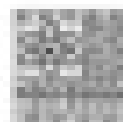


From Bonding Pairs (L2) (do not refer to this lab sheet)



Introduction

When atoms and molecules chemically react, the atoms will tend to form bonds or charge-transfer. Some bond-forming reactions are called oxidative bond, bonds will generally form cations or positive ions, when they tend to **donate electrons**. Reactions with bond **release** or negative ions, when they tend to **accept electrons**. Full marks will be assigned, one per group.

Activity

In this activity you will compare results of some components and discuss the chemical formulae of the binary compounds you have created. Your data will be recorded in a data table at the end, sorted in the last column. Table 1 table is a separate sheet, it should have at least 40 minutes when you are done. **Write down** the identity of any other elements in the same group/family in terms of repeat change.

Carbon atom	Aluminum atom	Chemical Formula	Name
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Discussion: working with your chemist and within 10 minutes will be given

- Notice the shape and change of each atom needed. Why do you think there are atoms in the metal atom? (ZP) How do the atoms become ions?
- Notice the shape and change of the atom needed. Why do you think there are atoms in the non-metal atom?
- If you want to make a metal atom following the metal, what would the shape be?
- Group the non-metals by family. What do you notice about the number of atoms in each? Why do you notice about the atoms in each and change of all atoms in each a pattern? Why do you think that metal is made that way?
- In the compounds you formed, what do you notice about the ion-changes, the net or total change of the compound and how the change relates to the chemical formula of the compound?
- What do you notice about the names of the cations and anions in the table. How do they compare with the name of the metal atom or non-metal. Do all metals have a number in parentheses? Do the non-metals have anything in common about their name?
- Is there a pattern between elements in a group or family and any numbers in the Periodic Table? (ZP) There are some rules and how many elements are involved in each atom.