Key Terms

**chemical bond** - Any of several forces, especially the ionic bond, covalent bond, and metallic bond, by which atoms or ions are bound in a molecule or crystal.

**ionic bond** - A chemical bond between two ions with opposite charges, characteristic of salts.

**covalent bond** - A chemical bond formed by the sharing of one or more electrons, especially pairs of electrons, between atoms.

**metallic bond** - The chemical bond characteristic of metals, in which mobile valence electrons are shared among atoms in a usually stable crystalline structure.

**hydrogen bond** - A chemical bond in which a hydrogen atom of one molecule is attracted to an electronegative atom, especially a nitrogen, oxygen, or fluorine atom, usually of another molecule.

**delocalized** - Electrons in a molecule or solid metal that are not associated with a single atom or one covalent bond.

**crystal lattice** - A geometric arrangement of the points in space at which the atoms, molecules, or ions of a crystal occur.

**luster** - A radiant brightness or glow, usually due to light reflected from a smooth surface.

**malleable** - Capable of being shaped or formed, as by hammering or pressure.

**ductile** - Easily drawn into wire or hammered thin.

**volatile** - Evaporating readily at normal temperatures and pressures.

**ion** - An atom or a group of atoms that has acquired a net electric charge by gaining or losing one or more electrons.

**cation** - An ion or group of ions having a positive charge and characteristically moving toward the negative electrode in electrolysis.

**anion** - A negatively charged ion, especially the ion that migrates to an anode in electrolysis.

**intermolecular force** - The force between two molecules; it is that negative gradient of the potential energy between the interacting molecules, if energy is a function of the distance between the centers of the molecules.

**London-dispersion force** - A weak intermolecular force arising from quantum induced instantaneous polarization multipoles in molecules.

**polar** - Relating to or characterized by a dipole.

**nonpolar** - Not characterized by a dipole.

**electron dot diagram** - A structural formula in which electrons are represented by dots; two dots between atoms represent a covalent bond. Also known as electron-dot formula; Lewis formula.

**Lewis structure** - A structural formula in which electrons are represented by dots; two dots between atoms represent a covalent bond. Also known as electron-dot formula; Lewis formula.

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http://cms.gavirtualschool.org/Shared/Science/Chemistry/bonding_shared/Module_5_Table_of_Electronenegativities.pdf