

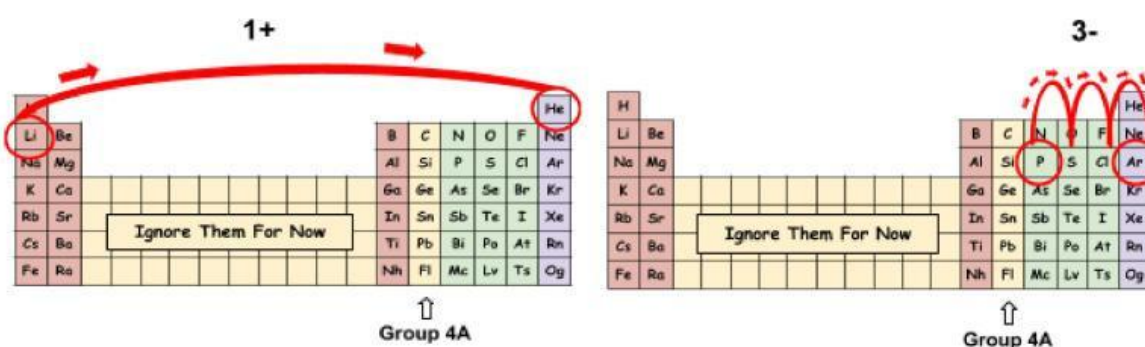
Finding Charges Worksheet

Directions: Use the following information to complete the table below.

How do we find charges?

- Elements will gain or lose electrons to have the same number of electrons as the nearest noble gas. This happens because noble gases have a full outer shell of electrons (8), and are very chemically stable.
- Elements to the left of group 4A (14) will lose one electron for every element until they reach the nearest noble gas.
- Elements to the right of group 4A (14) will gain one electron for every element until they reach the nearest noble gas.
- The "Charge" comes from the imbalance in the total number of protons and electrons due to the loss or gain of electrons.

Example:



Element	Closest Noble Gas	Will the element gain or lose electrons	# of Electrons Gained or Lost	Charge	Type of Ion
Li	He	Lose	1	1+	Cation
P	Ar	Gain	3	3-	Anion

Finding Charges Worksheet

H																		He
Li	Be																	Ne
Na	Mg																	Ar
K	Ca																	Kr
Rb	Sr																	Xe
Cs	Ba																	Rn
Fr	Ra																	Og

↑
Group 4A

Element	Closest Noble Gas	Will the element gain or lose electrons	# of Electrons Gained or Lost	Charge	Type of Ion
Be					
Rb					
K					
Al					
O					
Cl					
B					
Se					
N					
F					
I					
Cs					
Mg					
S					