


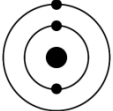
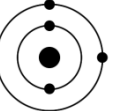
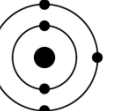
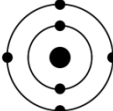
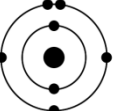
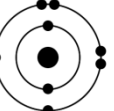
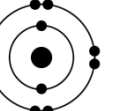
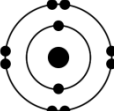
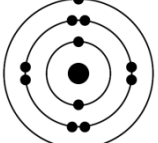
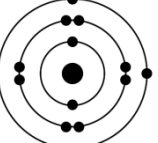
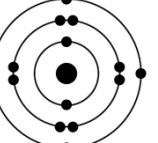
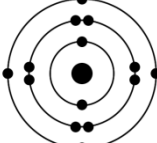
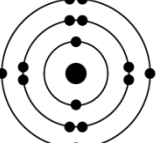
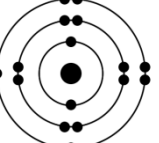
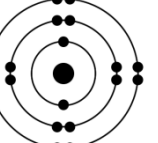
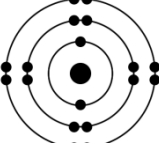


## Electronic Configurations for the First Eighteen Chemical Elements – Hydrogen to Argon

	Group I (1)*	Group II (2)*	Group III (13)*	Group IV (14)*	Group V (15)*	Group VI (16)*	Group VII (17)*	Group 0 (18)*
Period 1	${}^1_1\text{H}$ Hydrogen    Protons = 1 Electrons = 1 Neutrons = 0	  Name: .....  Class: .....  Date: ..... / ..... / .....  Mass Number → 12 Atomic Number → 6 <b>C</b>  • Atomic Number = Number of Protons • Mass Number = Number of Protons + Number of Neutrons • For a Neutral Atom, Number of Electrons = Number of Protons • Number of Neutrons = Mass Number – Atomic Number • Number of Electron Shells = Period Number • Number of Valence Electrons = Group Number						${}^4_2\text{He}$ Helium    Protons = 2 Electrons = 2 Neutrons = 2
Period 2	${}^7_3\text{Li}$ Lithium    Protons = 3 Electrons = 3 Neutrons = 4	${}^9_4\text{Be}$ Beryllium    Protons = 4 Electrons = 4 Neutrons = 5	${}^{11}_5\text{B}$ Boron    Protons = 5 Electrons = 5 Neutrons = 6	${}^{12}_6\text{C}$ Carbon    Protons = 6 Electrons = 6 Neutrons = 6	${}^{14}_7\text{N}$ Nitrogen    Protons = 7 Electrons = 7 Neutrons = 7	${}^{16}_8\text{O}$ Oxygen    Protons = 8 Electrons = 8 Neutrons = 8	${}^{19}_9\text{F}$ Fluorine    Protons = 9 Electrons = 9 Neutrons = 10	${}^{20}_{10}\text{Ne}$ Neon    Protons = 10 Electrons = 10 Neutrons = 10
Period 3	${}^{23}_{11}\text{Na}$ Sodium    Protons = 11 Electrons = 11 Neutrons = 12	${}^{24}_{12}\text{Mg}$ Magnesium    Protons = 12 Electrons = 12 Neutrons = 12	${}^{27}_{13}\text{Al}$ Aluminium    Protons = 13 Electrons = 13 Neutrons = 14	${}^{28}_{14}\text{Si}$ Silicon    Protons = 14 Electrons = 14 Neutrons = 14	${}^{31}_{15}\text{P}$ Phosphorus    Protons = 15 Electrons = 15 Neutrons = 16	${}^{32}_{16}\text{S}$ Sulfur    Protons = 16 Electrons = 16 Neutrons = 16	${}^{35.5}_{17}\text{Cl}$ Chlorine    Protons = 17 Electrons = 17 Neutrons = 18 or 20	${}^{40}_{18}\text{Ar}$ Argon    Protons = 18 Electrons = 18 Neutrons = 22

\*Note: Roman numerals refer to Group number given on the O' Level Periodic Table, Arabic numerals refer to Group number given on the A' level Periodic Table.