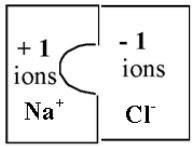
Ionic Compound Puzzle Pieces

You have had a couple of days experience balancing ionic-compound formulas, getting the cations and ions properly balanced. To get a visual feel for how to combine ions, let's use ion puzzle pieces to make ionic compounds. One has to cut them out and glue them together. For example, Sodium Chloride when completed and labeled will look like this:

Label each ion piece →



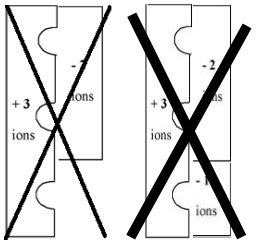
NaCl

Write the formula below the puzzle pieces Remember to use subscripts!

Compound	Cation Do before	Anion Do before	Formula Do after
Lead (II) Hydroxide	Pb^{2+}	OH^-	$Pb(OH)_2$
Copper (I) chloride			
Copper (II) iodide			
Magnesium oxide			
Aluminum Carbonate			
Ammonium Dichromate			

You have to make a neutral compound! No left over "tabs" or "cut-outs."

You can only use one type Of anion and one type of cation per compound.



- Label all ion puzzle pieces. See above.
- Add up ions to get formulas.
- The number of atoms or polyatomic ions must be subscripted: Ag_2CO_3
- If element symbol has two letters, second must be lowercase.
- Don't forget to put polyatomic ions in parentheses if more than one and subscript the number: $Al(OH)_3$

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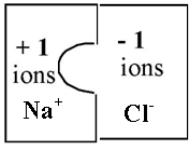

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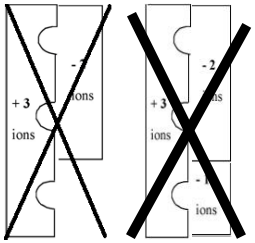

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