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

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

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