

Name: \_\_\_\_\_ Per: \_\_\_\_\_

### Ions Worksheet

Element	# Valence Electrons	# Electrons to gain	# Electrons to lose	Ion Formed/ name
Li	1	None	1	Li <sup>+1</sup> / cation
N	5	3	None	N <sup>-3</sup> / anion
O				
Ca				
Br				
S				
Cl				
K				
Mg				
Be				

Questions:

- If Li loses an electron to another atom, why is it written Li<sup>+1</sup> (with a +1)?
- If N gains 3 electrons from other atoms, why is it written N<sup>-3</sup> (with a -3)?
- a. What do you think happens to atomic radius size of a cation & why?    b. an anion & why?

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O				
Ca				
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S				
Cl				
K				
Mg				
Be				

Questions:

- If Li loses an electron to another atom, why does it have a +1 charge?
- If N gains 3 electrons from other atoms, why does it have a -3 charge?
- a. What do you think happens to atomic radius size of a cation & why?    b. an anion & why?