

Brandon	Logan	Haley	Derek	Megan	Madison	Dylan	
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Travis	Trevor	Karlie	Liam	Kayla	Elizabeth	Brenden	Katie
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Vicki	Devin	Maggie	Layne	Beth	Josh	Christina
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Owen	Alanis	Kim	Sky	Chaz	Donelle	Justin
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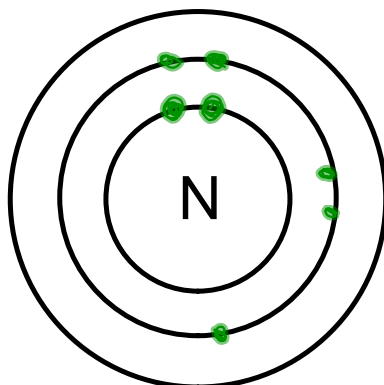
Front

New Seating Plan

Warm-Up!

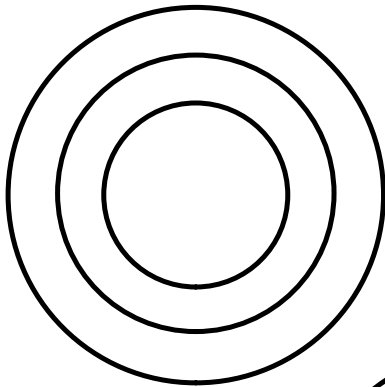
How many valence electrons does nitrogen have?

5

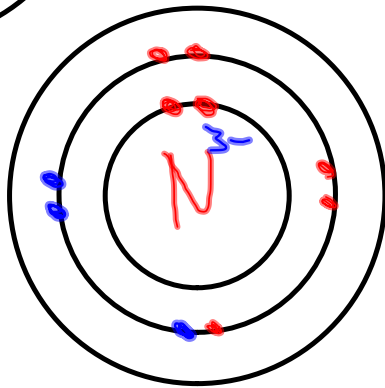


7p⁺
7e⁻

Check Homework

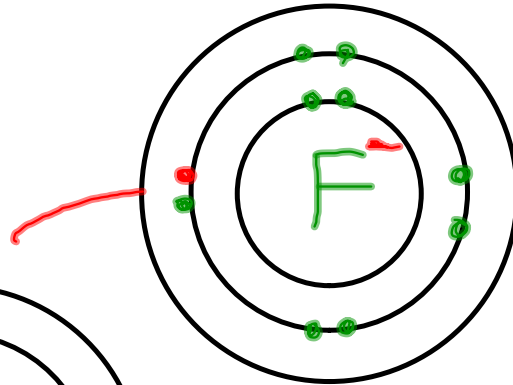


$$\begin{array}{r} 7p^+ \\ 7e^- \\ +3e^- \\ \hline 10e^- \end{array}$$

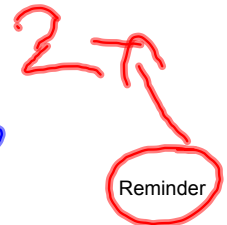


metals → lose
nonmetals → gain

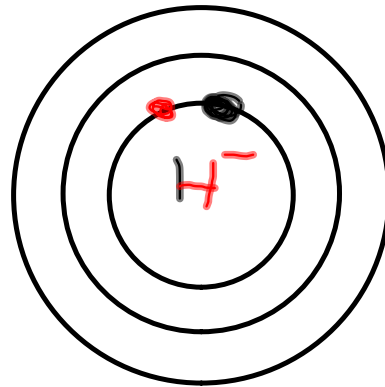
$$\begin{array}{r} 1p^+ \\ 1e^- \\ +1e^- \\ \hline 2e^- \end{array}$$



nonmetals



$$\begin{array}{r} 9p^+ \\ 9e^- \\ +1e^- \\ \hline 10e^- \end{array}$$



Review of Terms...

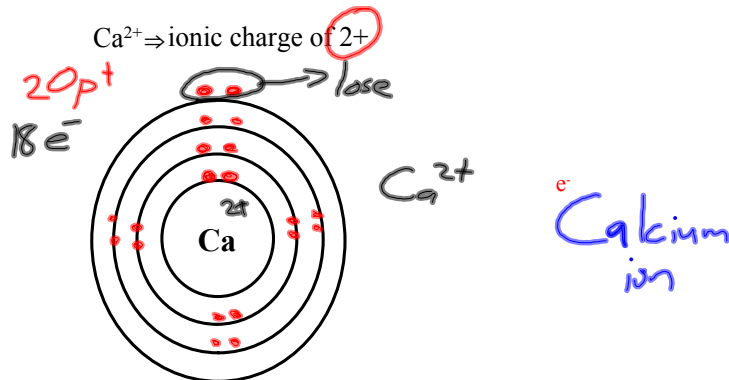
ion - charged atom in which the number of electrons is different from the number of protons.

An atom that gains or loses one or more electrons becomes an ion.

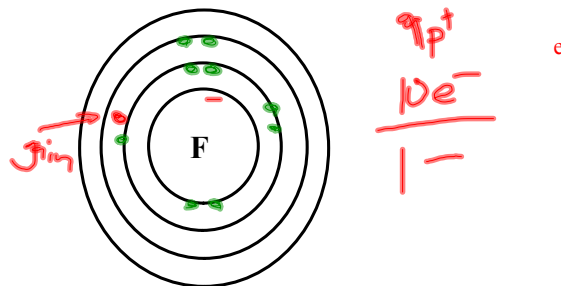
Ex. F^- (9 proton, 10 electrons)

ionic charge - numerical value of the electric charge with a plus or minus sign

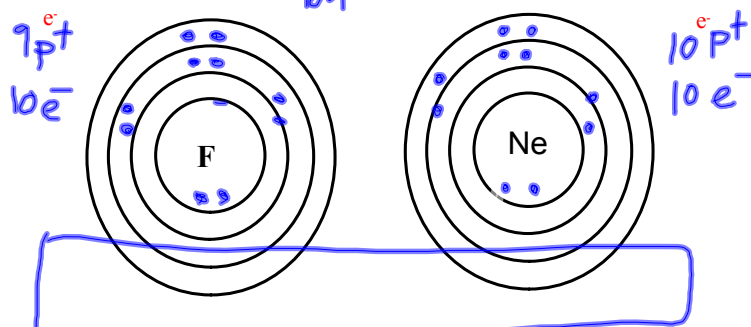
Ex. F^- \Rightarrow ionic charge of 1-



When calcium loses two electrons, it becomes Ca^{2+} (20 protons, 18 electrons). It now has a stable arrangement of electrons. This is called a calcium ion.



When fluorine gains an electron, it has a stable electron arrangement, the same as neon (Ne). We call the F^- ion a fluoride ion.



When nonmetals gain electrons to form ions, the name of the ion changes its ending to "ide".

\Rightarrow fluorine atom becomes a fluoride ion

Valence Electrons

valence electrons: the electrons in the last shell or energy level of an atom.

- show a repeating or periodic pattern
- increase in number as you go across a period
- when you start the new period, the number drops back down to one and starts increasing again

1	2	13	14	15	16	17	18
			C 4	N 5	O 6	F 7	Ne 8
Na 1			Si 4				
			Ge 4				

****Look at the group number!****

Homework

ions worksheets

Quiz Thursday