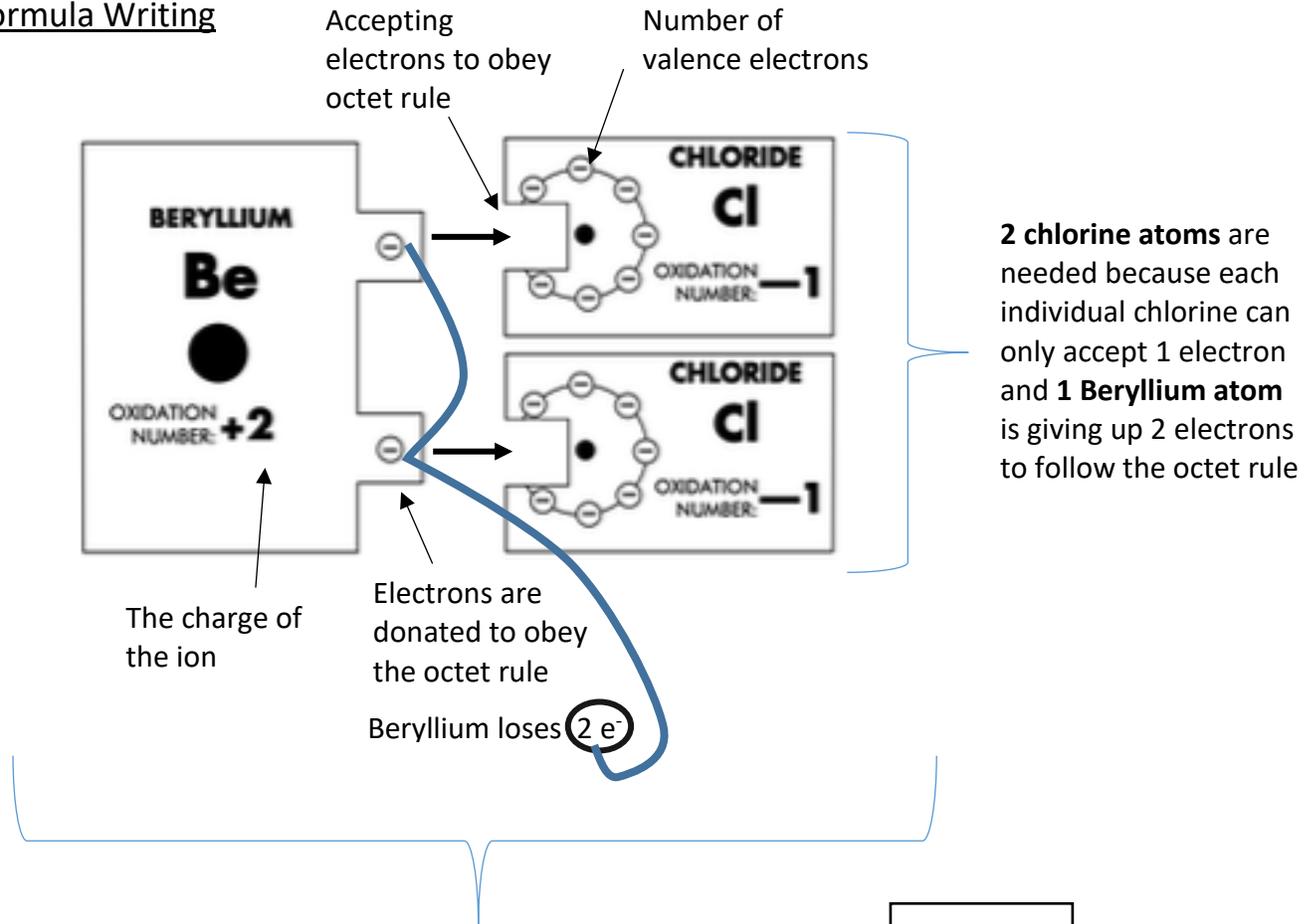


## Ionic Formula Writing



The **number** of cards = the **number** of atoms = the **subscript number** =



1 atom of beryllium  
needs 2 atoms of  
chlorine to balance out

Using the cards complete the table below

	Ions	# of atoms ( cards) used	Ionic Formula	Compound Name <i>when a metal/cation is present no prefixes are added</i>
#1	Cation (+ ion): <b>Be<sup>2+</sup></b>	1	<b>BeCl<sub>2</sub></b>	<b>Beryllium Chloride</b>
	Anion (- ion): <b>Cl<sup>1-</sup></b>	2		
#2	Cation (+ ion): <b>K<sup>1+</sup></b>			
	Anion (- ion): <b>Br<sup>1-</sup></b>			
#3	Cation (+ ion): <b>Ca<sup>2+</sup></b>			
	Anion (- ion): <b>P<sup>3-</sup></b>			
#4	Cation (+ ion): <b>Al<sup>3+</sup></b>			
	Anion (- ion): <b>S<sup>2-</sup></b>			

#5) Why is a roman numeral used when naming a transition metal compound?

#6) What three transition metals **do not need a roman numeral**?

#7) What two metals **need a roman numeral** but are not transition metals?

#8) How is the roman numeral determined? Example  $\text{FeCl}_3$

#9) What are the nine polyatomic ions that need to be memorized? (look at the flowchart sheet and include the chemical formula with subscripts and the charge)


Using the cards complete the table below:

	Ions	# of atoms ( cards) used	Ionic Formula	Compound Name <i>when a metal/cation is present no prefixes are added</i>
#10	Cation (+ ion): $\text{Co}^{3+}$			
	Anion (- ion): $\text{Br}^{1-}$			
#11	Cation (+ ion): $\text{K}^{1+}$			
	Anion (- ion): $(\text{SO}_4^{2-})$			
#12	Cation (+ ion): $\text{Zn}^{2+}$			
	Anion (- ion): $\text{P}^{3-}$			
#13	Cation (+ ion): $\text{Co}^{3+}$			
	Anion (- ion): $(\text{NO}_3^{1-})$			
#14	Cation (+ ion): $\text{Al}^{3+}$			
	Anion (- ion): $(\text{PO}_4^{3-})$			

Create your own compound with a transition metal &/or polyatomic ion

#15	Cation (+ ion):			
	Anion (- ion):			

