

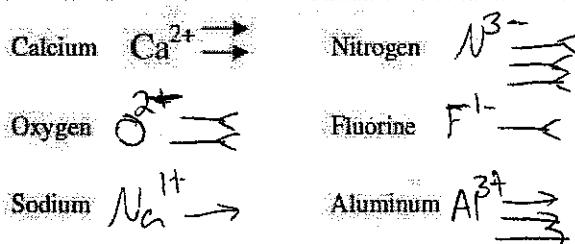
1. Oxidation #s	B	A. Attracted by a positive ion.
2. Zero	C	B. Tells you how many electrons will be gained or lost by an element.
3. Negative ion	A	C. Net charge of a balanced ionic compound.
4. Positive ion	E	D. When the number of electrons given equals the number taken.
5. Balanced	D	E. Attracted by a negative ion.

6. Use the following symbols to answer the following:



- A. An electron being lost: →  
 B. An ionic bond: →—  
 C. An electron being gained: >—  
 D. Used for a metal: →  
 E. Used for a nonmetal: >—

7. Give abbreviations with oxidation numbers and arrows.



8. Give number of electrons gained or lost

Ca <sup>2+</sup>	2 lost	Ca <sub>3</sub> <sup>2+</sup>	6 lost
F <sup>1-</sup>	1 G	F <sub>3</sub> <sup>1-</sup>	3 G
Al <sup>3+</sup>	3 L	Al <sub>3</sub> <sup>3+</sup>	6 L
O <sup>2-</sup>	2 G	O <sub>3</sub> <sup>2-</sup>	6 G
Na <sup>1+</sup>	1 L	Na <sub>3</sub> <sup>1+</sup>	3 L
N <sup>3-</sup>	3 G	N <sub>2</sub> <sup>3-</sup>	6 G

For the following six examples, combine the two given atoms using electron arrows, then give the balanced ionic compound formula.

Combine Sodium and Oxygen: Na → ↗ O Na → Na <sub>2</sub> O	Give the balanced ionic formula for Sodium Oxide.	Combine Beryllium and Fluorine: Be → ↗ F Be → F BeF <sub>2</sub>	Give the balanced ionic formula for Beryllium Fluoride.
Combine Magnesium and Sulfur: Mg → ↗ S Mg → MgS	Give the balanced ionic formula for Magnesium Sulfide.	Combine Lithium and Phosphorus: Li → ↗ P Li → Li → Li <sub>3</sub> P Compound name: Lithium Phosphide	Give the balanced ionic formula: Li <sub>3</sub> P Compound name: Lithium Phosphide
Combine Calcium and Nitrogen: Ca → ↗ N Ca → Ca → Ca → Calcium Nitride	Give the balanced ionic formula: Ca <sub>3</sub> N <sub>2</sub> Compound name: Calcium Nitride	Combine Aluminum and Oxygen: Al → ↗ O Al → Al → Al → O Al <sub>2</sub> O <sub>3</sub>	Give the balanced ionic formula for Beryllium Fluoride: Al <sub>2</sub> O <sub>3</sub> Compound name: Al <sub>2</sub> O <sub>3</sub>

Write the balanced ionic compounds for the following:

- Be<sup>2+</sup> and O<sup>2-</sup>: BeO      Na<sup>1+</sup> and S<sup>2-</sup>: Na<sub>2</sub>S  
 Li<sup>1+</sup> and N<sup>3-</sup>: Li<sub>3</sub>N      Ca<sup>2+</sup> and N<sup>3-</sup>: Ca<sub>3</sub>N<sub>2</sub>  
 Al<sup>3+</sup> and Cl<sup>-</sup>: AlCl<sub>3</sub>      K<sup>1+</sup> and (SO<sub>4</sub>)<sup>2-</sup>: K<sub>2</sub>(SO<sub>4</sub>)

Write the balanced ionic formulas for the following:

- Lithium and Oxygen: Li<sub>2</sub>O  
 Magnesium and Iodine: MgI<sub>2</sub>  
 Calcium and Sulfur: CaS  
 Aluminum and Oxygen: Al<sub>2</sub>O<sub>3</sub>