

# CLASSIFICATION PERIODIQUE DES ELEMENTS

| Période       | I                                    | II                                  | III                                  | IV                                      | V                                   | VI                                   | VII                                       | VIII                                  | IX                                  | X                                     | XI                                 | XII                                      | XIII                                 | XIV                                 | XV                                    | XVI                                  | XVII                                 | XVIII                                  |                                     |                                    |                                    |                                      |                                       |                                      |
|---------------|--------------------------------------|-------------------------------------|--------------------------------------|---|-------------------------------------|--------------------------------------|---|---------------------------------------|-------------------------------------|---------------------------------------|------------------------------------|--|--------------------------------------|-------------------------------------|---------------------------------------|--------------------------------------|--------------------------------------|--|-------------------------------------|------------------------------------|------------------------------------|--------------------------------------|---------------------------------------|--------------------------------------|
| 1<br>couche K | 1<br>H<br>Hydrogène<br>1.0<br>G      |                                     |                                      |   |                                     |                                      |   |                                       |                                     |                                       |                                    |  |                                      |                                     |                                       |                                      |                                      | 4<br>He<br>Hélium<br>4.0<br>G          |                                     |                                    |                                    |                                      |                                       |                                      |
| 2<br>couche L | 7<br>Li<br>Lithium<br>6.9<br>3       | 9<br>Be<br>Béryllium<br>9.0<br>4    |                                      |   |                                     |                                      |   |                                       |                                     |                                       |                                    |  |                                      |                                     |                                       |                                      |                                      |  | 11<br>B<br>Bore<br>10.8<br>5        | 12<br>C<br>Carbone<br>12.0<br>6    | 14<br>N<br>Azote<br>14.0<br>7<br>G | 16<br>O<br>Oxygène<br>16.0<br>8<br>G | 19<br>F<br>Fluor<br>19.0<br>9<br>G    | 20<br>Ne<br>Néon<br>20.2<br>10<br>G  |
| 3<br>couche M | 23<br>Na<br>Sodium<br>23.0<br>11     | 24<br>Mg<br>Magnésium<br>24.3<br>12 |                                      |   |                                     |                                      |   |                                       |                                     |                                       |                                    |  |                                      |                                     |                                       |                                      |                                      |  | 27<br>Al<br>Aluminium<br>27.0<br>13 | 28<br>Si<br>Silicium<br>28.1<br>14 | 31<br>P<br>Phosphore<br>31.0<br>15 | 32<br>S<br>Soufre<br>32.1<br>16      | 35<br>Cl<br>Chlore<br>35.5<br>17<br>G | 40<br>Ar<br>Argon<br>39.9<br>18<br>G |
| 4<br>couche N | 39<br>K<br>Potassium<br>39.1<br>19   | 40<br>Ca<br>Calcium<br>40.1<br>20   | 45<br>Sc<br>Scandium<br>45.0<br>21   | 48<br>Ti<br>Titane<br>47.9<br>22        | 51<br>V<br>Vanadium<br>50.9<br>23   | 52<br>Cr<br>Chrome<br>52.0<br>24     | 55<br>Mn<br>Manganèse<br>54.9<br>25       | 56<br>Fe<br>Fer<br>55.8<br>26         | 59<br>Co<br>Cobalt<br>58.9<br>27    | 58<br>Ni<br>Nickel<br>58.7<br>28      | 63<br>Cu<br>Cuivre<br>63.5<br>29   | 64<br>Zn<br>Zinc<br>65.4<br>30           | 69<br>Ga<br>Gallium<br>69.7<br>31    | 74<br>Ge<br>Germanium<br>72.6<br>32 | 75<br>As<br>Arsenic<br>74.9<br>33     | 80<br>Se<br>Sélénium<br>79.0<br>34   | 79<br>Br<br>Brome<br>79.9<br>35<br>L | 84<br>Kr<br>Krypton<br>83.8<br>36<br>G |                                     |                                    |                                    |                                      |                                       |                                      |
| 5<br>couche O | 85<br>Rb<br>Rubidium<br>85.5<br>37   | 88<br>Sr<br>Strontium<br>87.6<br>38 | 89<br>Y<br>Yttrium<br>88.9<br>39     | 90<br>Zr<br>Zirconium<br>91.2<br>40     | 93<br>Nb<br>Niobium<br>92.9<br>41   | 98<br>Mo<br>Molybdène<br>95.9<br>42  | 98<br>Tc<br>Technétium<br>99.0<br>43<br>* | 102<br>Ru<br>Ruthénium<br>101.1<br>44 | 103<br>Rh<br>Rhodium<br>102.9<br>45 | 106<br>Pd<br>Palladium<br>106.4<br>46 | 107<br>Ag<br>Argent<br>107.9<br>47 | 114<br>Cd<br>Cadmium<br>112.4<br>48      | 115<br>In<br>Indium<br>114.8<br>49   | 120<br>Sn<br>Etain<br>118.7<br>50   | 121<br>Sb<br>Antimoine<br>121.8<br>51 | 128<br>Te<br>Tellure<br>127.6<br>52  | 127<br>I<br>Iode<br>126.9<br>53      | 129<br>Xe<br>Xénon<br>131.3<br>54<br>G |                                     |                                    |                                    |                                      |                                       |                                      |
| 6<br>couche P | 133<br>Cs<br>Césium<br>132.9<br>55   | 138<br>Ba<br>Baryum<br>137.3<br>56  | 139<br>La<br>Lanthane<br>138.9<br>57 | 180<br>Hf<br>Hafnium<br>178.5<br>72     | 181<br>Ta<br>Tantale<br>180.9<br>73 | 184<br>W<br>Tungstène<br>183.9<br>74 | 185<br>Re<br>Rhénium<br>186.2<br>75       | 192<br>Os<br>Osmium<br>190.2<br>76    | 193<br>Ir<br>Iridium<br>192.2<br>77 | 195<br>Pt<br>Platine<br>195.1<br>78   | 197<br>Au<br>Or<br>197.0<br>79     | 202<br>Hg<br>Mercure<br>200.6<br>80<br>L | 205<br>Tl<br>Thallium<br>204.4<br>81 | 208<br>Pb<br>Plomb<br>207.2<br>82   | 209<br>Bi<br>Bismuth<br>209.0<br>83   | 210<br>Po<br>Polonium<br>210.0<br>84 | 218<br>At<br>Astate<br>210.0<br>85   | 222<br>Rn<br>Radon<br>222.0<br>86<br>G |                                     |                                    |                                    |                                      |                                       |                                      |
| 7<br>couche Q | 223<br>Fr<br>Francium<br>223.0<br>87 | 226<br>Ra<br>Radium<br>226.0<br>88  | 227<br>Ac<br>Actinium<br>227.0<br>89 | 260<br>Ku<br>Kurchatovium<br>260<br>104 | 260<br>Ha<br>Hahnium<br>260<br>105  |                                      |   |                                       |                                     |                                       |                                    |  |                                      |                                     |                                       |                                      |                                      |  |                                     |                                    |                                    |                                      |                                       |                                      |

**Légende**

nombre de masse de l'isotope le plus abondant = nombre de nucléons

masse molaire atomique en g.mol<sup>-1</sup>

symbole

nom

numéro atomique = nombre de protons

- Hydrogène
- Métaux vrais
- Métaux de transition
- "Métalloïdes"
- Non métaux
- Gaz rares
- Lanthanides
- Transuraniens

P 6  
Q 7

\*

: Radioactif et préparé par synthèse

G

: Gaz

L

: Liquide