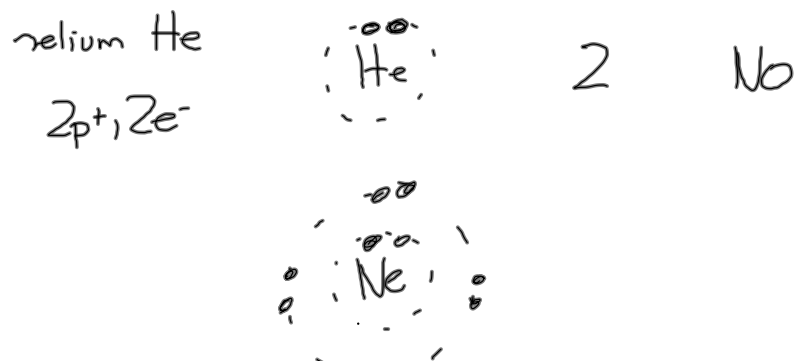
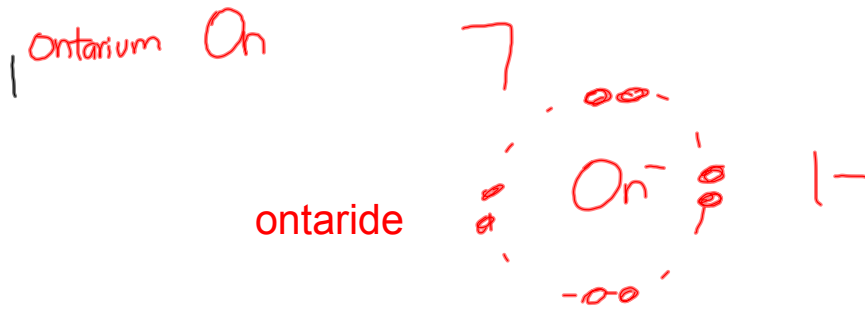
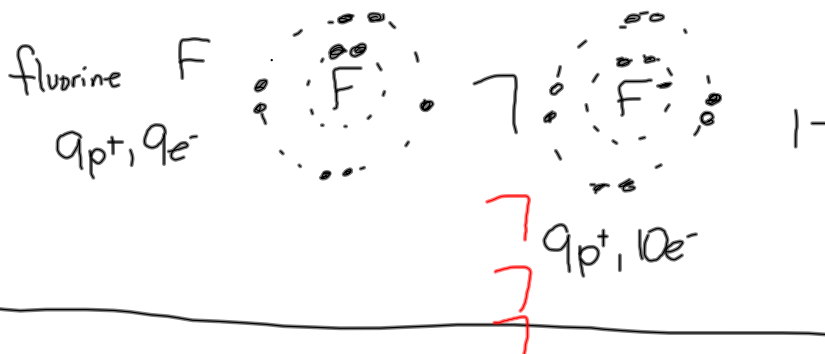
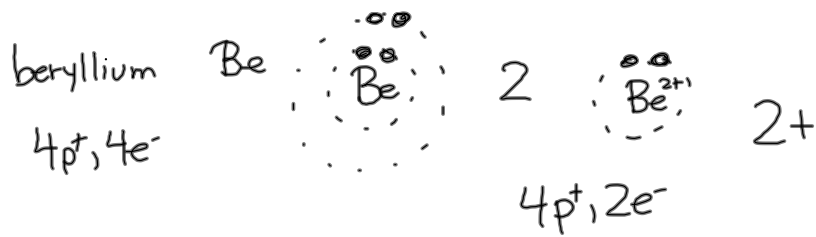


# Check Homework





2

He



18

Ar

## Review of Terms...

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

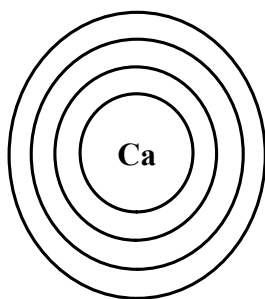
An atom that gains or loses one or more electrons becomes an ion.

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-

$Ca^{2+} \Rightarrow$  ionic charge of 2+



$e^-$

All metals will lose electrons to form a stable ion, which is positively charged.

Ex. Na                       $Na^+$   
sodium atom              sodium ion

All nonmetals will gain electrons to form a stable ion, which is negatively charged.

Ex. F                       $F^-$   
fluorine atom              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

			C 4	N 5	O 6	F 7	Ne 8
Na 1			Si 4				
			Ge 4				

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

# **Exercise**

**p. 187 #7-8**  
**lons worksheet**

			C 4	N 5	O 6	F 7	Ne 8
Na 1			Si 4				
			Ge 4				