

TEDALDI'S A.P. CHEMISTRY IMPORTANT INFORMATION BY UNIT

MR. TEDALDI - AP CHEMISTRY YOUTUBE PLAY LIST FOR NOTES

IMPORTANT INFORMATION NOTES	IMPORTANT INFORMATION YOUTUBE VIDEOS
UNIT 1	
<p><u>UNIT 1 IMPORTANT INFORMATION (NOTES)</u> <u>PDF Answered Notes</u></p>	<ul style="list-style-type: none">• Unit 1 Lecture Notes - Part 1 - Moles and Subatomic Structure• Unit 1 Lecture Notes - Part 2 - Mass Spectroscopy and Composition of Compounds• Unit 1 - Lecture Notes - Part 3 - Composition of Mixtures• Unit 1 Lecture Notes - Part 4 - Energy, Wavelength and Frequency Calculations• Unit 1 Lecture Notes - Part 5 - Atomic Structure and Electron Configuration• Unit 1 Lecture - Part 6 - More Electron Configurations• Unit 1 Lecture Notes - Part 7 - Effective Nuclear Charge• Unit 1 Lecture - Part 8 - Photoelectron Spectroscopy, Effective Nuclear Charge and Valence Electrons• Unit 1 - Lecture Notes Part 9 - Periodic Trends and Ions
UNIT 2	
<p><u>UNIT 2 IMPORTANT INFORMATION (NOTES)</u> <u>PDF Answered Notes</u></p>	<ul style="list-style-type: none">• Unit 2 - Lecture Part 1 - Types of Bonds• Unit 2 - Lecture Part 2 - Polarity in Bonds• Unit 2 - Lecture Part 3 - Bond Energy Diagrams and Trends in Bond Energies• Unit 2 - Lecture Part 4 - Ionic Solids & Lattice Energy• Unit 2 - Lecture Part 5 - Metallic Bonding• Unit 2 - Lecture Part 6 - Introduction to Lewis Structures• Unit 2 - Lecture Part 7 - Lewis Structures and VSEPR Theory• Unit 2 - Lecture Part 8 - Hybridization• Unit 2 Lecture - Part 8 - II - Example with Hybridization in Lewis Structure• Unit 2 Lecture - Part 9 - Sigma and Pi Bonding• Unit 2 Lecture Part 10 - Lone Pairs and Formal Charge• Unit 2 - Lecture Part 11 - Resonance Structures
UNIT 3	
<p><u>UNIT 3 IMPORTANT INFORMATION (NOTES)</u> <u>PDF Answered Notes</u></p>	<ul style="list-style-type: none">• Unit 3 Lecture Part 1 - Introduction to Intermolecular Forces• Unit 3 Lecture Part 2 - Intermolecular Forces (1) - London Dispersion Forces• Unit 3 Lecture - Part 3 - (2) - Dipole-Dipole Forces• Unit 3 - Lecture Part 4 - (2) & (3) - Hydrogen Bonding and Ion-Dipole Forces• Unit 3 - Helpful Flowchart on Intermolecular Forces• Unit 3 - Lecture Part 5 - Liquids & Vapor Pressure• Unit 3 Lecture - Part 6 - Types & Properties of Solids• Unit 3 - Lecture Part 7 - Gases• Unit 3 Lecture - Part 8 - Ideal Gas Law & Density of Gases• Unit 3 - Lecture Part 9 - Mixture of Gases• Unit 3 - Lecture Part 10 - Kinetic Molecular Theory & Deviations from Ideal Gas Law• Unit 3 - Lecture Part 11 - Solution Concentration• Unit 3 Lecture - Part 12 - Types of Solutions & Solubility• Unit 3 - Lecture Part 13 - Separation of Solutions Mixtures• Unit 3 - Lecture Part 14 - Spectroscopy & The Photoelectric Effect• Unit 3 - Lecture Part 15 - Absorption Spectroscopy and Beers Law
UNIT 4	
<p><u>UNIT 4 IMPORTANT INFORMATION (NOTES)</u> <u>PDF Answered Notes</u></p>	<ul style="list-style-type: none">• Unit 4 - Lecture Part 1 - Physical Changes & Chemical Reactions• Unit 4 - Lecture Part 2 - Stoichiometry• Unit 4 Lecture - Part 3 - Net Ionic Equations• Unit 4 Lecture - Part 4 - Types of Reactions: Acid- Base Reactions• Unit 4 Lecture - Part 5 - Types of Reactions: Acid-Base Titrations & Redox Reactions

UNIT 5

UNIT 5 IMPORTANT INFORMATION (NOTES)

PDF Answered Notes

- [Unit 5 - Lecture Part 1 - Rates of Reactions](#)
- [Unit 5 - Lecture Part 2 - Introduction to Rate Laws](#)
- [Unit 5 - Lecture Part 3 - Reaction Order for Multiple Reactants](#)
- [Unit 5 - Lecture Part 4 - Rate Law & Integrated Rate Law Summary](#)
- [Unit 5 - Lecture Part 5 - Energy & Reaction Rate](#)
- [Unit 5 - Lecture Part 6 - The Collision Model](#)
- [Unit 5 - Lecture Part 7 - Introduction to Reaction Mechanisms](#)
- [Unit 5 - Lecture Part 8 - Reaction Mechanisms and Steady State Approximation](#)
- [Unit 5 - Lecture Part 8 - Worked Sample Problems](#)

UNIT 6

UNIT 6 IMPORTANT INFORMATION (NOTES)

PDF Answered Notes I
PDF Answered Notes II

- [Unit 6 - Lecture Part 1 - Endothermic & Exothermic Processes](#)
- [Unit 6 - Lecture Part 2 - Energy Diagrams](#)
- [Unit 6 - Lecture Part 3 - Energy Transfer & Thermal Equilibrium](#)
- [Unit 6 - Lecture Part 4 - Quantifying Energy Changes Associated with Temperature Changes](#)
- [Unit 6 - Sample Problem 14 Walkthrough](#)
- [Unit 6 - Lecture Part 5 - Energy Associated with Phase Changes](#)
- [Unit 6 - Lecture Part 6 - Enthalpy of Reaction](#)
- [Unit 6 - Lecture Part 7 - Enthalpy of Reaction/Solution](#)
- [Unit 6 - Lecture Part 8 - Review of Bonds](#)
- [Unit 6 - Lecture Part 8-2 - Bond Enthalpies](#)
- [Unit 6 - Lecture Part 9 - Enthalpies of Formation](#)
- [Unit 6 - Lecture Part 9 - Sample Problems](#)
- [Unit 6 - Lecture Part 10 - Hess' Law](#)
- [Unit 6 - Lecture Part 10 - Sample Problem 20](#)

UNIT 7

UNIT 7 IMPORTANT INFORMATION (NOTES)

DAILY VIDEO - LECHATELIERS
PDF Answered Notes

- [Unit 7 - Lecture Part 1 - Introduction to Equilibrium](#)
- [Unit 7 - Lecture Part 2 - The Magnitude of the Equilibrium Constant](#)
- [Unit 7 - Lecture Part 3 - Properties of the Equilibrium Constant](#)
- [Unit 7 - Equilibrium Problem Set # 1 - Walkthrough](#)
- [Unit 7 - Lecture Part 4 - Calculating Kc from Equilibrium Concentrations](#)
- [Unit 7 - Lecture Part 4-ii - Sample Problems 2-4](#)
- [Unit 7 - Lecture Bridging The Gap \(Kp\) - Equilibrium Calculations](#)
- [Unit 7 - Lecture Part 5 - Calculating Equilibrium Concentrations I](#)
- [Unit 7 - Lecture Part 6 - Calculating Equilibrium Concentrations II](#)
- [Calculating Equilibrium Concentrations - Sample Problem 9](#)
- [Unit 7 - Lecture Part 7- Rates of Forward and Reverse in Equilibrium](#)
- [Unit 7 - Lecture Part 8 - Effect of Concentration on Equilibrium](#)
- [Unit 7 - Lecture Part 9 - Effect of Volume \(or Pressure\) on Equilibrium](#)
- [Unit 7 - Lecture Part 10 - Effect of Temperature on Equilibrium](#)
- [Unit 7 - Lecture Part 11 - Reaction Quotient & Le Châtelier's Principle](#)
- [Unit 7 - Lecture Part 12 - Solubility Equilibria and Ksp](#)
- [Unit 7 - Lecture Part 13 - Ksp and Molar Solubility](#)
- [Unit 7 - Lecture Part 14 - LeChateliers and Solubility](#)
- [Unit 7 - Lecture Part 15 - Reaction Quotient, LeChatelier's Principle and Solubility](#)

UNIT 8

UNIT 8 IMPORTANT INFORMATION (NOTES)

UNIT 8 LECTURE - PART 6 (DAILY VIDEOS)
UNIT 8 LECTURE - PART 7 (DAILY VIDEOS)

- [Unit 8 - Lecture Part I - Strong and Weak Acids](#)
- [Unit 8 - Lecture Part 2 - Strong vs. Weak Acids & Bases and Ka /Kb Expressions](#)
- [Unit 8 - Lecture Part 3 - Autoionization of Water and pH](#)
- [Unit 8 - Lecture Part 3 - Sample Problems Answer Key](#)
- [Unit 8 - Lecture Part 4 - Weak Acid Equilibria](#)
- [Bridging The Gap - Base Dissociation](#)
- [Thinking About Percent Dissociation of Acids](#)

- [Unit 8 - Lecture Part 5 - Percent Dissociation of a Weak Acid](#)
- [Unit 8 - Lecture Part 7 - Titrations Recap](#)
- [Unit 8 - Lecture Part 7 - Titrations & Half Equivalence Point](#)
- [Unit 8 - Lecture Part 8 - Molecular Structure of Acids](#)
- [Unit 8 - Lecture Part 9 - Molecular Structure of Bases](#)
- [Weak Acid FRQ - Tedaldi Version](#)
- [Unit 8 - Lecture Part 10 - pH v. pKa & Sample Problems](#)
- [Unit 8 - Lecture Part 11 - Properties of Buffers](#)
- [Calculations with the Addition of Acids & Bases And Buffers](#)
- [Unit 8 - Lecture Part 12 - Buffer Calculations](#)
- [Unit 8 - Lecture Part 13 - Using the Henderson-Hasselbach Equation in Buffer Calculations](#)
- [Unit 8 - Lecture Part 14 - Buffer Capacity](#)

UNIT 9

UNIT 9 IMPORTANT INFORMATION (NOTES)

- [Unit 9 - Lecture Part 1- Thermodynamics Recap](#)
- [Unit 9 - Lecture Part 2 - Thermodynamic Recap Sample Problems](#)
- [Unit 9 - Lecture Part 2 \(Continued\) - More Thermodynamics Recap & Sample Problems](#)
- [Unit 9 - Lecture Part 3 - Introduction to Spontaneity](#)
- [Unit 9 - Lecture Part 4 - Introduction to Entropy](#)
- [Unit 9 - Lecture Part 4 \(Continued\) - Introduction to Entropy Sample Problems Answer Key](#)
- [Unit 9 - Lecture Part 5 - Calculating Entropy Changes](#)
- [Unit 9 - Lecture Part 6 - Gibbs Free Energy & Thermodynamic Favorability \(Spontaneity\)](#)
- [Unit 9 - Lecture Part 7 - Applications of Gibbs Free Energy](#)
- [Unit 9 - Lecture Part 8 - Thermodynamic and Kinetic Control](#)
- [Unit 9 - Lecture Part 9 - Gibbs Free Energy & Equilibrium](#)
- [Unit 9 - Lecture Part 10 - Coupled Reactions](#)
- [Unit 9 - Lecture Part 11 - Reduction Half Reactions](#)
- [Unit 9 - Lecture Part 12 - Introduction to Electrochemical Cells](#)
- [Unit 9 - Lecture Part 13 - Standard Cell Potential](#)
- [Unit 9 - Lecture Part 14 - Cell Potential and Gibbs Free Energy](#)
- [Unit 9 - Lecture Part 15 - Cell Potential Under Nonstandard Conditions](#)
- [Unit 9 - Lecture Part 16 - Electrolysis and Faradays Law](#)