

**Assignment #1 - Main Group Metals**

Name: \_\_\_\_\_

Wooster Honor Chemistry

Date: \_\_\_\_\_ Period: \_\_\_\_\_

- Using colored pencils or crayons, color the following on your periodic table as noted below:
  - Lithium, Sodium, Potassium, Rubidium, Cesium, and Francium = RED
  - Beryllium, Magnesium, Calcium, Strontium, Barium, and Radium = ORANGE
  - Aluminum = GREEN
- Write in pencil at the bottom of your periodic table: Alkali metals make ions with 1+ charges, and then circle where you wrote "Alkali metals" with your RED colored pencil or crayon.
- Write in pencil at the bottom of your periodic table: Alkaline earth metals make ions with 2+ charges, and then circle where you wrote "Alkaline earth metals" with your ORANGE colored pencil or crayon.
- Write in pencil at the bottom of your periodic table: Aluminum ions have 3+ charges, and then circle where you wrote "Aluminum" with your GREEN colored pencil or crayon.
- Complete the following table:

Atomic number	Element name	Element symbol	Ion name	Ion symbol	Charge of ion	Atomic mass of element
3	Lithium	Li	Lithium ion	Li <sup>+</sup>	1+	6.941
4				Be <sup>2+</sup>		
	Sodium					
		Mg				
				Al <sup>3+</sup>		
						39.098
37				Rb <sup>+</sup>		
38	Strontium	Sr	Strontium ion	Sr <sup>2+</sup>	2+	87.62
						137.328

- Use this word bank to fill in the following sentences (not all words will be used):

positive	negative	aluminum
alkali metals	alkaline earth metals	ions

- ✓ All main group metals form \_\_\_\_\_ ions.
- ✓ All \_\_\_\_\_ form ions with 2+ charges.
- ✓ All \_\_\_\_\_ form ions with 1+ charges.
- ✓ Elements differ from ions; elements are neutral, whereas \_\_\_\_\_ have charges.