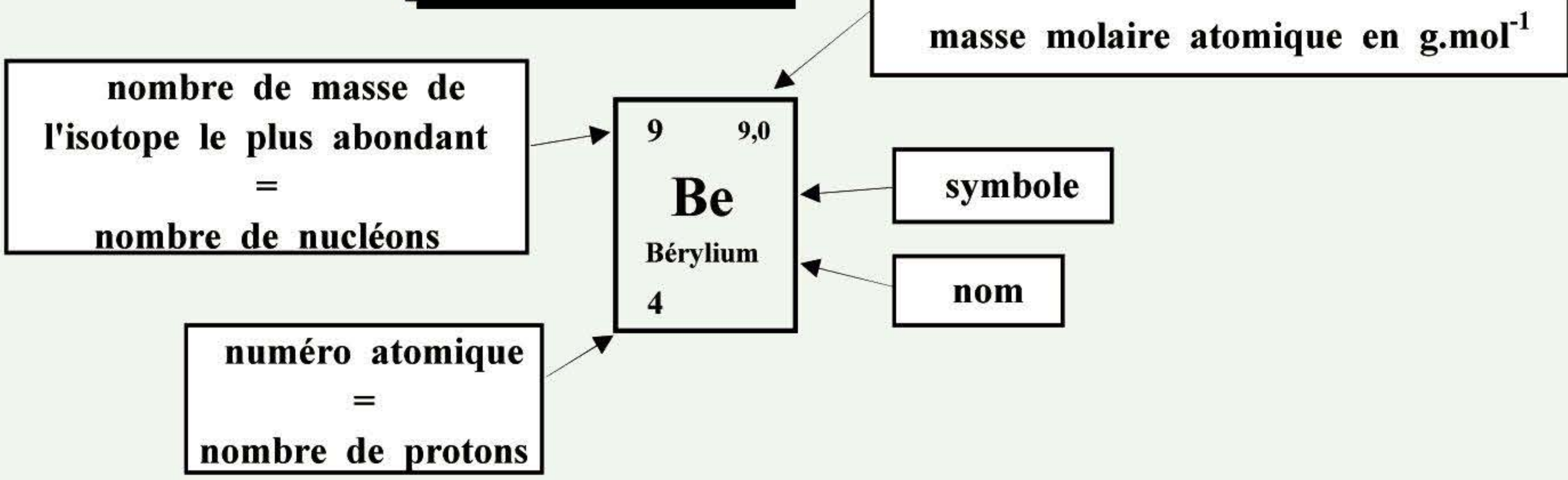


# CLASSIFICATION PERIODIQUE DES ELEMENTS

| Période       | I                                  | II                                | III                                | IV                                | V                                 | VI                                 | VII                                | VIII                                | IX                                | X                                   | XI                               | XII                               | XIII                               | XIV                               | XV                                  | XVI                                | XVII                             | XVIII                             |                                  |                                  |                                |                                |                               |
|---------------|------------------------------------|-----------------------------------|------------------------------------|-----------------------------------|-----------------------------------|------------------------------------|------------------------------------|-------------------------------------|-----------------------------------|-------------------------------------|----------------------------------|-----------------------------------|------------------------------------|-----------------------------------|-------------------------------------|------------------------------------|----------------------------------|-----------------------------------|----------------------------------|----------------------------------|--------------------------------|--------------------------------|-------------------------------|
| 1<br>couche K | 1 1,0<br><b>H</b><br>Hydrogène     |                                   |                                    |                                   |                                   |                                    |                                    |                                     |                                   |                                     |                                  |                                   |                                    |                                   |                                     |                                    | 4 4,0<br><b>He</b><br>Hélium     |                                   |                                  |                                  |                                |                                |                               |
| 2<br>couche L | 7 6,9<br><b>Li</b><br>Lithium      | 9 9,0<br><b>Be</b><br>Béryllium   |                                    |                                   |                                   |                                    |                                    |                                     |                                   |                                     |                                  |                                   |                                    |                                   |                                     |                                    |                                  | 11 10,8<br><b>B</b><br>Bore       | 12 12,0<br><b>C</b><br>Carbone   | 14 14,0<br><b>N</b><br>Azote     | 16 16,0<br><b>O</b><br>Oxygène | 19 19,0<br><b>F</b><br>Fluor   | 20 20,2<br><b>Ne</b><br>Néon  |
| 3<br>couche M | 23 23,0<br><b>Na</b><br>Sodium     | 24 24,3<br><b>Mg</b><br>Magnésium |                                    |                                   |                                   |                                    |                                    |                                     |                                   |                                     |                                  |                                   |                                    |                                   |                                     |                                    |                                  | 27 27,0<br><b>Al</b><br>Aluminium | 28 28,1<br><b>Si</b><br>Silicium | 31 31,0<br><b>P</b><br>Phosphore | 32 32,1<br><b>S</b><br>Soufre  | 35 35,5<br><b>Cl</b><br>Chlore | 40 39,9<br><b>Ar</b><br>Argon |
| 4<br>couche N | 39 39,1<br><b>K</b><br>Potassium   | 40 40,1<br><b>Ca</b><br>Calcium   | 45 45,0<br><b>Sc</b><br>Scandium   | 48 47,9<br><b>Ti</b><br>Titane    | 51 50,9<br><b>V</b><br>Vanadium   | 52 52,0<br><b>Cr</b><br>Chrome     | 55 54,9<br><b>Mn</b><br>Manganèse  | 56 55,8<br><b>Fe</b><br>Fer         | 59 58,9<br><b>Co</b><br>Cobalt    | 58 58,7<br><b>Ni</b><br>Nickel      | 63 63,5<br><b>Cu</b><br>Cuivre   | 64 65,4<br><b>Zn</b><br>Zinc      | 69 69,7<br><b>Ga</b><br>Gallium    | 74 72,6<br><b>Ge</b><br>Germanium | 75 74,9<br><b>As</b><br>Arsenic     | 80 79,0<br><b>Se</b><br>Sélénium   | 79 79,9<br><b>Br</b><br>Brome    | 84 83,8<br><b>Kr</b><br>Krypton   |                                  |                                  |                                |                                |                               |
| 5<br>couche O | 85 85,5<br><b>Rb</b><br>Rubidium   | 88 87,6<br><b>Sr</b><br>Strontium | 89 88,9<br><b>Y</b><br>Yttrium     | 90 91,2<br><b>Zr</b><br>Zirconium | 93 92,9<br><b>Nb</b><br>Niobium   | 98 95,9<br><b>Mo</b><br>Molybdène  | 98 99,0<br><b>Tc</b><br>Technétium | 102 101,1<br><b>Ru</b><br>Ruthénium | 103 102,9<br><b>Rh</b><br>Rhodium | 106 106,4<br><b>Pd</b><br>Palladium | 107 107,9<br><b>Ag</b><br>Argent | 114 112,4<br><b>Cd</b><br>Cadmium | 115 114,8<br><b>In</b><br>Indium   | 120 118,7<br><b>Sn</b><br>Etain   | 121 121,8<br><b>Sb</b><br>Antimoine | 128 127,6<br><b>Te</b><br>Tellure  | 127 126,9<br><b>I</b><br>Iode    | 129 131,3<br><b>Xe</b><br>Xénon   |                                  |                                  |                                |                                |                               |
| 6<br>couche P | 133 132,9<br><b>Cs</b><br>Césium   | 138 137,3<br><b>Ba</b><br>Baryum  | 139 138,9<br><b>La</b><br>Lanthane | 180 178,5<br><b>Hf</b><br>Hafnium | 181 180,9<br><b>Ta</b><br>Tantale | 184 183,9<br><b>W</b><br>Tungstène | 185 186,2<br><b>Re</b><br>Rhénium  | 192 190,2<br><b>Os</b><br>Osmium    | 193 192,2<br><b>Ir</b><br>Iridium | 195 195,1<br><b>Pt</b><br>Platine   | 197 197,0<br><b>Au</b><br>Or     | 202 200,6<br><b>Hg</b><br>Mercure | 205 204,4<br><b>Tl</b><br>Thallium | 208 207,2<br><b>Pb</b><br>Plomb   | 209 209,0<br><b>Bi</b><br>Bismuth   | 210 210,0<br><b>Po</b><br>Polonium | 218 210,0<br><b>At</b><br>Astate | 222 222,0<br><b>Rn</b><br>Radon   |                                  |                                  |                                |                                |                               |
| 7<br>couche Q | 223 223,0<br><b>Fr</b><br>Francium | 226 226,0<br><b>Ra</b><br>Radium  | 227 227,0<br><b>Ac</b><br>Actinium | 260<br><b>Ku</b><br>Kurchatovium  | 260<br><b>Ha</b><br>Hahnium       |                                    |                                    |                                     |                                   |                                     |                                  |                                   |                                    |                                   |                                     |                                    |                                  |                                   |                                  |                                  |                                |                                |                               |

## Légende



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

P 6  
Q 7

|                                   |  |                                   |                                      |                                     |                                     |                                      |                                     |                                       |                                       |                                   |                                       |                                     |                                      |
|-----------------------------------|--|-----------------------------------|--------------------------------------|-------------------------------------|-------------------------------------|--------------------------------------|-------------------------------------|---------------------------------------|---------------------------------------|-----------------------------------|---------------------------------------|-------------------------------------|--------------------------------------|
| 140 140,1<br><b>Ce</b><br>Cérium  | 141 140,9<br><b>Pr</b><br>Praséodyme   | 144 144,2<br><b>Nd</b><br>Néodyme | 143 145,0<br><b>Pm</b><br>Prométhium | 152 150,4<br><b>Sm</b><br>Samarium  | 153 152,0<br><b>Eu</b><br>Europium  | 158 157,3<br><b>Gd</b><br>Gadolinium | 159 158,9<br><b>Tb</b><br>Terbium   | 162 162,5<br><b>Dy</b><br>Dysprosium  | 165 164,9<br><b>Ho</b><br>Holmium     | 166 167,3<br><b>Er</b><br>Erbium  | 169 168,9<br><b>Tm</b><br>Thulium     | 174 173,0<br><b>Yb</b><br>Ytterbium | 175 175,0<br><b>Lu</b><br>Lutécium   |
| 232 232,0<br><b>Th</b><br>Thorium | 231 231,0<br><b>Pa</b><br>Protactinium | 238 238,0<br><b>U</b><br>Uranium  | 237 237,0<br><b>Np</b><br>Neptunium  | 239 242,0<br><b>Pu</b><br>Plutonium | 243 243,0<br><b>Am</b><br>Américium | 247 247,0<br><b>Cm</b><br>Curium     | 247 247,0<br><b>Bk</b><br>Berkélium | 251 251,0<br><b>Cf</b><br>Californium | 254 254,0<br><b>Es</b><br>Einsteinium | 257 253,0<br><b>Fm</b><br>Fermium | 258 256,0<br><b>Md</b><br>Mendélévium | 259 254,0<br><b>No</b><br>Nobélium  | 260 257,0<br><b>Lw</b><br>Lawrencium |

: Radioactif et préparé par synthèse

: Gaz

: Liquide