

# The Periodic Table of the Elements

| (1)                          |                               | (2)   |                               |                              |                                |                              |                                |                              |                                |                               |                              | (3)                           |                               | (4)                           | (5)                            | (6)                          | (7)                         | (0)               |  |                          |  |                          |
|------------------------------|-------------------------------|---|-------------------------------|------------------------------|--------------------------------|------------------------------|--------------------------------|------------------------------|--------------------------------|-------------------------------|------------------------------|-------------------------------|-------------------------------|-------------------------------|--------------------------------|------------------------------|-----------------------------|-------------------|--|--------------------------|--|--------------------------|
| 1                            |                               | <div>Key</div> <div>atomic number</div> <div>Symbol</div> <div>name</div> <div>relative atomic mass</div> |                               |                              |                                |                              |                                |                              |                                |                               |                              |                               |                               |                               |                                |                              |                             |                   |  | 18                       |  |                          |
| 1<br>H<br>hydrogen<br>1.0    |                               |   |                               |                              |                                |                              |                                |                              |                                |                               |                              | 2                             |                               |                               |                                |                              |                             |                   |  | 2<br>He<br>helium<br>4.0 |  |                          |
| 3<br>Li<br>lithium<br>6.9    | 4<br>Be<br>beryllium<br>9.0   |   |                               |                              |                                |                              |                                |                              |                                |                               |                              |                               |                               |                               |                                |                              |                             |                   |  |                          |  | 10<br>Ne<br>neon<br>20.2 |
| 11<br>Na<br>sodium<br>23.0   | 12<br>Mg<br>magnesium<br>24.3 |   |                               |                              |                                |                              |                                |                              |                                |                               |                              | 13<br>Al<br>aluminium<br>27.0 | 14<br>Si<br>silicon<br>28.1   | 15<br>P<br>phosphorus<br>31.0 | 16<br>S<br>sulfur<br>32.1      | 17<br>Cl<br>chlorine<br>35.5 | 18<br>Ar<br>argon<br>39.9   |                   |  |                          |  |                          |
| 19<br>K<br>potassium<br>39.1 | 20<br>Ca<br>calcium<br>40.1   | 3<br>Sc<br>scandium<br>45.0   | 4<br>Ti<br>titanium<br>47.9   | 5<br>V<br>vanadium<br>50.9   | 6<br>Cr<br>chromium<br>52.0    | 7<br>Mn<br>manganese<br>54.9 | 8<br>Fe<br>iron<br>55.8        | 9<br>Co<br>cobalt<br>58.9    | 10<br>Ni<br>nickel<br>58.7     | 11<br>Cu<br>copper<br>63.5    | 12<br>Zn<br>zinc<br>65.4     | 31<br>Ga<br>gallium<br>69.7   | 32<br>Ge<br>germanium<br>72.6 | 33<br>As<br>arsenic<br>74.9   | 34<br>Se<br>selenium<br>79.0   | 35<br>Br<br>bromine<br>79.9  | 36<br>Kr<br>krypton<br>83.8 |                   |  |                          |  |                          |
| 37<br>Rb<br>rubidium<br>85.5 | 38<br>Sr<br>strontium<br>87.6 | 39<br>Y<br>yttrium<br>88.9  | 40<br>Zr<br>zirconium<br>91.2 | 41<br>Nb<br>niobium<br>92.9  | 42<br>Mo<br>molybdenum<br>95.9 | 43<br>Tc<br>technetium       | 44<br>Ru<br>ruthenium<br>101.1 | 45<br>Rh<br>rhodium<br>102.9 | 46<br>Pd<br>palladium<br>106.4 | 47<br>Ag<br>silver<br>107.9   | 48<br>Cd<br>cadmium<br>112.4 | 49<br>In<br>indium<br>114.8   | 50<br>Sn<br>tin<br>118.7      | 51<br>Sb<br>antimony<br>121.8 | 52<br>Te<br>tellurium<br>127.6 | 53<br>I<br>iodine<br>126.9   | 54<br>Xe<br>xenon<br>131.3  |                   |  |                          |  |                          |
| 55<br>Cs<br>caesium<br>132.9 | 56<br>Ba<br>barium<br>137.3   | ● 57–71<br>lanthanoids  |                               | 72<br>Hf<br>hafnium<br>178.5 | 73<br>Ta<br>tantalum<br>180.9  | 74<br>W<br>tungsten<br>183.8 | 75<br>Re<br>rhenium<br>186.2   | 76<br>Os<br>osmium<br>190.2  | 77<br>Ir<br>iridium<br>192.2   | 78<br>Pt<br>platinum<br>195.1 | 79<br>Au<br>gold<br>197.0    | 80<br>Hg<br>mercury<br>200.6  | 81<br>Tl<br>thallium<br>204.4 | 82<br>Pb<br>lead<br>207.2     | 83<br>Bi<br>bismuth<br>209.0   | 84<br>Po<br>polonium         | 85<br>At<br>astatine        | 86<br>Rn<br>radon |  |                          |  |                          |
| 87<br>Fr<br>francium         | 88<br>Ra<br>radium            | ● 89–103<br>actinoids   |                               | 104<br>Rf<br>rutherfordium   | 105<br>Db<br>dubnium           | 106<br>Sg<br>seaborgium      | 107<br>Bh<br>bohrium           | 108<br>Hs<br>hassium         | 109<br>Mt<br>meitnerium        | 110<br>Ds<br>darmstadtium     | 111<br>Rg<br>roentgenium     | 112<br>Cn<br>copernicium      |                               | 114<br>Fl<br>flerovium        |                                | 116<br>Lv<br>livermorium     |                             |                   |  |                          |  |                          |

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