

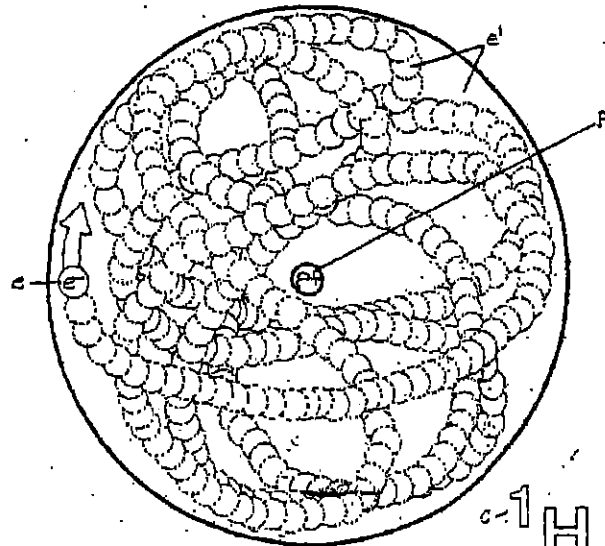
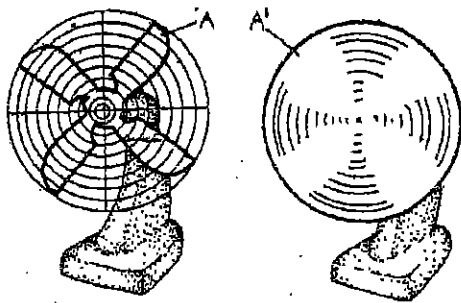
Color-code the diagrams that follow: (1) Color anything representing a proton RED, (2) color anything representing an electron some shade of GREEN, and (3) color anything representing a neutron BLUE. Then color (4) anything representing an s-orbital YELLOW, and (5) color anything representing a p-orbital some shade of ORANGE.

(3a)

SUBATOMIC PARTICLES.

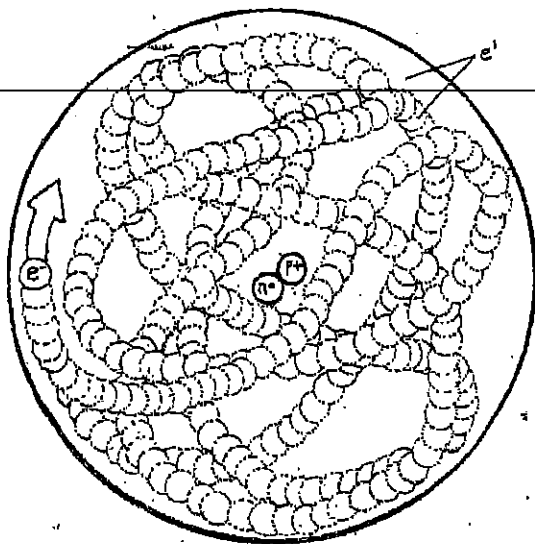
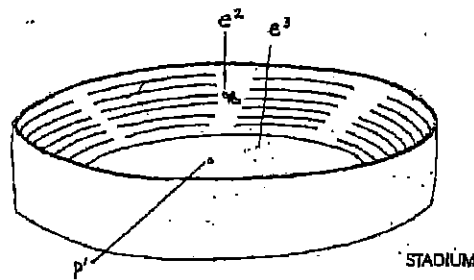
← SUBATOMIC PARTICLES.

HYDROGEN ATOM.
 NUCLEUS.
 PROTON.
 ELECTRON.
 ORBITAL.
 STATIONARY FAN BLADES.
 ROTATING FAN BLADES.

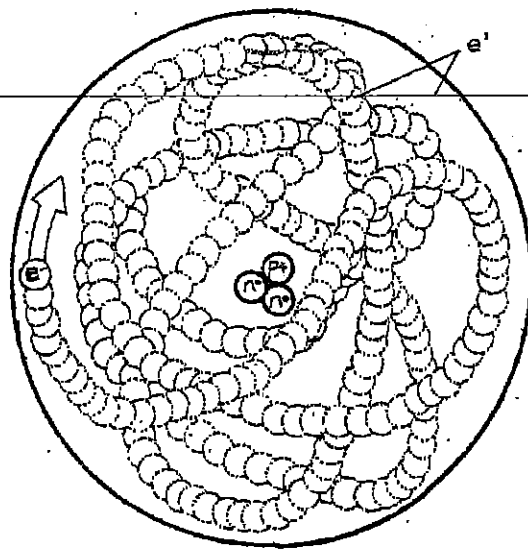


RELATIVE DIMENSIONS.
 CANDY.
 FLY.
 STADIUM.
 ISOTOPES.
 NEUTRONS.
 SYMBOL.

ATOMIC NUMBER.
 MASS NUMBER.



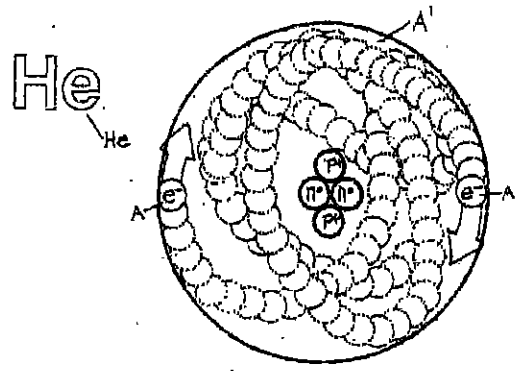
c-2
 B-1 H-H



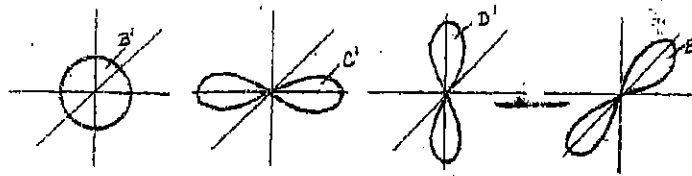
c-3
 B-1 H-H

ATOMIC STRUCTURE.

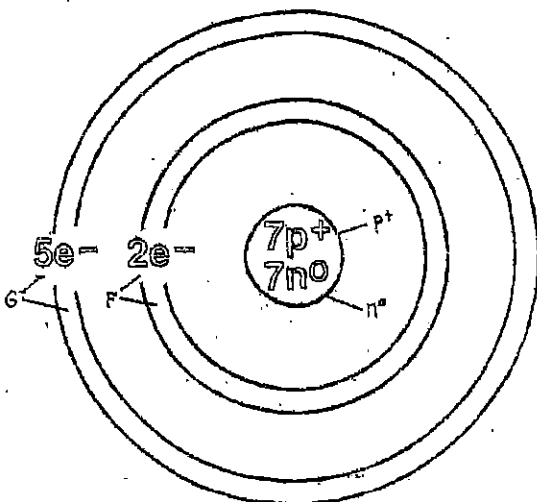
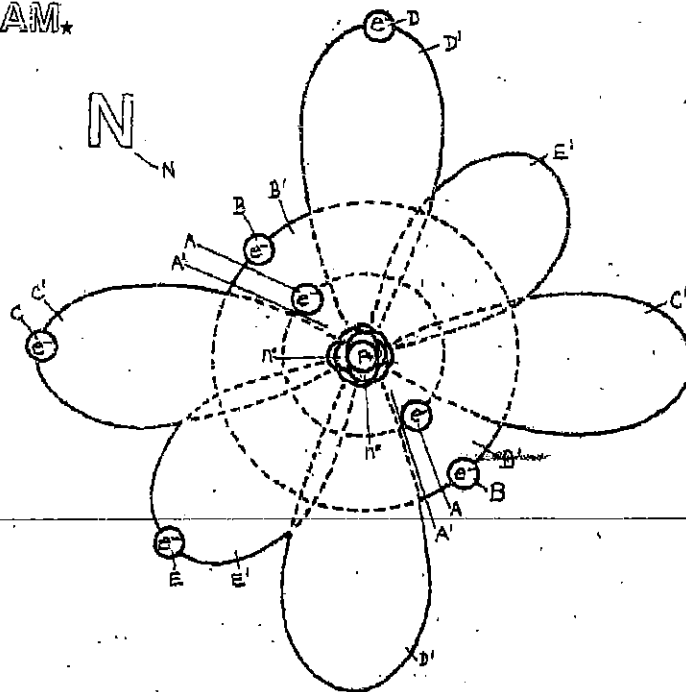
HELIUM.
 SYMBOL: He
 PROTON: 2
 NEUTRON: 2
 FIRST SHELL:
 1s ELECTRONS: 2
 1s ORBITAL: 1



ORBITALS:
 2s ORBITAL:
 2p_x ORBITAL:
 2p_y ORBITAL:
 2p_z ORBITAL:



NITROGEN ORBITAL DIAGRAM.
 SYMBOL: N
 1s ELECTRONS: 2
 ORBITAL: 1
 2s ELECTRONS: 2
 ORBITAL: 1
 2p_x ELECTRONS: 2
 ORBITAL: 1
 2p_y ELECTRONS: 2
 ORBITAL: 1
 2p_z ELECTRONS: 2
 ORBITAL: 1



NITROGEN SHELL DIAGRAM.
 FIRST SHELL/ELECTRONS: 2
 SECOND SHELL/ELECTRONS: 5