Lab: Properties of Elements

Introduction:

Each element has its own set of unique properties.
Despite the different properties that each element
contains, elements can often be grouped together based
upon similar physical and chemical properties.

Pre-Lab:

You will be testing four properties in this lab.
For each of the four properties:

a.) Define what the term/property is.

b.) Classify the property as either a physical or chemical
property.

c.) EXPLAIN your reasoning.

Luster:
   a)

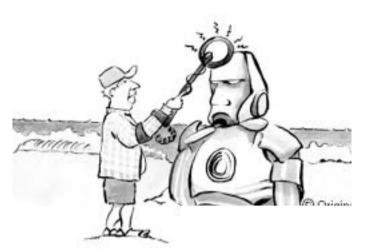   **b)**

   c)

Electrical Conductivity:
   a)

   b)

   c)

Malleability:
   a)

   b)

   c)

Hardness:
   a)

   b)

   c)

Purpose: To classify elements based on physical and chemical properties.

Safety: Safety glasses should be worn at all times.

Procedure:
Use the given materials and your teacher's instruction to test each of the four properties listed in the Pre-Lab.

Data:
 ➢ Complete the data chart below for each element.
 ➢ The tests should be done in the order they appear in the chart, from left to right.

Element	Shiny Luster (Yes or No)	Electrical Conductivity (Yes or No)	Crush Test (brittle or malleable)
Aluminum			
Lead			
Magnesium			
Silicon			
Sulfur			
Tin			
Carbon			

Based on your data…

 1.) Which element(s) display metallic properties?

 2.) Which element(s) display non-metallic properties?

 3.) Which element(s) seem to not fit in either a metal or non-metal category?

Now get your lab credit sheet from your teacher. There is a different one for each skill level.