Anatomy of the Periodic Table Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Chem 332 – O’Dette Date \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period \_\_\_\_

1. Notice that there are 18 columns (vertical) numbered on the periodic table, these columns are referred to as **groups or families**. Write the numbers of each column on your periodic table.
2. Notice that there are 7 rows (horizontal), these rows are referred to as **periods**. Write the numbers of each row on your periodic table.
3. Draw a line under the following elements to create a stair step line: Boron, Silicon, Arsenic, Tellurium
4. Color code the following **regions** on your periodic table.
   * Metalloids – Those elements above and below the stair step line, **excluding** Al The 8 metalloids are B, Si, Ge, As, Sb, Te, Po, At.
   * Nonmetals – all the elements above and to the right of the stair step line, **excluding** the metalloids, and also **includes** Hydrogen
   * Metals – groups 1 – 12 and all elements below and left of the stair step line **excluding** Hydrogen, and also **includes** the two rows at the bottom
5. Label the following families on your periodic table.

* **Noble Gases** – group 18
* **Transition Metals** – group 3 – 12
* **Alkali Metals** – group 1 ***(except hydrogen)***
* **Alkaline Earth Metals** – group 2
* **Lanthanide Elements** – atomic numbers 57 – 70 and are part of the transition elements
* **Actinide Elements** – atomic numbers 89 – 102 and are part of the transition elements
* **Halogens** – group 17
* **Hydrogen** – forms its own chemical family

1. Elements at room temperature exhibit the following states of matter; somehow denote the gases and liquids.

* **Gas** – Hydrogen, Nitrogen, Oxygen, Fluorine, Chlorine, and group 18
* **Liquid** – Bromine, Mercury
* **Solid** – All the rest of the elements

