

CHE 171

Fall, 2005

Specific Objectives for Quiz 1

1. Understand why atoms form bonds and what types of bonds they form based on relative electronegativity (or electropositivity).
2. Be able to draw good Lewis dot structures (or Lewis structures) given a molecular formula; also be able to calculate formal charge and incorporate this into your Lewis structures where applicable.
3. Be aware that there may be two (or more) ways to connect the atoms of a given molecular formula (constitutional isomers) and be able to draw Lewis structures for them.
4. Understand the concept of resonance and be able to show contributing resonance structures for a compound whose electrons may be delocalized.
5. Be able to predict bond angles and geometry for designated atoms within a molecule.
6. Understand the concept of hybridization and be able to predict the hybridization of indicated atoms within a given molecule.