

Atom – the smallest particle of matter

Matter – anything that has mass and takes up space (heat and sound are NOT matter)

Proton – the positively charged particle found in the nucleus of an atom

Neutron – the neutral particle found in the nucleus of an atom

Electron – the negatively charged particle found in an atom

Energy Levels (shells) – the orbits that electrons follow around the nucleus (Electron “Highways”)

Nucleus – Made up of protons and neutrons; most of mass is found in nucleus.

Periodic Table – Organized table of known elements; periodic means having a regular pattern.

Period – Horizontal rows on periodic table (represent number of energy levels)

Group/Family – Vertical columns on periodic table (Elements in a specific group share properties)

Symbol – Each element has an element symbol. Example: Carbon's symbol is C.

Atomic Number – Represents number of protons (and electrons) in an atom

Atomic Mass – Represents number of protons and neutrons combined in an atom

Metal – Left of staircase (exception is Hydrogen)

Metalloid – Touch staircase (except for Aluminum)

Nonmetal – Right of staircase

Noble gases – Inert (stable and nonreactive) gases found in family

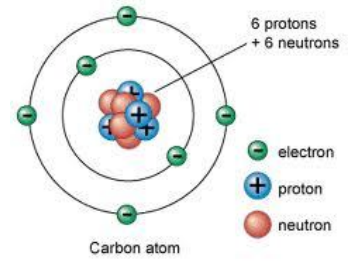
Element – a pure substance that cannot be separated.

Valence Electrons – Electrons in the outermost energy level.

Properties – Characteristics that describe a substance.

Mass – Amount of matter (triple beam balance) (gram, kilogram)

Volume – the amount of space an object occupies (l x w x h) (water displacement) (cm³)



A color-coded periodic table of elements. The title 'Periodic Table' is written in a decorative font at the top. The table is organized into groups (IA to 8A) and periods (1 to 7). Elements are color-coded by groups: IA (blue), IIA (orange), IIIA (green), IVA (yellow), VA (purple), VIA (pink), VIIA (red), and 8A (grey). The lanthanide and actinide series are shown at the bottom of the table.

