

SYMBOL AND OXIDATION NUMBER OF THE MAIN CHEMICAL ELEMENTS

Symbol: how we represent the elements of the periodic table. Generally we represent the elements with one capital letter. If we use two letters, then the 2nd letter is always written in lower case. Ex: Hydrogen → H ; Nickel → Ni

Valency (Oxidation number): the number of electrons lost (positive on.), gained (negative on.), or shared (we assigned the negative on. to the most electronegative element), by an element when it combines with another.

Hydrogen H (on.=+/-1)

Alkali metals (on.= +1)

Lithium Li
Sodium Na
Potassium K
Rubidium Rb
Caesium Cs
Francium Fr

Alkaline-earth metals (on.= +2)

Beryllium Be
Magnesium Mg
Calcium Ca
Strontium Sr
Barium Ba
Radium Ra

Earth metals (on.=+3)

Boron B
Aluminium Al
Gallium Ga
Indium In
Thallium Tl

Group IV (on.=+2,+4)

Carbon C
Silicon Si
Germanium Ge
Tin Sn
Lead Pb

Group V (on.=+/-3,+5)

Nitrogen N
Phosphorus P
Arsenic As
Antimony Sb
Bismuth Bi

Group VI (on.=+/-2,+4,+6)

Oxygen O (on.= -2)
Sulfur S
Selenium Se
Tellurium Te
Polonium Po

Halogens (on.=+/-1,+3,+5,+7)

Fluorine F (on.= -1)
Chlorine Cl
Bromine Br
Iodine I
Astatine At

Noble Gases

Helium He
Neon Ne
Argon Ar
Krypton Kr
Xenon Xe
Radon Rn

Transition Metals

(on.=+1) Silver Ag

(on.=+2) Zinc Zn
 Cadmium Cd

(on.=+1,+2) Copper Cu
 Mercury Hg

(on.=+1,+3) Gold Au

(on.=+2,+3) Iron Fe
 Cobalt Co
 Nickel Ni

(on.=+2,+3,+6) Chromium Cr

(on.=+2,+3,+4,+6,+7) Manganese Mn

(on.=+2,+4) Palladium Pd
 Platinum Pt

Scandium Sc
Titanium Ti
Vanadium V