WODSS SCIENCE Name:_____

SCH 3UI Date: _____

Review #2: Formation of Ionic Compounds

1. Draw Lewis Dot Diagrams for the following atoms and their common ion:

Element Name	# Valence Electrons	Lewis Dot Diagram	Charge on Atom	Ion Symbol	Diagram of Stable Ion
Magnesium					
Potassium					
Sulfur					
Fluorine					

2. Identify the noble gas that has the same electron configuration as each of the following ions from question 1:

Element Name	Noble Gas
Magnesium	
Potassium	
Sulfur	
Fluorine	

3. What rule is used to predict the number of electrons that must be lost or gained in order to achieve stability?

4. Using Lewis Dot Diagrams and the octet rule, show how each of the following pairs of atoms bond to form an ionic compound. You may need more than one atom of each type.

   a) Calcium and oxygen

   b) Lithium and fluorine

   c) Magnesium and bromine

5. Name the type of bond that occurs in the compounds in question 4. _____

6. Why are the compounds in question 4 considered electrolytes?

7. How could you experimentally verify that the compounds in question 4 are electrolytes?