

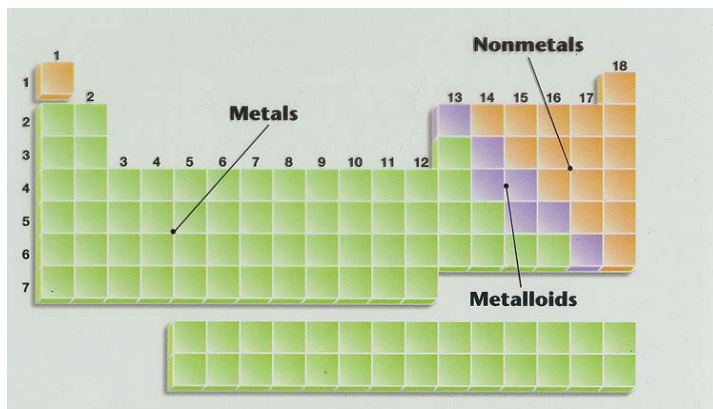
NOTES for Metals, Nonmetals & Metalloids

Metals, Nonmetals, & Metalloids

Most periodic tables contain a _____ line which allows you to identify which elements are metals, nonmetals, and metalloids. Following are descriptions of each of the three types of materials.

Metals

Most elements are metals. 88 elements to the left of the staircase line are _____ or metal like elements.



Physical Properties of Metals:

- Luster (_____)
- Good conductors of _____ and _____
- High _____ (heavy for their size)
- High melting _____
- _____ (most metals can be drawn out into thin wires)
- _____ (most metals can be hammered into thin sheets)

Chemical Properties of Metals:

- Easily lose _____
- Corrode easily. Corrosion is a gradual wearing away due to oxygen reacting with the metal. (Example: silver tarnishing and iron rusting)

Nonmetals

Nonmetals are found to the right of the staircase line. Their characteristics are opposite those of metals.

Physical Properties of Nonmetals:

- No _____ (dull appearance)
- Poor _____ of heat and electricity
- Brittle (_____ easily)
- Not _____
- Low _____ point
- Not _____
- Low _____

Chemical Properties of Nonmetals:

Tend to gain _____

Since metals tend to lose electrons and nonmetals tend to gain electrons, metals and nonmetals like to form compounds with each other. *These compounds are called ionic compounds.* When two or more nonmetals bond with each other, they form a covalent compound.

Metalloids

Elements on both sides of the zigzag line have properties of both metals and nonmetals. These elements are called metalloids.

Physical Properties of Metalloids:

- _____ (not liquids or gases)
- Can be shiny or dull
- _____ Ductile
- _____ Malleable
- Conduct heat and electricity better than _____ but not as well as _____