Mr. V. Chai	n
-------------	---

	•	
Name:		

## Phet Simulator - Ruild an Atom

		Thet Simulator Duna an Atom				
	5.	Based on what you've observed, which two particles appear to determine the mass of the overall atom? Which particle doesn't seem to have a measurable impact on the mass? Explain why you think this is!  Based on what you've observed, summarize the relationship between how protons, neutrons and electrons affect the overall charge of an atom.				
	6.					
<ul> <li>7. If you've been paying attention, you should have noticed that the term <u>lon</u> appears from time to time.</li> <li>Experiment with the simulator and list the two ways you can create a positive ion and a negative ion:</li> <li>a) Two ways to create a <i>positive</i> ion:</li> </ul>						
•	b)		ve ion:			
٠.	c)		on means?			
		#1:del Sketch of Atom:	Element #2: Bohr Model Sketch of Atom:	Element #3:		
	i ivio	del Skettii di Atoiii.	Botti Woder Sketch of Atom.	Both Woder Sketch of Atom.		
·						
How tabl		ould appear on periodic	How it would appear on periodic table:	How it would appear on periodic table:		

9. Click Game at the bottom of the simulator window. Play the four games- can you get all *five stars* each time?! <sup>(3)</sup>

		$\sim$	
Mr.	V.	( h	ลท

	•
Name:	
name.	
, ,	

## Phet Simulator – Build an Atom

- 1. Go to the following: <a href="http://phet.colorado.edu/en/simulation/build-an-atom">http://phet.colorado.edu/en/simulation/build-an-atom</a> and click Play, then select Atom.
- 2. Use the tools to build any three, different types of atoms and fill in the information about them below:

Element #1:	Element #2:	Element #3:
# of protons:	# of protons:	# of <u>protons</u> :
# of neutrons:	# of <u>neutrons</u> :	# of <u>neutrons</u> :
# of electrons:	# of electrons:	# of <u>electrons</u> :
Bohr Model Sketch:	Bohr Model Sketch:	Bohr Model Sketch:
Atomic #:	Atomic #:	Atomic #:
Atomic mass:	Atomic mass:	Atomic mass:
mbol on Periodic Table:	Symbol on Periodic Table:	Symbol on Periodic Table:
	s the <i>boss</i> of the atom? What <u>evidence</u> d	loes the simulator give you for this?

	F. A. W.	Land a control of the second o	Ave
	Add a Neutron	Add an Electron	Add a Proton
	(to original atom)	(to original atom) 🦠	(to original atom)
Observe and record	How does it change the:	How does it <u>change</u> the:	How does it <u>change</u> the:
ALL changes to the	Overall charge:	Overall charge:	Overall charge:
original Hydrogen (H)	Mass:	Mass:	Mass:
atom when each	Atómic Number:	Atomic Number:	Atomic Number:
subatomic particle is added!	Type of Atom:	Type of Atom:	Type of Atom:

complete the table below. (You need to RESET back to your original Hydrogen (H) atom (1 proton and 1

electron) after you make each change!)