1. Molecular Orbital Diagrams
   Bond Order

2. Valence Bond Theory
   Hybrid Orbitals
   $\sigma$ and $\pi$ bonding models

3. Freezing point depression/Boiling point elevation

4. Crystal Structures

5. Henry’s Law

6. Ideal Gas Law
   Stoichiometry
   Dalton’s Law of Partial Pressures

7. Stoichiometry

8. Redox Reactions
   Balancing acid/base reactions

9. Ionic Precipitation Reactions
   Complete Ionic Equations
   Net Ionic Equations

10. Electronic Structures
    Electron Configurations
    Orbital Diagrams
    Magnetism (Diamagnetic/ Paramagnetic)

11. Lewis Dot Structures

12. Thermochemistry

13. Phase Diagrams

14. Molecular Weight by Freezing Point Depression

15. VSEPR Theory
    Molecular Structures (arrangement of e pairs and geometry)
    Predict hybridization
    Bond Angles

16. Extra Credit.