

# The Periodic Table of the Elements

|  |   |  |  |   |   |   |  |   |  |                                       |                                       |  |                                       |   |  |   |                                     |
|--|---|--|--|---|---|---|--|---|--|---------------------------------------|---------------------------------------|--|---------------------------------------|---|--|---|-------------------------------------|
| 1<br><b>H</b><br>Hydrogen<br>1.00794   |   |  |  |   |   |   |  |   |  |                                       |                                       |  |                                       |   |  |   | 2<br><b>He</b><br>Helium<br>4.003   |
| 3<br><b>Li</b><br>Lithium<br>6.941     | 4<br><b>Be</b><br>Beryllium<br>9.012182 |  |  |   |   |   |  |   |  |                                       |                                       | 5<br><b>B</b><br>Boron<br>10.811         | 6<br><b>C</b><br>Carbon<br>12.0107    | 7<br><b>N</b><br>Nitrogen<br>14.00674     | 8<br><b>O</b><br>Oxygen<br>15.9994     | 9<br><b>F</b><br>Fluorine<br>18.9984032 | 10<br><b>Ne</b><br>Neon<br>20.1797  |
| 11<br><b>Na</b><br>Sodium<br>22.989770 | 12<br><b>Mg</b><br>Magnesium<br>24.3050 |  |  |   |   |   |  |   |  |                                       |                                       | 13<br><b>Al</b><br>Aluminum<br>26.981538 | 14<br><b>Si</b><br>Silicon<br>28.0855 | 15<br><b>P</b><br>Phosphorus<br>30.973761 | 16<br><b>S</b><br>Sulfur<br>32.066     | 17<br><b>Cl</b><br>Chlorine<br>35.4527  | 18<br><b>Ar</b><br>Argon<br>39.948  |
| 19<br><b>K</b><br>Potassium<br>39.0983 | 20<br><b>Ca</b><br>Calcium<br>40.078    | 21<br><b>Sc</b><br>Scandium<br>44.955910 | 22<br><b>Ti</b><br>Titanium<br>47.867      | 23<br><b>V</b><br>Vanadium<br>50.9415   | 24<br><b>Cr</b><br>Chromium<br>51.9961  | 25<br><b>Mn</b><br>Manganese<br>54.938049 | 26<br><b>Fe</b><br>Iron<br>55.845      | 27<br><b>Co</b><br>Cobalt<br>58.933200  | 28<br><b>Ni</b><br>Nickel<br>58.6934   | 29<br><b>Cu</b><br>Copper<br>63.546   | 30<br><b>Zn</b><br>Zinc<br>65.39      | 31<br><b>Ga</b><br>Gallium<br>69.723     | 32<br><b>Ge</b><br>Germanium<br>72.61 | 33<br><b>As</b><br>Arsenic<br>74.92160    | 34<br><b>Se</b><br>Selenium<br>78.96   | 35<br><b>Br</b><br>Bromine<br>79.904    | 36<br><b>Kr</b><br>Krypton<br>83.80 |
| 37<br><b>Rb</b><br>Rubidium<br>85.4678 | 38<br><b>Sr</b><br>Strontium<br>87.62   | 39<br><b>Y</b><br>Yttrium<br>88.90585    | 40<br><b>Zr</b><br>Zirconium<br>91.224     | 41<br><b>Nb</b><br>Niobium<br>92.90638  | 42<br><b>Mo</b><br>Molybdenum<br>95.94  | 43<br><b>Tc</b><br>Technetium<br>(98)     | 44<br><b>Ru</b><br>Ruthenium<br>101.07 | 45<br><b>Rh</b><br>Rhodium<br>102.90550 | 46<br><b>Pd</b><br>Palladium<br>106.42 | 47<br><b>Ag</b><br>Silver<br>107.8682 | 48<br><b>Cd</b><br>Cadmium<br>112.411 | 49<br><b>In</b><br>Indium<br>114.818     | 50<br><b>Sn</b><br>Tin<br>118.710     | 51<br><b>Sb</b><br>Antimony<br>121.760    | 52<br><b>Te</b><br>Tellurium<br>127.60 | 53<br><b>I</b><br>Iodine<br>126.90447   | 54<br><b>Xe</b><br>Xenon<br>131.29  |
| 55<br><b>Cs</b><br>Cesium<br>132.90545 | 56<br><b>Ba</b><br>Barium<br>137.327    | 57<br><b>La</b><br>Lanthanum<br>138.9055 | 72<br><b>Hf</b><br>Hafnium<br>178.49       | 73<br><b>Ta</b><br>Tantalum<br>180.9479 | 74<br><b>W</b><br>Tungsten<br>183.84    | 75<br><b>Re</b><br>Rhenium<br>186.207     | 76<br><b>Os</b><br>Osmium<br>190.23    | 77<br><b>Ir</b><br>Iridium<br>192.217   | 78<br><b>Pt</b><br>Platinum<br>195.078 | 79<br><b>Au</b><br>Gold<br>196.96655  | 80<br><b>Hg</b><br>Mercury<br>200.59  | 81<br><b>Tl</b><br>Thallium<br>204.3833  | 82<br><b>Pb</b><br>Lead<br>207.2      | 83<br><b>Bi</b><br>Bismuth<br>208.98038   | 84<br><b>Po</b><br>Polonium<br>(209)   | 85<br><b>At</b><br>Astatine<br>(210)    | 86<br><b>Rn</b><br>Radon<br>(222)   |
| 87<br><b>Fr</b><br>Francium<br>(223)   | 88<br><b>Ra</b><br>Radium<br>(226)      | 89<br><b>Ac</b><br>Actinium<br>(227)     | 104<br><b>Rf</b><br>Rutherfordium<br>(261) | 105<br><b>Db</b><br>Dubnium<br>(262)    | 106<br><b>Sg</b><br>Seaborgium<br>(263) | 107<br><b>Bh</b><br>Bohrium<br>(262)      | 108<br><b>Hs</b><br>Hassium<br>(265)   | 109<br><b>Mt</b><br>Meitnerium<br>(266) | 110<br>(269)                           | 111<br>(272)                          | 112<br>(277)                          | 113                                      | 114                                   |   |  |   |                                     |

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| 58<br><b>Ce</b><br>Cerium<br>140.116   | 59<br><b>Pr</b><br>Praseodymium<br>140.90765 | 60<br><b>Nd</b><br>Neodymium<br>144.24 | 61<br><b>Pm</b><br>Promethium<br>(145) | 62<br><b>Sm</b><br>Samarium<br>150.36 | 63<br><b>Eu</b><br>Europium<br>151.964 | 64<br><b>Gd</b><br>Gadolinium<br>157.25 | 65<br><b>Tb</b><br>Terbium<br>158.92534 | 66<br><b>Dy</b><br>Dysprosium<br>162.50 | 67<br><b>Ho</b><br>Holmium<br>164.93032 | 68<br><b>Er</b><br>Erbium<br>167.26  | 69<br><b>Tm</b><br>Thulium<br>168.93421  | 70<br><b>Yb</b><br>Ytterbium<br>173.04 | 71<br><b>Lu</b><br>Lutetium<br>174.967  |
| 90<br><b>Th</b><br>Thorium<br>232.0381 | 91<br><b>Pa</b><br>Protactinium<br>231.03588 | 92<br><b>U</b><br>Uranium<br>238.0289  | 93<br><b>Np</b><br>Neptunium<br>(237)  | 94<br><b>Pu</b><br>Plutonium<br>(244) | 95<br><b>Am</b><br>Americium<br>(243)  | 96<br><b>Cm</b><br>Curium<br>(247)      | 97<br><b>Bk</b><br>Berkelium<br>(247)   | 98<br><b>Cf</b><br>Californium<br>(251) | 99<br><b>Es</b><br>Einsteinium<br>(252) | 100<br><b>Fm</b><br>Fermium<br>(257) | 101<br><b>Md</b><br>Mendelevium<br>(258) | 102<br><b>No</b><br>Nobelium<br>(259)  | 103<br><b>Lr</b><br>Lawrencium<br>(262) |