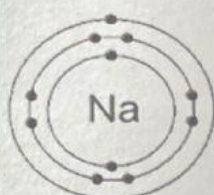
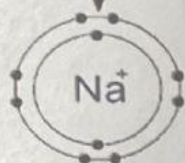


Ionic and Covalent Bonding (Chemical Compounds)



Sodium Atom
Loses Outer Electron



Sodium Ion

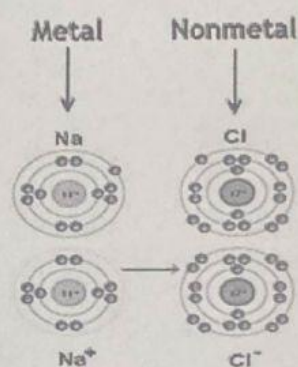
_____ - an atom that becomes electrically charged by gaining or losing an electron.

♦ When an atom _____ an electron it **loses** a negative charge and becomes a _____ ion.

♦ When an atom _____ an electron it **gains** a negative charge and becomes a _____ ion.

Metals and Nonmetal

- ♦ _____ tend to **lose** electrons in chemical reactions, forming positive ions.
- ♦ _____ tend to **gain** electrons in chemical reactions, forming negative ions.



_____ - The attraction between two oppositely charged ions.

- ♦ When a **metallic** element reacts with a **nonmetallic** element, their atoms gain and lose electrons respectively, forming ionic bonds

Gaining or losing neutrons makes an atom an _____.

- ♦ However, gaining or losing a _____ makes an atom into a completely different element.

_____ - A bond formed when two atoms share electrons.

- ♦ Both atoms attract the two shared electrons at the same time.
- ♦ Generally, when two _____ react, atoms share electrons, forming covalent (molecular) bonds.