: _____

Post-Lab Questions:

1. Review the data gathered for the nine elements. Sort the nine elements into groups based on similarities and differences in their physical properties. From the information provided in the background information classify each element as metals, nonmetals, or metalloids. Use symbols.

metals - _____

nonmetals - _____

metalloids - _____

2. Do any elements seem to have properties of both groups. Refer to your chart on the front. Which element? Explain.

Look at the location on the periodic table of each of the nine elements tested in this lab. Make generalizations about the position (left, right, middle) of the metals, nonmetals, and metalloids on the periodic table.

3. Look at where on the periodic table the elements are that you tested. Look at the proximity of where the elements listed below are and predict if they are a metal, non-metal or metalloid.

Arsenic - _____

calcium - _____

cobalt - _____

Element	Chemical Symbol	Color	Luster	Magnetism	Malleability	Conductivity	Hardness
Aluminum							
Carbon							
Copper							
Iron							
Magnesium							
Silicon							
Sulfur							
Zinc							
Nickel							

