	<u>The Modern Periodic Table of the Elements</u>																	
1																		18
Hydrogen  1  H  1.01			-	relative n nded to tw places.		Ele	ement na	ame	→ Mer	cury ←	Atomic	; #						Helium 2 He 4.00
2.1	2			age masse			Svn	nbol —	$\rightarrow$ $lacksquare$				13	14	15	16	17	
Lithium <b>3</b>	Beryllium 4			ed as mea es, and su			<b>O</b> y		, L	lg			Boron <b>5</b>	Carbon <b>6</b>	Nitrogen <b>7</b>	Oxygen <b>8</b>	Fluorine <b>9</b>	Neon 10
Ľi	Be		significa	ant figure	rules. Do					).59 ←	Avg	. Mass	B	č	N	Ö	F	Ne
6.94 1.0	9.01 1.5			nd them fu erforming	irther			_		1.9			10.81 2.0	12.01 2.5	14.01 3.0	16.00 3.5	19.00 4.0	20.18
1.0	1.5		calculat			Electro	negativ	itv _		1.9			2.0	2.5	3.0	3.5	4.0	
Sodium	Magnesium 12						- 3	-9			J		Aluminum	Silicon 14	Phosphorus	Sulfur 16	Chlorine 17	Argon 18
11 <b>Na</b>	Mg												13 <b>Al</b>	Si	15 <b>P</b>	S	CI	Ar
22.99	24.31												26.98	28.09	30.97	32.07	35.45	39.95
0.9	1.2		3	4	5	6	7	8	9	10	11	12	1.5	1.8	2.1	2.5	3.0	
Potassium 19	Calcium <b>20</b>		Scandium 21	Titanium <b>22</b>	Vanadium <b>23</b>	Chromium <b>24</b>	Manganese 25	1ron <b>26</b>	Cobalt <b>27</b>	Nickel 28	Copper <b>29</b>	Zinc <b>30</b>	Gallium <b>31</b>	Germanium <b>32</b>	Arsenic <b>33</b>	Selenium <b>34</b>	Bromine 35	Krypton <b>36</b>
K	Ca		Sc	Ti	V	Cr	Mn	Fe	Co	Ni	Cu	Zn	Ga	Ge	As	Se	Br	Kr
39.10 0.8	40.08 1.0		44.96 1.3	47.88 1.5	50.94 1.6	52.00 1.6	54.94 1.5	55.85 1.8	58.93 1.8	58.69 1.8	63.55 1.9	65.39 1.6	69.72 1.6	72.61 1.8	74.92 2.0	78.96 2.4	79.90 2.8	83.80 3.0
Rubidium	Strontium		Yttrium	Zirconium	Niobium	Molybdenum	Technetium	Ruthenium	Rhodium	Palladium	Silver	Cadmium	Indium	Tin	Antimony	Tellurium	lodine	Xenon
37	38		39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54
<b>Rb</b> 85.47	<b>Sr</b> 87.62		<b>Y</b> 88.91	<b>Zr</b> 91.22	<b>Nb</b> 92.91	<b>Mo</b> 95.94	<b>Tc</b> (98)	<b>Ru</b> 101.07	<b>Rh</b> 102.91	<b>Pd</b> 106.42	<b>Ag</b>	<b>Cd</b>	<b>In</b> 114.82	<b>Sn</b> 118.71	<b>Sb</b> 121.76	<b>Te</b> 127.60	<b>I</b> 126.90	<b>Xe</b> 131.29
0.8	1.0		1.2	1.4	1.6	1.8	1.9	2.2	2.2	2.2	1.9	1.7	1.7	1.8	1.9	2.1	2.5	2.6
Cesium <b>55</b>	Barium <b>56</b>		Lutetium <b>71</b>	Hafnium <b>72</b>	Tantalum <b>73</b>	Tungsten <b>74</b>	Rhenium <b>75</b>	Osmium <b>76</b>	Iridium <b>77</b>	Platinum <b>78</b>	Gold <b>79</b>	Mercury <b>80</b>	Thallium <b>81</b>	Lead <b>82</b>	Bismuth <b>83</b>	Polonium <b>84</b>	Astatine <b>85</b>	Radon <b>86</b>
Cs	Ba	57-70 *	Lu	Hf	Ta	W	Re	Os	ir	Pt	Au	Hg	TI	Pb	Bi	Po	At	Rn
132.91 0.7	137.33 0.9		174.97 1.1	178.49 1.3	180.95 1.5	183.84 1.7	186.21 1.9	190.23 2.2	192.22 2.2	195.08 2.2	196.97 2.4	200.59 1.9	204.38 1.8	207.20 1.8	208.98 1.9	(209) 2.0	(210) 2.2	(222) 2.4
Francium	Radium		Lawrencium	Rutherfordium	Dubnium	Seaborgium	Bohrium	Z.Z Hassium	Z.Z Meitnerium	Z.Z Darmstadtium	Z.4 Roegentium	Copernicium	Ununtrium	Flerovium	Ununpentium	Livermorium	Z.Z Ununseptium	Z.4 Ununoctium
		1	Lawrencium	rvati iei ioi aidili	Dubiliulii	Jeaborgium	DUITIUITI											
87	88	89-102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118
		89-102 **	103 Lr (262)	104 Rf (261)	105 Db (262)	106 Sg (266)	107 Bh (264)	108 Hs (269)	109 Mt (268)	110 <b>Ds</b> (271)	111 <b>Rg</b> (272)	112 Cn (277)	113 Uut (284)	114 FI (289)	115 Uup (288)	116 Lv (293)	117 Uus (294)	118 Uuo (294)

*lanthanides

	Lanthanum <b>57</b>	Cerium <b>58</b>	Praseodymium 59	Neodymium <b>60</b>	Promethium <b>61</b>	Samarium <b>62</b>	Europium <b>63</b>	Gadolinium <b>64</b>	Terbium <b>65</b>	Dysprosium <b>66</b>	Holmium <b>67</b>	Erbium <b>68</b>	Thulium <b>69</b>	Ytterbium <b>70</b>
3	La	Ce	Pr	Nd	Pm	Sm	Eu	Gd	Tb	Dy	Но	Er	Tm	Yb
	138.91	140.12	140.91	144.24	(145)	150.36	151.97	157.25	158.93	162.50	164.93	167.26	168.93	173.04
	1.1	1.1	1.1	1.1	1.1	1.2	1.1	1.2	1.1	1.2	1.2	1.2	1.3	1.1
Ī	Actinium <b>89</b>	Thorium 90	Protactinium 91	Uranium <b>92</b>	Neptunium <b>93</b>	Plutonium <b>94</b>	Americium 95	Curium <b>96</b>	Berkelium <b>97</b>	Californium 98	Einsteinium 99	Fermium 100	Mendelevium 101	Nobelium 102
١.		Th		9 <u>2</u>				_					Md	-
1	AC		Pa	U	Np	Pu	Am	Cm	Bk	Cf	Es	Fm	-	No
	(227)	232.04	231.04	238.03	(237)	(244)	(243)	(247)	(247)	(251)	(252)	(257)	(258)	(259)
	1.1	1.3	1.5	1.4	1.4	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3