

Name \_\_\_\_\_

# Physical Science Chemical Bonding Study Guide

## A. Covalent & Ionic Compounds/Bonds

1. Which ion accepts electrons, and which from it? (anion/cation) \_\_\_\_\_  
which cation it gains and electron it loses from it? \_\_\_\_\_ (anion/cation)
2. How placed in the halogen group has \_\_\_\_\_ valence electrons, and needs to \_\_\_\_\_ 1 more to have it. This is because it has \_\_\_\_\_ valence.
3. How \_\_\_\_\_ bond in the addition between oppositely charged ions. (ionic covalent bond) is \_\_\_\_\_
4. On a covalent bond, atoms \_\_\_\_\_, electrons, shared by all. Ionic bond, atoms \_\_\_\_\_, electrons.
5. (Electron group) Which side from left shared completely by it completely bond it is \_\_\_\_\_, and which group is shared equally it is \_\_\_\_\_  
How can predict it is covalent, is ionic, polar covalent, or ionic bond formed by  
electron sharing? \_\_\_\_\_
6. How atoms can have up to \_\_\_\_\_ valence electrons. This usually happens in the periodic table that all have 8 valence electrons, is called \_\_\_\_\_
7. Atoms can gain, lose, or share \_\_\_\_\_ by forming ionic bonds.

## B. Formulas for Ionic Compounds – Put in the right order

Write correct chemical formula	Aluminum	Fluorine	Phosphorus	Chlorine
EXPLANATION IS				

## C. Write the chemical formulas for each of the following ions: compound it

Write your own ionic compounds, and use arrows to show the transfer of electrons. Use your periodic table to find their oxidation numbers. They will combine so that their oxidation numbers cancel out to zero. Use the criss cross method if their oxidation numbers do not cancel.

# Physical Science Chemical Bonding Study Guide

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