Oct. 00 A. Lee

Name:		
Period:	Date:	

## **Ion Worksheet**

- 1. The atomic number of oxygen is 8 and the mass number is 16.
- A. Draw an oxygen atom.
- B. What is the charge of the oxygen atom you just drew? \_\_\_\_\_
- C. The oxygen atom can gain two electrons (to make 8) and become an oxygen ion. Draw the ion.
- D. What is the charge of the oxygen ion?(Hint: It is not neutral) \_\_\_\_\_
- E. What is the symbol for the oxygen ion?
- 2. The atomic number of lithium is 3 and the mass number is 6.
- A. Draw the lithium atom.
- B. What is the charge of the lithium atom you just drew?
- C. The lithium atom loses one electrons and become lithium ion. Draw the ion.

- D. What is the charge of the lithium ion? (Hint: It is not neutral) \_\_\_\_\_
- E. What is the symbol for the lithium ion?

3. The atomic number of nitrogen is 7 and the mass number is 14. Draw the  $N^{-3}$  ion.

4. Fill in the blanks. Following are ions.

Element	Atom	# of	# of	Charge	Symbol
Liement	No.	p+	e-	charge	-
Sodium	11	11	10	+1	Na <sup>+1</sup>
Chlorine		17		-1	
Sulfur	16				
Calcium		20		+2	
Iodine	53				I <sup>-1</sup>
zinc		30	28		
Oxygen					
Magnesium					

5. Write the formula for the ionic molecule made when these ions combine.

	Cl <sup>-1</sup>	0 <sup>-2</sup>	S <sup>-2</sup>	$N^{-3}$	Br <sup>-1</sup>
Na <sup>+1</sup>					
$K^{+1}$					
Zn <sup>+2</sup>					
$Al^{+3}$					
Mg <sup>+2</sup>					
Fe <sup>+3</sup>					
Sn <sup>+4</sup>					

- 6. Name these compounds.
- a. KCl
- b. PbI \_\_\_\_\_
- c. MgO \_\_\_\_\_
- d. AgCl
- e. ZnCl<sub>2</sub>
- f. AlBr<sub>3</sub>
- g.  $Fe_2O_3$
- h. CoCl<sub>2</sub> i. KBr
- j. BaCl<sub>2</sub>
- k. MgS