

Lewis -developed the OCTET RULE

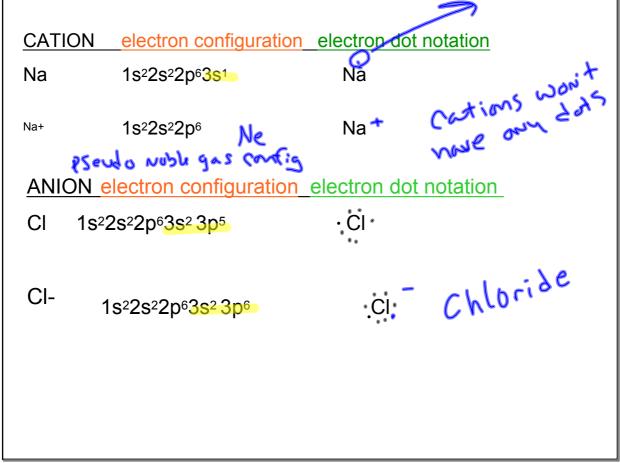
Atoms will try to adjust to the Group 8 elements.

Some elements can't lose e- easily.

really the configuration is:



Ag+1 -



Nov 7-2:49 PM

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Nov 13-6:50 AM

lons aren't the same size as the atoms they come from. Compare the sizes of sodium and chloride ions with the sizes of sodium and chlorine atoms.







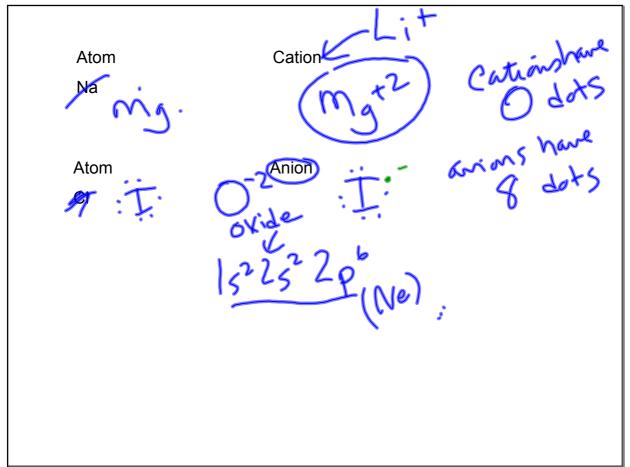


Nov 9-6:56 AM

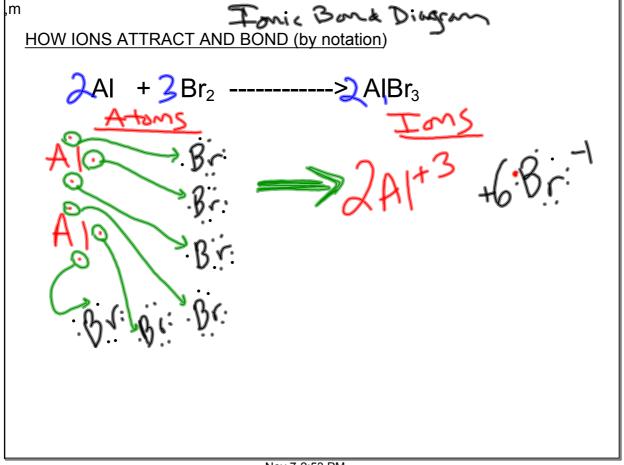
IONIZATION USING e- DOT NOTATION

(half-reactions are used to help understand ionic bonding)

$$Mg ----> Mg^{+2} + 2e$$



Nov 12-7:04 AM



Nov 7-2:53 PM

IONIC BONDS:

P. 190-196

Oppositely charged ions bonded together by electrostatic forces (mostly salts).

PROPERTIES of ionic compounds:

Repeating 3-dimensional pattern (crystals)

high melting point good conductivity

dissolves in water (most) crystalline solid at room T

Metallic Bonds: The chemical bonding that results from the attraction

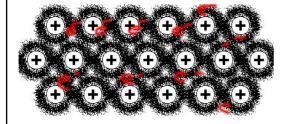
between metal atoms and the surrounding sea of electrons.

There is an overlapping of orbitals due to vacant d orbitals. The valence eare delocalized and move around freely within the atoms of the network.

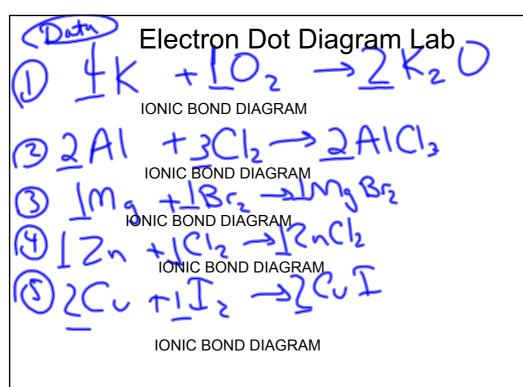
They are packed together in a crystal lattice.

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Metallic Sea of Electrons



Electrons are not bonded to any particular atom and are free to move about in the solid.



Nov 12-7:36 AM

Preory: Octet Rule

Low of Definite Proportions

(define)

look on previous slide

Do Discussion and Conclusion after your are finished with diagrams.

ionicbonds.notebook	November 06, 20
Nov 5-	10:59 AM