Bonding

Vocabulary / Study List

3-D structural formula (Lab)
alloys
bent
bond dissociation energy
bond length
chemical formula
compare properties of covalent/ionic/metallic
conductor
coordinate covalent bond
coordination number (ionic cmpds)
crystal lattice
diatomic elements H_2, N_2, O_2, F_2, Cl_2, Br_2, I_2
difference in electronegativity
dipole-dipole interactions
dipole-ion forces
dispersion forces (London forces)
double covalent bond
ductile
electron dot structures (notation)
electron sea
electronegativity
formula unit
halogen/halide ions
hybrid bond
hybridization / hybrid orbital (sp^3)
hydrogen bonding
ionic bond
intermolecular forces (IMF's)
lattice energy
linear shape
Lewis Structure
Lone pair
lustrous
malleable
metallic bond
molecular compound
molecular formula
molecular shapes: (from lab) linear, trigonal planar, tetrahedral, trigonal bipyramidal, octahedral
molecule
multiple bond
network solid (covalent solids)
nonpolar covalent bond
octet rule
overlap of orbitals
percent ionic character
polar covalent bond
polar molecule / dipole
pyramidal
resonance
salt
shared pair / lone pair - unshared pair
single, double, triple covalent bonds
structural formula (Lab)
tetrahedral
trigonal bipyramidal
trigonal planar
triple covalent bond
unshared pair
valence electrons
van der Waal's forces
VSEPR Theory

Optional Items

(Covered at the discretion of the Instructor as time permits)

close packing of ions (Metals)
crystallography / x-ray diffraction
diamagnetic
paramagnetic
sigma bonding
pi bonding
hybrid orbitals: sp ; sp^2 ; sp^3d ; sp^3d^2
unit cell