

|    |    |    |    |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|----|----|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 1  |    |    |    |     |     |     |     |     |     |     |     |     |     |     |     |     | 2   |     |
| H  |    |    |    |     |     |     |     |     |     |     |     |     |     |     |     |     | He  |     |
| 3  | 4  |    |    |     |     |     |     |     |     |     |     | 5   | 6   | 7   | 8   | 9   | 10  |     |
| Li | Be |    |    |     |     |     |     |     |     |     |     | B   | C   | N   | O   | F   | Ne  |     |
| 11 | 12 |    |    |     |     |     |     |     |     |     |     | 13  | 14  | 15  | 16  | 17  | 18  |     |
| Na | Mg |    |    |     |     |     |     |     |     |     |     | Al  | Si  | P   | S   | Cl  | Ar  |     |
| 19 | 20 | 21 | 22 | 23  | 24  | 25  | 26  | 27  | 28  | 29  | 30  | 31  | 32  | 33  | 34  | 35  | 36  |     |
| K  | Ca | Sc | Ti | V   | Cr  | Mn  | Fe  | Co  | Ni  | Cu  | Zn  | Ga  | Ge  | As  | Se  | Br  | Kr  |     |
| 37 | 38 | 39 | 40 | 41  | 42  | 43  | 44  | 45  | 46  | 47  | 48  | 49  | 50  | 51  | 52  | 53  | 54  |     |
| Rb | Sr | Y  | Zr | Nb  | Mo  | Tc  | Ru  | Rh  | Pd  | Ag  | Cd  | In  | Sn  | Sb  | Te  | I   | Xe  |     |
| 55 | 56 | 57 | *  | 72  | 73  | 74  | 75  | 76  | 77  | 78  | 79  | 80  | 81  | 82  | 83  | 84  | 85  | 86  |
| Cs | Ba | La | Hf | Ta  | W   | Re  | Os  | Ir  | Pt  | Au  | Hg  | Tl  | Pb  | Bi  | Po  | At  | Rn  |     |
| 87 | 88 | 89 | ** | 104 | 105 | 106 | 107 | 108 | 109 | 110 | 111 | 112 | 113 | 114 | 115 | 116 | 117 | 118 |
| Fr | Ra | Ac | Rf | Db  | Sg  | Bh  | Hs  | Mt  | Ds  | Rg  | Cn  | Uut | Fl  | Uup | Lv  | Uus | Uuo |     |

|    |    |    |    |    |    |    |    |    |    |     |     |     |     |
|----|----|----|----|----|----|----|----|----|----|-----|-----|-----|-----|
| 58 | 59 | 60 | 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68  | 69  | 70  | 71  |
| Ce | Pr | Nd | Pm | Sm | Eu | Gd | Tb | Dy | Ho | Er  | Tm  | Yb  | Lu  |
| 90 | 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 100 | 101 | 102 | 103 |
| Th | Pa | U  | Np | Pu | Am | Cm | Bk | Cf | Es | Fm  | Md  | No  | Lr  |

Serie chimiche della tavola periodica

|                      |                       |            |           |                      |
|----------------------|-----------------------|------------|-----------|----------------------|
| Metalli alcalini     | Metalli alcalino terr | Lantanoidi | Attinoidi | Metalli del blocco d |
| Metalli del blocco p | Semimetalli           | Nonmetalli | Alogeni   | Gas nobili           |

|    |    |    |    |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|----|----|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 1  |    |    |    |     |     |     |     |     |     |     |     |     |     |     |     |     | 2   |     |
| H  |    |    |    |     |     |     |     |     |     |     |     |     |     |     |     |     | He  |     |
| 3  | 4  |    |    |     |     |     |     |     |     |     |     | 5   | 6   | 7   | 8   | 9   | 10  |     |
| Li | Be |    |    |     |     |     |     |     |     |     |     | B   | C   | N   | O   | F   | Ne  |     |
| 11 | 12 |    |    |     |     |     |     |     |     |     |     | 13  | 14  | 15  | 16  | 17  | 18  |     |
| Na | Mg |    |    |     |     |     |     |     |     |     |     | Al  | Si  | P   | S   | Cl  | Ar  |     |
| 19 | 20 | 21 | 22 | 23  | 24  | 25  | 26  | 27  | 28  | 29  | 30  | 31  | 32  | 33  | 34  | 35  | 36  |     |
| K  | Ca | Sc | Ti | V   | Cr  | Mn  | Fe  | Co  | Ni  | Cu  | Zn  | Ga  | Ge  | As  | Se  | Br  | Kr  |     |
| 37 | 38 | 39 | 40 | 41  | 42  | 43  | 44  | 45  | 46  | 47  | 48  | 49  | 50  | 51  | 52  | 53  | 54  |     |
| Rb | Sr | Y  | Zr | Nb  | Mo  | Tc  | Ru  | Rh  | Pd  | Ag  | Cd  | In  | Sn  | Sb  | Te  | I   | Xe  |     |
| 55 | 56 | 57 | *  | 72  | 73  | 74  | 75  | 76  | 77  | 78  | 79  | 80  | 81  | 82  | 83  | 84  | 85  | 86  |
| Cs | Ba | La | Hf | Ta  | W   | Re  | Os  | Ir  | Pt  | Au  | Hg  | Tl  | Pb  | Bi  | Po  | At  | Rn  |     |
| 87 | 88 | 89 | ** | 104 | 105 | 106 | 107 | 108 | 109 | 110 | 111 | 112 | 113 | 114 | 115 | 116 | 117 | 118 |
| Fr | Ra | Ac | Rf | Db  | Sg  | Bh  | Hs  | Mt  | Ds  | Rg  | Cn  | Uut | Fl  | Uup | Lv  | Uus | Uuo |     |

|    |    |    |    |    |    |    |    |    |    |     |     |     |     |
|----|----|----|----|----|----|----|----|----|----|-----|-----|-----|-----|
| 58 | 59 | 60 | 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68  | 69  | 70  | 71  |
| Ce | Pr | Nd | Pm | Sm | Eu | Gd | Tb | Dy | Ho | Er  | Tm  | Yb  | Lu  |
| 90 | 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 100 | 101 | 102 | 103 |
| Th | Pa | U  | Np | Pu | Am | Cm | Bk | Cf | Es | Fm  | Md  | No  | Lr  |

Serie chimiche della tavola periodica

|                      |                       |            |           |                      |
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