Go to msrobbinspnhs.weebly.com and open Chemistry 2016-17 page. Download and go through Notes 1 Intro to the Periodic Table PowerPoint and go through it as a slide show.

**WS 1 Classes of Elements**

1. Write the name or symbol for each of the following elements and identify them as:

Metals , Nonmetals , or Metalloids

|  |  |  |
| --- | --- | --- |
| **Name** | **Symbol** | **Class** |
| carbon |  |  |
|  | Na |  |
| argon |  |  |
|  | Ca |  |
| silicon |  |  |
|  | Zn |  |
|  | Cl |  |
| sulfur |  |  |
|  | Pb |  |
| iron |  |  |
| potassium |  |  |
|  | O |  |
|  | B |  |
|  | Sn |  |
| bromine |  |  |
|  | H |  |

2. How are metalloids different from metals and nonmetals? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

3. Identify each of the following as more characteristic of a metal, nonmetal, or metalloid.

a. malleable \_\_\_\_\_\_\_\_\_\_\_\_\_

b. brittle \_\_\_\_\_\_\_\_\_\_\_\_\_

c. able to be drawn into a wire \_\_\_\_\_\_\_\_\_\_\_\_\_

d. gas at room temperature \_\_\_\_\_\_\_\_\_\_\_\_\_

e. semi-conductor \_\_\_\_\_\_\_\_\_\_\_\_\_

f. shiny \_\_\_\_\_\_\_\_\_\_\_\_\_

g. poor conductor \_\_\_\_\_\_\_\_\_\_\_\_\_

h. shiny and brittle \_\_\_\_\_\_\_\_\_\_\_\_\_

i. most elements \_\_\_\_\_\_\_\_\_\_\_\_\_

4. Write the name and symbol of each element described: Name Symbol

a. the nonmetal in period 3 with the fewest protons \_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_

b. the metalloid in group 17 (7A) \_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_

c. the metal in period 3 with the most electrons \_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_

d. the metal in group 2 with lowest atomic number \_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_

e. the nonmetal in group 14 (4A) \_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_

f. the metal in group 12 that is a liquid at room temp. \_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_

g. the metal in period 4 with the fewest electrons \_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_

h. the least metallic element in period 5 \_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_

i. the most metallic element in period 3 \_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_

j. the metal in group 15 (5A) \_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_

k. the metalloid in group 13 (3A) \_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_

l. the gas in group 16 (6A) \_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_

m. the gas in group 17 (7A) with the fewest electrons \_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_

n. the metal in period 4 used most for electrical wire \_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_

o. the heaviest nonmetal in group 17 (7A) \_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_

p. the lightest metal \_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_

q. the heaviest nonmetal \_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_

r. the metalloid used most in microchips \_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_

s. the solid nonmetal in period 2 \_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_

t. the liquid nonmetal in period 4 \_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_

5. List two elements that will react similarly to chlorine. \_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_

6. Write the symbols of 3 precious metals commonly used in jewelry. \_\_\_\_ \_\_\_\_ \_\_\_\_

7. List the 2 metals named after scientists who made new atomic models after an experiment.

Name Symbol

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_