Unit #8 Regents Chemistry

Chemical Bonding

Text	Unit Objectives:
7.2 7.3 8.1	1. Must know the 3 main types of chemical bonds, and the properties associated with each.
7.1	2. Be able to explain how, why, and when ionic bonding occurs.
8.2	3. Be able to describe when and why covalent bonding takes place as well as coordinate covalent bonding.
8.2	4. Be able to draw electron dot structures (Lewis) for simple molecules. Use this information to describe how the octet rule has been satisfied.
8.3	5. Be able to determine the shape of a simple molecule.
8.4	6. Be able to determine if a covalent bond is polar or nonpolar. Be able to determine if a molecule is polar or nonpolar.
8.4	7. Be able to explain the importance of hydrogen bonding and how it is created. Also understand molecule-ion attraction.
8.4	8. Be able to describe molecules and understand the van der Waals' forces that attract molecules together.
8.4	9. Be able to describe a network solid, know common examples, and their properties.
8.2	10. Be able to describe the energy associated with chemical bonding and the strength of the different bonds.

Essential Vocabulary

Chemical Bond, Covalent Bond, Dipole, Dipole-Dipole Attractions, Double Bond, Electronegativity, Hydrogen Bonding, Ionic Bond, Ionic Radius, Ionic Solids, Metallic Bond, Molecular Solids, Molecule, Network Solid, Nonpolar Bond, Nonpolar Molecule, Octet Rule, Polarity, Polar Covalent Bond, Salt, Single Covalent Bond, Tetrahedron, Triple Covalent Bond, Van der Waals Forces

Announcements:

1. The unit on bonding will be the last unit before the semester ends. Do your best!!
2. This unit will cover all of chapter 7 and 8. I encourage everyone to read the chapter as we cover this unit.
3. You should look back through your notes for all the old tests. They will be very useful in preparing for the midterm.