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Chemistry**Homework: Ionic Compounds**

1. Define anion and cation.
2. Draw a shell model for sulfur, S. **Use an arrow to show** how many electrons it would lose or gain to have a full valence shell.
3. When chlorine gains an electron to become a chloride ion with a -1 charge, it ends up with the same *electron arrangement* as argon. Why doesn't it become an argon atom?
4. Use the periodic table to complete the following table:

Element	Gain or Lose Electrons?	How <i>many</i> Electrons will it Gain/Lose?	Ion Formed (Element with Charge)
Magnesium			
Aluminum			
Nitrogen			
Chlorine			
Sulfur			
Silicon			
Sodium			
Flourine			

Name: _____ Period: _____

3. Use the periodic table and page 7 of your workbook to fill in the table:

Compound	Type of Bonding	Conducts?	Dissolves?
NaI(s)			
BF ₃ (g)			
SO ₂ (g)			
Ni(s)			
H ₂ (g)			
K ₂ O(s)			

4. Based on the formula below, write the name of each compound.

