



# Periodic Table of the Elements

s <sup>1</sup>		d (n-1)										p					p <sup>6</sup>	
1	<b>1</b> <b>H</b> Hydrogen 1.0079																<b>2</b> <b>He</b> Helium 4.003	
2	<b>3</b> <b>Li</b> Lithium 6.941	<b>4</b> <b>Be</b> Beryllium 9.012											<b>5</b> <b>B</b> Boron 10.811	<b>6</b> <b>C</b> Carbon 12.011	<b>7</b> <b>N</b> Nitrogen 14.007	<b>8</b> <b>O</b> Oxygen 15.999	<b>9</b> <b>F</b> Fluorine 18.998	<b>10</b> <b>Ne</b> Neon 20.180
3	<b>11</b> <b>Na</b> Sodium 22.990	<b>12</b> <b>Mg</b> Magnesium 24.305	<b>d<sup>1</sup></b>	<b>d<sup>2</sup></b>	<b>d<sup>3</sup></b>	<b>d<sup>4</sup></b>	<b>d<sup>5</sup></b>	<b>d<sup>6</sup></b>	<b>d<sup>7</sup></b>	<b>d<sup>8</sup></b>	<b>d<sup>9</sup></b>	<b>d<sup>10</sup></b>	<b>13</b> <b>Al</b> Aluminum 26.982	<b>14</b> <b>Si</b> Silicon 28.086	<b>15</b> <b>P</b> Phosphorus 30.974	<b>16</b> <b>S</b> Sulfur 32.066	<b>17</b> <b>Cl</b> Chlorine 35.453	<b>18</b> <b>Ar</b> Argon 39.948
4	<b>19</b> <b>K</b> Potassium 39.098	<b>20</b> <b>Ca</b> Calcium 40.078	<b>21</b> <b>Sc</b> Scandium 44.956	<b>22</b> <b>Ti</b> Titanium 47.88	<b>23</b> <b>V</b> Vanadium 50.942	<b>24</b> <b>Cr</b> Chromium 51.996	<b>25</b> <b>Mn</b> Manganese 54.938	<b>26</b> <b>Fe</b> Iron 55.847	<b>27</b> <b>Co</b> Cobalt 58.933	<b>28</b> <b>Ni</b> Nickel 58.693	<b>29</b> <b>Cu</b> Copper 63.546	<b>30</b> <b>Zn</b> Zinc 65.39	<b>31</b> <b>Ga</b> Gallium 69.723	<b>32</b> <b>Ge</b> Germanium 72.61	<b>33</b> <b>As</b> Arsenic 74.922	<b>34</b> <b>Se</b> Selenium 78.96	<b>35</b> <b>Br</b> Bromine 79.904	<b>36</b> <b>Kr</b> Krypton 83.80
5	<b>37</b> <b>Rb</b> Rubidium 84.468	<b>38</b> <b>Sr</b> Strontium 87.62	<b>39</b> <b>Y</b> Yttrium 88.906	<b>40</b> <b>Zr</b> Zirconium 91.224	<b>41</b> <b>Nb</b> Niobium 92.906	<b>42</b> <b>Mo</b> Molybdenum 95.94	<b>43</b> <b>Tc</b> Technetium (98)	<b>44</b> <b>Ru</b> Ruthenium 101.07	<b>45</b> <b>Rh</b> Rhodium 102.91	<b>46</b> <b>Pd</b> Palladium 106.42	<b>47</b> <b>Ag</b> Silver 107.87	<b>48</b> <b>Cd</b> Cadmium 112.41	<b>49</b> <b>In</b> Indium 114.82	<b>50</b> <b>Sn</b> Tin 118.71	<b>51</b> <b>Sb</b> Antimony 121.76	<b>52</b> <b>Te</b> Tellurium 127.60	<b>53</b> <b>I</b> Iodine 126.90	<b>54</b> <b>Xe</b> Xenon 131.29
6	<b>55</b> <b>Cs</b> Cesium 132.91	<b>56</b> <b>Ba</b> Barium 137.33	<b>57</b> <b>La</b> Lanthanum 138.91	<b>72</b> <b>Hf</b> Hafnium 178.49	<b>73</b> <b>Ta</b> Tantalum 180.95	<b>74</b> <b>W</b> Tungsten 183.84	<b>75</b> <b>Re</b> Rhenium 186.21	<b>76</b> <b>Os</b> Osmium 190.23	<b>77</b> <b>Ir</b> Iridium 192.22	<b>78</b> <b>Pt</b> Platinum 195.08	<b>79</b> <b>Au</b> Gold 196.97	<b>80</b> <b>Hg</b> Mercury 200.59	<b>81</b> <b>Tl</b> Thallium 204.38	<b>82</b> <b>Pb</b> Lead 207.2	<b>83</b> <b>Bi</b> Bismuth 208.98	<b>84</b> <b>Po</b> Polonium (209)	<b>85</b> <b>At</b> Astatine (210)	<b>86</b> <b>Rn</b> Radon (222)
7	<b>87</b> <b>Fr</b> Francium (223)	<b>88</b> <b>Ra</b> Radium (226)	<b>89</b> <b>Ac</b> Actinium 227.03	<b>104</b> <b>Rf</b> Rutherfordium (261)	<b>105</b> <b>Db</b> Dubnium (262)	<b>106</b> <b>Sg</b> Seaborgium (263)	<b>107</b> <b>Bh</b> Bohrium (264)	<b>108</b> <b>Hs</b> Hassium (265)	<b>109</b> <b>Mt</b> Meitnerium (266)	<b>110</b> <b>Ds</b> Darmstadtium (281)	<b>111</b> <b>Rg</b> Roentgenium (282)	<b>112</b> <b>Cn</b> Copernicium (285)	<b>113</b> <b>Nh</b> Nihonium (286)	<b>114</b> <b>Fl</b> Flerovium (289)	<b>115</b> <b>Mc</b> Moscovium (290)	<b>116</b> <b>Lv</b> Livermorium (293)	<b>117</b> <b>Ts</b> Tennessine (294)	<b>118</b> <b>Og</b> Tennessine (294)
			<b>6</b>															
			<b>58</b> <b>Ce</b> Cerium 140.12	<b>59</b> <b>Pr</b> Praseodymium 140.91	<b>60</b> <b>Nd</b> Neodymium 144.24	<b>61</b> <b>Pm</b> Promethium (145)	<b>62</b> <b>Sm</b> Samarium 150.36	<b>63</b> <b>Eu</b> Europium 151.97	<b>64</b> <b>Gd</b> Gadolinium 157.25	<b>65</b> <b>Tb</b> Terbium 158.93	<b>66</b> <b>Dy</b> Dysprosium 162.50	<b>67</b> <b>Ho</b> Holmium 164.93	<b>68</b> <b>Er</b> Erbium 167.26	<b>69</b> <b>Tm</b> Thulium 168.93	<b>70</b> <b>Yb</b> Ytterbium 173.04	<b>71</b> <b>Lu</b> Lutetium 174.97		
			<b>7</b>															
			<b>90</b> <b>Th</b> Thorium 232.04	<b>91</b> <b>Pa</b> Protactinium 231.04	<b>92</b> <b>U</b> Uranium 238.03	<b>93</b> <b>Np</b> Neptunium (237)	<b>94</b> <b>Pu</b> Plutonium (244)	<b>95</b> <b>Am</b> Americium (243)	<b>96</b> <b>Cm</b> Curium (247)	<b>97</b> <b>Bk</b> Berkelium (247)	<b>98</b> <b>Cf</b> Californium (251)	<b>99</b> <b>Es</b> Einsteinium (252)	<b>100</b> <b>Fm</b> Fermium (257)	<b>101</b> <b>Md</b> Mendelevium (258)	<b>102</b> <b>No</b> Nobelium (259)	<b>103</b> <b>Lr</b> Lawrencium (260)		



f (n-2)