Atomic number – pertains to the number of protons and electrons present in an element.

Chemical symbol – letter or letters that represent an element. It is considered as an abbreviation of the elements longer name

Jon Jakob Berzelius – a Swedish Chemist who proposed that elements should be represented by one or two letter symbols.

Rules to be observed in writing the chemical symbol of an element

1. The chemical symbol of an element having one – letter symbol was taken from the first letter of its name and must be written in capitalized form.
2. The chemical symbol of an element having 2 letter symbols was taken from the first letter of its name and the second letter is any later of its name. The first letter must be written in capitalized form while the second letter is in lowercase.

Atomic Number	Name of Element	Chemical Symbol	Ancient Latin Name
11	Sodium	Na	Natrium
19	Potassium	K	Kalium
26	Iron	Fe	Ferrum
29	Copper	Cu	Cuprum
47	Silver	Ag	Argentum
50	Tin	Sn	Stannum
51	Antimony	Sb	Stibium
74	Tungsten	W	Wolfram
79	Gold	Au	Aurum
80	Mercury	Hg	Hydrargyrum
82	Lead	Pb	Plumbum

Four New elements as replacement by the international Union of Pure and Applies Chemistry

Atomic Number	Name of Element	Chemical Symbol	Group Number
113	Nihonium	Nh	13
115	Moscovium	Mc	15
117	Tennessine	Ts	17
118	Oganesson	Og	18

6.) Metals are good conductors of heat (high thermal conductivity) and electricity (high electrical conductivity)
7.) Some metals are magnetic.

Characteristics of Non-metals

1. Non-metals are not lustrous in their solid form. Sometimes, they are transparent
2. Most non-metals are gases at room temperature while others can be solid at room temperature.
3. Non-metals are brittle solids. They are neither malleable nor ductile.
4. Most non-metals have low melting point and boiling point.
5. Most non-metals are poor conductors of heat and electricity.
6. Non-metals are good insulators of heat and electricity.

Characteristics of Metalloids (Semimetals)

- They show the physical properties of a metal
- They exhibit the same chemical properties with non-metals.

Atomic number	Name of Element	Chemical symbol	Group Number
5	Boron	B	13
14	Silicon	Si	14
32	Germanium	Ge	14
33	Arsenic	As	15
51	Antimony	Sb	15
52	Tellurium	Te	16
84	Polonium	Po	16

COMPOUNDS

Important Concepts:

1. A chemical compound is a pure substance
2. It is formed by atoms or two or more elements that are combined carefully
3. A chemical compound results from a chemical reaction
4. A compound has a different set of properties compared to elements.
5. Unlike elements, a compound may be broken down into simpler substances
   Ex. Electrolysis –the process by which electrical current is used to breakdown the components of a compound.