

ATOMIC STRUCTURE KEYNOTES

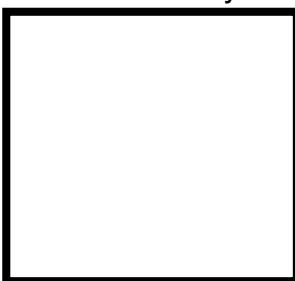
Physical Science @ SHS

Name _____ pd. _____

1) The three subatomic particles that make up an atom are:

Particle	Symbol	Relative Mass	Location	Charge	Importance	Discovery

2) Copy the periodic table square for Lithium. Identify each part and what importance each has.



3) How many protons, neutrons and electrons in the following elements?

Element	protons	neutrons	electrons	Element	protons	neutrons	electrons
Silver				Zinc			
Potassium				Uranium			
Neon				Gold			
Hydrogen				Fluorine			
Sulfur				Cesium			

4) What are isotopes? _____

The atomic weight on the periodic table is the _____
_____ of an element.

5) Draw the 3 isotopes of Hydrogen below:

Hydrogen - 1	Hydrogen - 2	Hydrogen - 3

6) The Bohr model of the atom places _____ and _____ in the _____ and _____ in _____ outside the nucleus.

On the Periodic Table:

7) Periods run _____ the table. The period number is the _____ of _____ . All the members of a period have the same _____ .

8) Groups run _____ the table. The A group number is the number of _____ in the _____ . The only exception is the element _____ .

Element	e- energy levels	# of valence e-	Element	e- energy levels	# of valence e-
Calcium			Carbon		
Fluorine			Phosphorus		
Aluminum			Radon		
Potassium			Hydrogen		

9) The maximum number of electrons (no more than this amount) in each energy level is:

1st _____ e- 2nd _____ e- 3rd _____ e- 4th _____ e- 5th _____ e- 6th _____ e- 7th _____ e-

10) Write the 5 Steps in drawing a Bohr Model of an atom:

- 1) _____

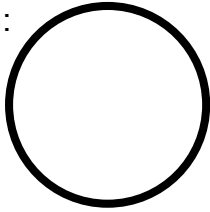
- 2) _____

- 3) _____

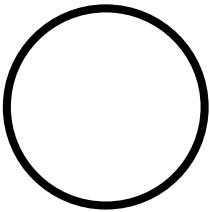
- 4) _____

5) _____

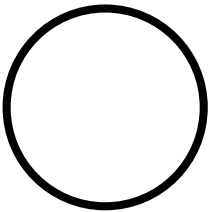
Bohr Model of a Strontium atom:




Bohr Model of an Aluminum atom:



Bohr Model of a Bromine atom:



Notes on
Periods
& Groups



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	39.100	40.08	44.96	47.90	50.95	52.01	54.94	55.85	58.94	58.71	63.54	65.38	69.72	72.60	74.91	78.96	79.916	83.80																																																																																				
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	132.91	137.36	138.92	178.50	180.95	183.86	186.22	190.2	192.2	195.09	197.0	200.61	204.39	207.21	208.9	(209)	(210)	(222)																																																																																				
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	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td>58</td><td>59</td><td>60</td><td>61</td><td>62</td><td>63</td><td>64</td><td>65</td><td>66</td><td>67</td><td>68</td><td>69</td><td>70</td><td>71</td> </tr> <tr> <td>Ce</td><td>Pr</td><td>Nd</td><td>Pm</td><td>Sm</td><td>Eu</td><td>Gd</td><td>Tb</td><td>Dy</td><td>Ho</td><td>Er</td><td>Tm</td><td>Yb</td><td>Lu</td> </tr> <tr> <td>140.13</td><td>140.92</td><td>144.27</td><td>(145)</td><td>150.35</td><td>152.35</td><td>157.26</td><td>158.93</td><td>162.51</td><td>164.94</td><td>167.2</td><td>168.94</td><td>173.04</td><td>174.99</td> </tr> <tr> <td>90</td><td>91</td><td>92</td><td>93</td><td>94</td><td>95</td><td>96</td><td>97</td><td>98</td><td>99</td><td>100</td><td>101</td><td>102</td><td>103</td> </tr> <tr> <td>Th</td><td>Pa</td><td>U</td><td>Np</td><td>Pu</td><td>Am</td><td>Cm</td><td>Bk</td><td>Cf</td><td>Es</td><td>Fm</td><td>Md</td><td>No</td><td>Lr</td> </tr> <tr> <td>232.04</td><td>(231)</td><td>238.07</td><td>(237)</td><td>(242)</td><td>(243)</td><td>(245)</td><td>(249)</td><td>(251)</td><td>(254)</td><td>(255)</td><td>(256)</td><td>(259)</td><td>(260)</td> </tr> </table>																		58	59	60	61	62	63	64	65	66	67	68	69	70	71	Ce	Pr	Nd	Pm	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu	140.13	140.92	144.27	(145)	150.35	152.35	157.26	158.93	162.51	164.94	167.2	168.94	173.04	174.99	90	91	92	93	94	95	96	97	98	99	100	101	102	103	Th	Pa	U	Np	Pu	Am	Cm	Bk	Cf	Es	Fm	Md	No	Lr	232.04	(231)	238.07	(237)	(242)	(243)	(245)	(249)	(251)	(254)	(255)	(256)	(259)	(260)
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IA	1	BOHR MODEL OF THE ATOM						VIII A	2
1	Name _____ per. _____								
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2									
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