

Organization of the Periodic Table

Periodic means that the table is organized in a repeating pattern.

Rows in the table are called periods.

Columns of elements are called groups or families.

The three main categories of elements are:

metals, metalloids, + non-metals
(left) → to → (right)

Energy levels or Orbitals of Electrons

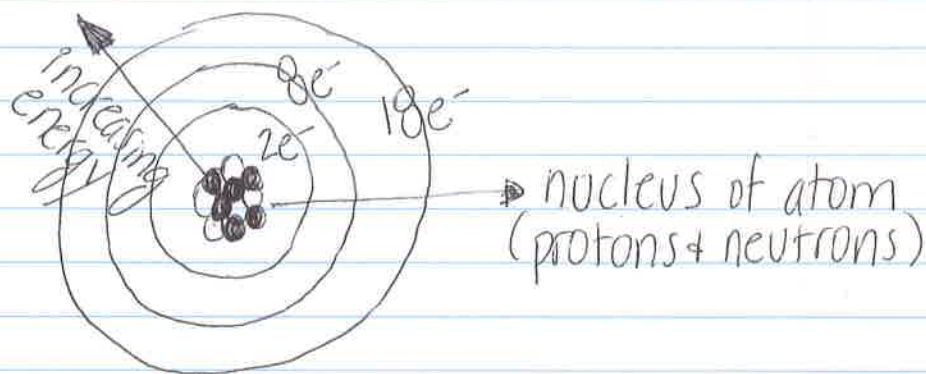
Energy levels closer to the nucleus have less energy than orbitals that are farther away.

Orbitals

1st = $2e^-$

2nd = $8e^-$

3rd = $18e^-$



Electrons in the outermost orbital are called valence electrons.

A stable outer energy level (beyond 1st level) will contain 8 electrons.