



NOTES

IONS



# IONS

- **IONS** are atoms or groups of atoms with a positive or negative charge.
- Taking away an electron from an atom gives a **CATION** with a positive charge
- Adding an electron to an atom gives an **ANION** with a negative charge.
- To tell the difference between an atom and an ion, look to see if there is a charge in the superscript! Examples:  $\text{Na}^+$   $\text{Ca}^{+2}$   $\text{I}^-$   $\text{O}^{-2}$   
Na Ca I O

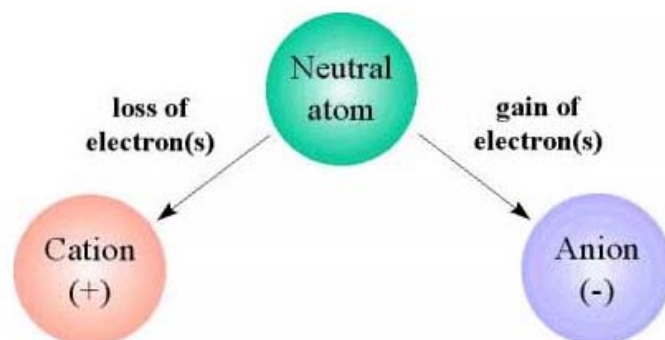
# FORMING CATIONS & ANIONS

A CATION forms when an **atom loses** one or more electrons.

An ANION forms when an **atom gains** one or more electrons



12 p	12 p
12 n	12 n
12 e	10 e



9 p	9 p
10 n	10 n
9 e	10 e