

PERIODIC TABLE GROUP CARDS

CUT OUT THE CARDS AND USE THEM TO EXPLORE GROUP TRENDS.



GROUP 1

ALKALI METALS



Valence electrons
1

Reactivity
Very reactive

Typical bonding
Lose 1 electron
to form +1 ions

Key properties
Soft, low density,
low melting points,
react with water

Examples
Li Na K Rb Cs Fr

GROUP 2

ALKALINE EARTH METALS



Valence electrons
2

Reactivity
Reactive

Typical bonding
Lose 2 electrons
to form +2 ions

Key properties
Harder, denser and
higher melting points
than Group 1

Examples
Be Mg Ca Sr Ba Ra

GROUP 3-12

TRANSITION METALS



Valence electrons
1-2 (variable)

Reactivity
Variable

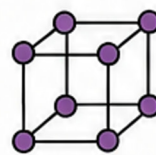
Typical bonding
Form cations with
variable charges

Key properties
Strong, hard, high
melting points, good
conductors

Examples
Fe Cu Ni Ag Au

GROUP 13

BORON GROUP



Valence electrons
3

Reactivity
Moderate

Typical bonding
Usually lose 3 electrons
to form +3 ions

Key properties
Boron is a metalloid;
others are metals

Examples
B Al Ga In Tl

GROUP 14

CARBON GROUP



Valence electrons
4

Reactivity
Variable

Typical bonding
Share or lose 4 electrons

Key properties
Trends from nonmetal
(C) to metal (Sn, Pb)

Examples
C Si Ge Sn Pb

GROUP 15

NITROGEN GROUP



Valence electrons
5

Reactivity
Variable

Typical bonding
Gain, share or lose
3 electrons

Key properties
Range from nonmetals
to metals down
the group

Examples
N P As Sb Bi

GROUP 16

OXYGEN GROUP (CHALCOGENS)



Valence electrons
6

Reactivity
Variable

Typical bonding
Gain or share
2 electrons

Key properties
Include nonmetals,
metalloids and metals

Examples
O S Se Te Po

GROUP 17

HALOGENS



Valence electrons
7

Reactivity
Very reactive

Typical bonding
Gain 1 electron
to form -1 ions

Key properties
Diatomic nonmetals,
form salts with metals

Examples
F Cl Br I At

USE THE CARDS TO COMPARE GROUP TRENDS IN REACTIVITY,
ATOMIC STRUCTURE AND PROPERTIES.