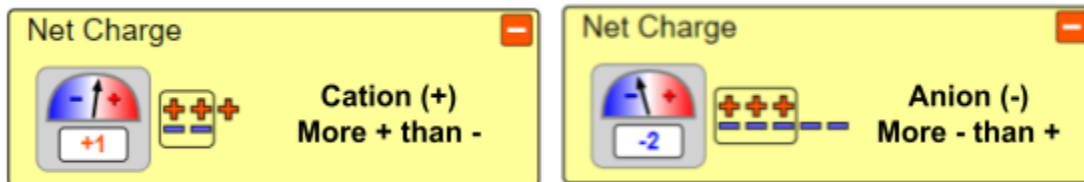


Ion Chip Challenge!

Goal: Make ions with your classmates!



Task: Start with 6 proton chips and 6 electron chips. Play “Rock Paper Scissors” with your classmates. If you win, take an electron (-) from your opponent. Record the results in the charts below.

	# protons (+)	# electrons (-)	Charge	Symbol	Cation/Anion
Initial (Start)					
End Round 1					
End Round 2					
End Round 3					

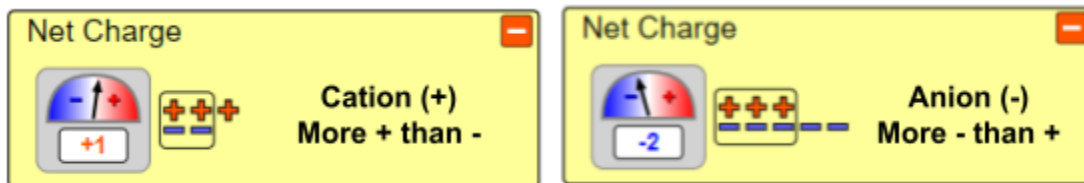
Questions:

1. When making ions, what stays the same (protons or electrons)?
2. What does a +1 or 1+ charge mean?
3. What does a -2 or 2- charge mean?
4. Where is the charge written on the symbol?

ANSWER KEY

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Goal: Make ions with your classmates!



Task: Start with 6 proton chips and 6 electron chips. Play “Rock Paper Scissors” with your classmates. If you win, take an electron (-) from your opponent. Record the results in the charts below.

	# protons (+)	# electrons (-)	Charge	Symbol	Cation/Anion
Initial (Start)	6	6	0	C	n/a
End Round 1	Answers vary				
End Round 2	Answers vary				
End Round 3	Answers vary				

Questions:

1. When making ions, what stays the same (protons or electrons)?

Protons

2. What does a +1 or 1+ charge mean?

One more proton than electron

3. What does a -2 or 2- charge mean?

Two more electrons than protons

4. Where is the charge written on the symbol?

Upper right corner