Name: _____

Date: _____ Period:_____

Chemistry
Atomic Models WS

I. *Complete the following table of atomic models:*

	Name of model	Unique characteristic	Description of model	Picture
1.		*indivisible, single particle*		
2.	*Thomson*			
3.			*a small, massive, positive nucleus exists in the center of the atom*	
4.	*Bohr*			
5.		*probability of knowing where electrons will be; energy levels*		

II. *Complete the following table (refer to p.113-116 for help):*

	Element	Symbol	Atomic #	# protons	# electrons	# neutrons	Mass #
6.	**hydrogen**					**0**	
7.	**nitrogen**						
8.		**Hg**					
9.					**56**		
10.							**12**
11.			**36**				
12.		**Zr**					
13.				**27**			
14.	**argon**						
15.		**U**					**238**

III. *Complete the following chart by listing each of the three subatomic particles, their charges, relative mass, and location in the atom:*

	Particle	Charge	Relative Mass	Location in the atom
16.				
17.				
18.				

IV. *Using the Bohr model, draw and label one atom of each of the following isotopes with the correct number and placement of its three major types of subatomic particles:*

19. Helium-4

20. Carbon-14

21. Sulfur-32