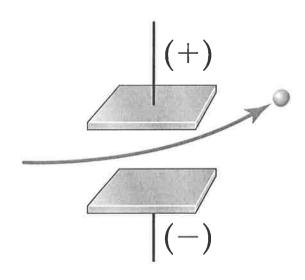
Name: \_\_\_\_\_

Using a periodic table, fill in the following table.

	Number of (+)Protons	Number of (-) Electrons	Overall Charge	Element Symbol &Charge	Neutral (N) Cation (C) Anion (A)
1.	+7	-10			
2.	+12	-10			
3.	+30	-30			
4.	+19		1+		
5.				P <sup>3-</sup>	
6.	+38		2+		
7.	+8		0		
8.				Cr <sup>3+</sup>	
9.	+35	-36			
10.	+55		1+		



11. What is the charge on the particle traveling between the two charged plates?

(Hint: Think about magnets)

12. How do you know?

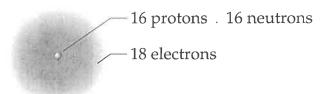
13. Would the particle most likely be a proton or electron? Why?

ı	on	CL	228	Sh	eet	#2
		<b>V</b>		-211		$\pi$

**Ion** – An atom with an overall charge due to unequal numbers of protons (+) and electrons (-).

**Anion** – Ion with an overall negative (-) charge.

**Cation** – Ion with an overall positive (+) charge.



## 1.Try This: (Use the picture above)

Name of where the protons and neutrons live:

Name of where the electrons live:

Atomic Number:

Number of protons:

Number of neutrons:

Atomic Mass:

Number of electrons:

Overall Charge:

Symbol with charge:

Name:		

## 2. Try This:

	19				1
	Number of	Number of	Overall	Element Symbol	Neutral (N)
	(+) Protons	(-) Electrons	Charge	&Charge	Cation (C) Anion (A)
	7700073	Live Cit O/IS		G.G., G. g.	7.0.00.11.0
1,	+9	-10	-1	F <sup>1-</sup>	А
2.	+20	-18			
3.	+7	-7			
4.	+3		1+		
5.				Al <sup>3+</sup>	
6.	+19	-18			
7.				S	
8.				<sup>1-</sup>	
9,	+26	-23			
1 0.				Ba <sup>2+</sup>	

1. Given the information and a periodic table - complete the following.

	$^{19}_{0}F^{1}$	
element: _		

$$^{11}_{5}B$$
 element: \_\_\_\_\_\_

atomic #:	
# neutrons: _	

	$^{10}_{\ 5}B^{3-}$	
mass #:		

Ħ	protons:	
	# electrons	

$$^{27}_{13}Al^{3+}$$

element: # protons: \_\_\_\_\_ # neutrons: \_\_\_\_\_

# electrons: \_\_\_\_\_

$${}_{4}^{9}Be^{2+}$$

element: \_\_\_\_\_\_ atomic #: \_\_\_\_\_ # electrons:\_\_\_\_\_ atomic mass: \_\_\_\_\_

element:	
# protons:	
# electrons:	
# neutrons:	

$$^{23}_{11}Na^{1+}$$

element: atomic #: mass #: \_\_\_\_\_ # electrons: \_\_\_\_\_

## $^{40}_{20}Ca^{2+}$

element: \_\_\_\_\_\_ atomic #: # electrons:\_\_\_\_\_ # neutrons:

$$_{30}^{65}Zn$$

element:	
# protons:	_ :
# electrons:	
# neutrons:	-2

$$^{40}_{18}Ar$$

element: # protons: # neutrons: \_\_\_\_\_

# electrons: \_\_\_\_\_

element: \_\_\_\_\_ atomic #: \_\_\_\_\_ # electrons:\_\_\_\_\_ atomic mass: \_\_\_\_\_

## 4*Не*

element: # protons: \_\_\_\_\_ # electrons: # neutrons: \_\_\_\_\_

 $^{24}_{12}Mg^{2+}$ 

 $^{26}_{12}Mg^{2+}$ 

1. Given the information and a peri	odic table - complete the following.	
$^{36}_{17}Cl^{1-}$ element:	$^{70}_{31}Ga$ element:	$^{24}_{11}Na^{1+}$ mass #:
# protons:	atomic #:	# protons:
# neutrons:	# neutrons:	
# electrons:	# electrons:	atomic #:
${}^{9}_{4}Be^{2+}$	$^{31}_{15}P^{3-}$	36S <sup>2-1</sup>
element:	element:	element:
# protons:	atomic #:	# protons:
# neutrons:	# electrons:	# electrons:
# electrons:	atomic mass:	# neutrons:
<sup>41</sup> <sub>19</sub> K <sup>1+</sup>	$_{10}^{21}Ne$	$^{133}_{55}Cs^{1+}$
element:	element:	element:

element:	element:	element:	
atomic #:	atomic #:	# protons:	
mass #:	# electrons:	# electrons:	
# electrons:	# neutrons:	# neutrons:	

 element:
 mass #:

 # protons:
 atomic #:
 # protons:

 # neutrons:
 # electrons:
 # electrons:

 # electrons:
 # neutrons:
 # neutrons:

 $^{25}_{12}Mg$ 

What is the term used to describe these last examples?

What do all three have in common?\_\_\_\_\_