



AP DAILY VIDEOS

AP Chemistry

AP Daily is a series of on-demand, short videos—created by expert AP teachers and faculty—that can be used for in-person, online, and blended/hybrid instruction. These videos cover every topic and skill outlined in the AP Course and Exam Description and are available in AP Classroom for students to watch anytime, anywhere.

Unit 1

Video Title	Topic	Video Focus	Instructor
1.1: Daily Video 1	Moles and Molar Mass	The mole concept; the connection between mass and number of particles; the calculation of molar mass.	Kristen Cacciatore
1.1: Daily Video 2	Moles and Molar Mass	The concept of a conversion factor and its use in converting between units of mass and moles.	Kristen Cacciatore
1.2: Daily Video 1	Mass Spectroscopy of Elements	The purpose of mass spectroscopy; interpreting graphs of mass spectroscopy data in the context of the AP Chemistry course and exam.	Kristen Cacciatore
1.2: Daily Video 2	Mass Spectroscopy of Elements	Three types of mass spectra questions commonly found on the AP Exam.	Kristen Cacciatore
1.3: Daily Video 1	Elemental Composition of Pure Substances	The definition of a pure substance; a demonstration of the relationship between chemical formula and percent composition; practice with calculating percent composition.	Kristen Cacciatore
1.3: Daily Video 2	Elemental Composition of Pure Substances	Empirical formula and molecular formula; practice with empirical formula determination.	Kristen Cacciatore
1.3: Daily Video 3	Elemental Composition of Pure Substances	Examples of multiple-choice and free-response empirical formula problems from the AP Exam, including combustion analysis and water of hydration problems.	Kristen Cacciatore
1.4: Daily Video 1	Composition of Mixtures	The definition of a mixture; the different ways mixtures can be represented symbolically and quantitatively.	Kristen Cacciatore
1.4: Daily Video 2	Composition of Mixtures	Examples of mixture analysis questions typical of the AP Exam, including purity determination and error analysis from elemental composition data.	Kristen Cacciatore
1.5: Daily Video 1	Atomic Structure and Electron Configuration	An introduction to Coloumb's law; how Coloumb's law can be used to predict the ionization energy of an electron.	Alice Putti
1.6: Daily Video 1	Photoelectron Spectroscopy	How to read spectra to identify elements and electron configurations; how to predict relative energies of electrons.	Alice Putti
1.6: Daily Video 2	Photoelectron Spectroscopy	Examples of free-response questions about photoelectron spectroscopy from the AP Exam.	Alice Putti
1.7: Daily Video 1	Periodic Trends	A review of the trends of the periodic table, with a focus on atomic radii, ionization energy, electronegativity, and electron affinity.	Alice Putti
1.7: Daily Video 2	Periodic Trends	Examples of free-response questions on periodic trends from the AP Exam.	Alice Putti
1.8: Daily Video 1	Valence Electrons and Ionic Compounds	How to determine the valence electrons and charges of elements using a periodic table; a review of AP-style questions.	Alice Putti

Unit 2

Video Title	Topic	Video Focus	Instructor
2.1: Daily Video 1	Types of Chemical Bonds	This video is an introduction to the types of chemical bonds (ionic, polar covalent, nonpolar covalent, and metallic).	Alice Putti
2.1: Daily Video 2	Types of Chemical Bonds	This video presents worked examples of AP-style questions on types of chemical bonding.	Alice Putti
2.2: Daily Video 1	Intramolecular Force and Potential Energy	This video covers potential energy curves for covalent bonds and how Coulomb's law applies to ionic bonds.	Alice Putti
2.2: Daily Video 2	Intramolecular Force and Potential Energy	This video presents worked examples of AP-style questions on potential energy diagrams and application of Coulomb's law for ionic bonds.	Alice Putti
2.3: Daily Video 1	Structure of Ionic Solids	This video covers particulate representations of ionic solids.	Alice Putti
2.4: Daily Video 1	Structure of Metals and Alloys	This video covers particulate representations of metals and alloys.	Alice Putti
2.5: Daily Video 1	Lewis Diagrams	This video introduces Lewis diagrams, addresses their usefulness, and shows how to use them to represent simple molecules.	Carlos Montero
2.5: Daily Video 2	Lewis Diagrams	This video presents a set of principles to construct Lewis diagrams for molecules and ions.	Carlos Montero
2.5: Daily Video 3	Lewis Diagrams	This video presents worked examples of AP-style questions on Lewis diagrams.	Carlos Montero
2.6: Daily Video 1	Resonance and Formal Charge	This video introduces the concept of resonance and why it is essential for the refinement of Lewis diagrams.	Carlos Montero
2.6: Daily Video 2	Resonance and Formal Charge	This video shows how to determine formal charges and how they serve as criteria to predict the best Lewis diagram for a molecule.	Carlos Montero
2.7: Daily Video 1	VSEPR and Bond Hybridization	This video introduces VSEPR theory and shows how it is used to determine the geometry of molecules.	Carlos Montero
2.7: Daily Video 2	VSEPR and Bond Hybridization	This video shows how molecular geometry determines molecular polarity.	Carlos Montero
2.7: Daily Video 3	VSEPR and Bond Hybridization	This video introduces the concept of hybridization and outlines how it is addressed in the AP Chemistry Exam.	Carlos Montero

Unit 3

Video Title	Topic	Video Focus	Instructor
3.1: Daily Video 1	Intermolecular Forces	This video introduces the nature and relative strengths of intermolecular forces.	Carlos Montero
3.1: Daily Video 2	Intermolecular Forces	This video introduces hydrogen bonding and ion-dipole, two specific cases of intermolecular forces of great significance.	Carlos Montero
3.1: Daily Video 3	Intermolecular Forces	This video demonstrates how intermolecular forces can explain the physical properties of a material.	Carlos Montero
3.2: Daily Video 1	Properties of Solids	This video introduces the types of solids and how their structure and composition account for their macroscopic properties.	Carlos Montero
3.2: Daily Video 2	Properties of Solids	This video presents strategies for answering AP-like questions that compare properties of different types of solids.	Carlos Montero
3.3: Daily Video 1	Solids, Liquids, and Gases	This video reviews the properties of solids, liquids, and gases, and accounts for their differences by using particulate-level models.	Carlos Montero
3.4: Daily Video 1	Ideal Gas Law	This video introduces how the macroscopic properties of gases, pressure, volume, temperature, and amount of gas are related through the ideal gas law.	Carlos Montero
3.4: Daily Video 2	Ideal Gas Law	This video addresses working with mixtures of gases by introducing Dalton's law of partial pressure.	Carlos Montero
3.4: Daily Video 3	Ideal Gas Law	This video gives multiple examples of typical AP Exam questions related to the ideal gas law.	Carlos Montero
3.5: Daily Video 1	Kinetic Molecular Theory	This video introduces the principles of the kinetic molecular theory and how the motion of the particles account for macroscopic properties of gases.	Carlos Montero
3.5: Daily Video 2	Kinetic Molecular Theory	This video introduces the Maxwell-Boltzmann distribution and how it represents the energies and velocities of gas particles.	Carlos Montero
3.6: Daily Video 1	Deviation from Ideal Gas Law	This video introduces how and why the ideal gas law actually does not explain the behavior of real gases.	Carlos Montero
3.7: Daily Video 1	Solutions and Mixtures	This video introduces the concepts of solutions and mixtures and how to calculate the number of solute particles, volume, or molarity.	Jordan Rose
3.8: Daily Video 1	Representations of Solutions	This video shows particulate model representations of solutions and shows interactions among the components.	Jordan Rose
3.9: Daily Video 1	Separation of Solutions and Mixtures Chromatography	This video explains the relationship between the solubility of compounds in aqueous and nonaqueous solvents. Chromatography can be used to separate chemical species.	Jordan Rose
3.9: Daily Video 2	Separation of Solutions and Mixtures Chromatography	This video explains the relationship between the solubility of compounds in aqueous and nonaqueous solvents. Distillation can be used to separate chemical species.	Jordan Rose

Video Title	Topic	Video Focus	Instructor
3.10: Daily Video 1	Solubility	This video explains the relationship between the solubility of compounds in aqueous and nonaqueous solvents, and the intermolecular interactions between particles.	Jordan Rose
3.11: Daily Video 1	Spectroscopy and the Electromagnetic Spectrum	This video explains the relationship between a region of the electromagnetic spectrum and the types of molecular or electronic transitions associated with that region.	Jordan Rose
3.12: Daily Video 1	Photoelectric Effect	This video explains the relationships between wavelength, frequency, and energy that occur when a photon is absorbed or emitted.	Jordan Rose
3.13: Daily Video 1	Beer-Lambert Law	This video explains the relationships among absorbance, concentration, path length, and molar absorptivity.	Jordan Rose
3.13: Daily Video 2	Beer-Lambert Law	This video uses a simulation to practice and apply the relationship between absorbance and concentration.	Jordan Rose

Unit 4

Video Title	Topic	Video Focus	Instructor
4.1: Daily Video 1	Introduction for Reactions	This video will discuss differences between physical processes and chemical reactions, and will identify evidence of these changes.	Jordan Rose
4.2: Daily Video 1	Net Ionic Equations	This video will discuss how a balanced equation can be used to describe processes. Representations will be used to show that mass is conserved in these processes.	Jordan Rose
4.2: Daily Video 2	Net Ionic Equations	This video will differentiate between balanced molecular, complete ionic, and net ionic equations using reactions and representations.	Jordan Rose
4.3: Daily Video 1	Representations of Reactions	This video examines different ways to represent chemical reactions and physical processes.	Jordan Rose
4.4: Daily Video 1	Physical and Chemical Changes	This video explains the relationship between macroscopic characteristics and particle interactions that can occur in matter.	Jordan Rose
4.5: Daily Video 1	Stoichiometry	This video introduces the concept of stoichiometry and stoichiometric relationships which can be used to solve a variety of problems.	Chris Manor
4.5: Daily Video 2	Stoichiometry	This video uses worked examples to show the utility of stoichiometry and how it can be used to solve qualitative and quantitative problems.	Chris Manor
4.5: Daily Video 3	Stoichiometry	This video provides worked examples of stoichiometry problems involving changing variables in a reaction and predicting their effects.	Chris Manor
4.6: Daily Video 1	Introduction to Titration	This video introduces the technique of titration, specifically an acid-base titration, and how it can be used to analyze a solution of unknown concentration.	Chris Manor
4.6: Daily Video 2	Introduction to Titration	This video introduces redox titrations which can also be used to determine the concentration of an unknown solution.	Chris Manor
4.7: Daily Video 1	Types of Chemical Reactions	This video explains how to identify a reaction as an acid-base reaction, an oxidation-reduction reaction, or a precipitation reaction.	Chris Manor
4.8: Daily Video 1	Introduction to Acid-Base Reactions	This video introduces how to identify species in an acid-base reaction as a Bronsted-Lowry acid or base based on proton transfer, as well as how to identify conjugate acid-base pairs.	Chris Manor
4.9: Daily Video 1	Oxidation-Reduction (Redox) Reactions	This video explains how to write an oxidation half-reaction and a reduction half-reaction and use them to construct a balanced chemical equation for a redox reaction.	Chris Manor

Unit 5

Video Title	Topic	Video Focus	Instructor
5.1: Daily Video 1	Reaction Rates	This video introduces the rate of a reaction and how the stoichiometry of the balanced chemical equation can relate the rates of change between reactants and products.	Chris Manor
5.1: Daily Video 2	Reaction Rates	This video illustrates the factors that can influence the rate of a reaction.	Chris Manor
5.2: Daily Video 1	Introduction to Rate Law	This video introduces how to experimentally determine the rate law, including the reaction order for each reactant, the overall order of the reaction, and the value (and units) of k .	Chris Manor
5.3: Daily Video 1	Concentration Changes Over Time	This video explains how the order of a reaction can be inferred from a graph of concentration versus time and how the slope can be used to determine the rate constant.	Chris Manor
5.3: Daily Video 2	Concentration Changes Over Time	This video focuses on recognizing that radioactive decay illustrates first-order kinetics and the relationship between the half-life and the rate constant.	Chris Manor
5.4: Daily Video 1	Elementary Reactions	This video illustrates how to represent an elementary reaction as a rate law expression using stoichiometry.	Chris Manor
5.5: Daily Video 1	Collision Model	This video explains the relationship between the rate of an elementary reaction and the frequency, energy, and orientation of molecular collisions.	Chris Manor
5.6: Daily Video 1	Reaction Energy Profile	This video introduces a reaction energy profile that represents the energy changes involved in a single step reaction.	Dena Leggett
5.6: Daily Video 2	Reaction Energy Profile	This video presents worked examples of questions related to reaction energy profiles from the AP Exam.	Dena Leggett
5.6: Daily Video 3	Reaction Energy Profile	This video explores the relationships among temperature, the activation energy, the rate constant, and the reaction energy profile.	Dena Leggett
5.7: Daily Video 1	Introduction to Reaction Mechanisms	This video explains the features and requirements of reaction mechanisms.	Dena Leggett
5.7: Daily Video 2	Introduction to Reaction Mechanisms	This video explains how to determine an overall reaction from a proposed reaction mechanism.	Dena Leggett
5.8: Daily Video 1	Reaction Mechanism and Rate Law	This video demonstrates how to determine a rate law expression from a slow step in a mechanism.	Dena Leggett
5.9: Daily Video 1	Steady-State Approximation	This video will cover the process used to determine a rate law expression using a fast equilibrium to eliminate an intermediate.	Dena Leggett
5.9: Daily Video 2	Steady-State Approximation	This video provides an opportunity to practice determining a rate law expression using a fast equilibrium to eliminate an intermediate.	Dena Leggett

Video Title	Topic	Video Focus	Instructor
5.10: Daily Video 1	Multistep Reaction Energy Profile	This video will explain how to sketch a reaction profile for a multistep mechanism.	Dena Leggett
5.11: Daily Video 1	Catalysis	This video will discuss types of catalysts and how catalysts increase the rate of a reaction.	Dena Leggett

Unit 6

Video Title	Topic	Video Focus	Instructor
6.1: Daily Video 1	Endothermic and Exothermic Processes	This video will explore systems and the balance of energy that results in endothermic and exothermic reactions.	Dena Leggett
6.1: Daily Video 2	Endothermic and Exothermic Processes	This video will explore the concepts of surroundings and the changes measured in the laboratory.	Dena Leggett
6.1: Daily Video 3	Endothermic and Exothermic Processes	This video will explore AP-style questions investigating energy flow in chemical and physical changes.	Dena Leggett
6.2: Daily Video 1	Energy Diagrams	This video will explore the application of energy diagrams to the determination of enthalpy changes in a reaction.	Dena Leggett
6.3: Daily Video 1	Heat Transfer and Thermal Equilibrium	This video will evaluate how heat is transferred from systems at high temperature to systems at low temperature.	Dena Leggett
6.4: Daily Video 1	Heat Capacity and Calorimetry	This video introduces the concept of heat capacity and how it connects to the laboratory technique of calorimetry.	Dena Leggett
6.4: Daily Video 2	Heat Capacity and Calorimetry	This video provides an opportunity to practice problems with heat capacity and calorimetry.	Dena Leggett
6.5: Daily Video 1	Energy of Phase Changes	This video links macroscopic and particulate representations of phase changes to the energetics of phase changes.	Dena Leggett
6.5: Daily Video 2	Energy of Phase Changes	This video provides an opportunity to practice AP-style problems involving phase changes.	Dena Leggett
6.6: Daily Video 1	Introduction to Enthalpy of Reaction	This video introduces enthalpy of reaction and relates the amount of heat energy absorbed or released to the stoichiometric coefficients in a balanced chemical equation.	Joanna Scimeca
6.7: Daily Video 1	Bond Enthalpies	This video explains how the enthalpy of a reaction relates to the average bond energies of the reactants and products.	Joanna Scimeca
6.7: Daily Video 2	Bond Enthalpies	This video demonstrates how to calculate the enthalpy of a reaction using the average bond energies of bonds broken and formed in the reaction.	Joanna Scimeca
6.8: Daily Video 1	Enthalpy of Formation	This video introduces the concept of standard enthalpy of formation and how it relates to the standard enthalpy of reaction.	Joanna Scimeca
6.8: Daily Video 2	Enthalpy of Formation	This video demonstrates how to calculate the enthalpy of a reaction using the standard enthalpies of formation of the products and reactants.	Joanna Scimeca
6.9: Daily Video 1	Hess's Law	This video introduces Hess's law, which describes how the enthalpy of a reaction changes if reactions are reversed, combined, and/or multiplied.	Joanna Scimeca
6.9: Daily Video 2	Hess's Law	This video provides an opportunity to practice applications of Hess's law.	Joanna Scimeca

Unit 7

Video Title	Topic	Video Focus	Instructor
7.1: Daily Video 1	Introduction to Equilibrium	In this video, we will introduce the concept of dynamic equilibrium in the context of both aqueous and gaseous systems, and we will represent equilibrium graphically.	Joanna Scimeca
7.2: Daily Video 1	Direction of Reversible Reactions	This video examines the concept of a reversible reaction and relates the relative rates of the forward and reverse reactions to the amount of product made and reactant consumed.	Joanna Scimeca
7.3: Daily Video 1	Reaction Quotient and Equilibrium Constant	This video introduces the equilibrium constant, K , and the reaction quotient, Q , and relates them to the relative amount of reactants and products at a given point in time.	Joanna Scimeca
7.4: Daily Video 1	Calculating the Equilibrium Constant	In this video, we will learn how to calculate the equilibrium constant, K , from concentrations or partial pressures of reactants and products for a reaction at equilibrium.	Joanna Scimeca
7.5: Daily Video 1	Magnitude of the Equilibrium Constant	In this video, we will examine how the magnitude of the equilibrium constant, K , indicates whether the products or reactants are favored at equilibrium.	Joanna Scimeca
7.6: Daily Video 1	Properties of the Equilibrium Constant	In this video, we will examine how the equilibrium constant, K , or the reaction quotient, Q , change when reactions are reversed, multiplied by a factor, or combined.	Joanna Scimeca
7.7: Daily Video 1	Calculating Equilibrium Concentrations	In this video, we will calculate equilibrium concentrations or pressures of reactants and products given the equilibrium constant, K , and initial concentrations or pressures.	Joanna Scimeca
7.7: Daily Video 2	Calculating Equilibrium Concentrations	In this video, we will practice calculating equilibrium concentrations or pressures from initial concentrations or pressures and the equilibrium constant, K .	Joanna Scimeca
7.8: Daily Video 1	Representations of Equilibrium	This video will explore how particle diagrams can be used to represent systems at equilibrium.	Dena Leggett
7.9: Daily Video 1	Introduction to Le Châtelier's Principle	This video will investigate how changes in concentration stress an equilibrium system.	Dena Leggett
7.9: Daily Video 2	Introduction to Le Châtelier's Principle	This video will investigate how pressure changes, volume changes, solids, and catalysts impact a system at equilibrium.	Dena Leggett
7.9: Daily Video 3	Introduction to Le Châtelier's Principle	This video will investigate how changes in temperature stress an equilibrium system.	Dena Leggett
7.10: Daily Video 1	Reaction Quotient and Le Châtelier's Principle	This video covers how the reaction quotient, Q , can be used to justify claims regarding stresses to systems at equilibrium.	Dena Leggett
7.10: Daily Video 2	Reaction Quotient and Le Châtelier's Principle	In this video, we will solve AP questions related to stresses on systems at equilibrium.	Dena Leggett

Video Title	Topic	Video Focus	Instructor
7.11: Daily Video 1	Introduction to Solubility Equilibria	This video explores equilibria systems involving slightly soluble salts and the equilibrium constant, K_{sp} .	Dena Leggett
7.11: Daily Video 2	Introduction to Solubility Equilibria	This video will compare insoluble salts and use the reaction quotient, Q , to predict whether a precipitate will form.	Dena Leggett
7.11: Daily Video 3	Introduction to Solubility Equilibria	This video will provide an opportunity to practice AP-style questions about solubility equilibria.	Dena Leggett
7.12: Daily Video 1	Common-Ion Effect	This video outlines the effect that the addition of one of the ions in a slightly soluble salt has on the solubility of that salt.	Dena Leggett
7.13: Daily Video 1	pH and Solubility	This video applies Le Châtelier's principle to the solubility of salts that are pH sensitive.	Dena Leggett
7.14: Daily Video 1	Free Energy of Dissolution	This video covers the thermodynamics of solution formation.	Dena Leggett

Unit 8

Video Title	Topic	Video Focus	Instructor
8.1: Daily Video 1	Introduction to Acids and Bases	This video will introduce calculations involving pH, pOH, and pKw.	Dena Leggett
8.1: Daily Video 2	Introduction to Acids and Bases	This video will explore how to estimate pH and the temperature dependence of Kw.	Dena Leggett
8.2: Daily Video 1	pH and pOH of Strong Acids and Bases	This video will introduce calculations involving the pH and pOH of strong acids and bases.	Dena Leggett
8.2: Daily Video 2	pH and pOH of Strong Acids and Bases	This video will provide practice with AP-style questions involving strong acids and strong bases.	Dena Leggett
8.3: Daily Video 1	Weak Acid and Base Equilibria	This video will introduce calculations involving pH and % ionization of weak acids.	Dena Leggett
8.3: Daily Video 2	Weak Acid and Base Equilibria	This video will introduce calculations involving pH, pOH, and % ionization of weak bases.	Dena Leggett
8.3: Daily Video 3	Weak Acid and Base Equilibria	This video will provide an opportunity to explore AP-style questions involving weak acids and bases.	Dena Leggett
8.4: Daily Video 1	Acid-Base Reactions and Buffers	This video will explore the major species that form when strong or weak acids react with strong bases.	Dena Leggett
8.4: Daily Video 2	Acid-Base Reactions and Buffers	This video will explore the major species that form when weak bases react with strong acids.	Dena Leggett
8.4: Daily Video 3	Acid-Base Reactions and Buffers	This video will provide an opportunity to explore AP-style questions involving acid-base reactions.	Dena Leggett
8.5: Daily Video 1	Acid-Base Titrations	This video will evaluate key points on a titration curve in which acids are titrated with a strong base.	Dena Leggett
8.5: Daily Video 2	Acid-Base Titrations	This video will evaluate key points on a titration curve in which bases are titrated with a strong acid.	Dena Leggett
8.5: Daily Video 3	Acid-Base Titrations	This video will explore AP-style questions that involve evaluating and/or sketching titration curves.	Dena Leggett
8.6: Daily Video 1	Molecular Structure of Acids and Bases	This video explains how the molecular structure of an acid is related to strength of the substance.	Jordan Rose
8.6: Daily Video 2	Molecular Structure of Acids and Bases	This video explains how the molecular structure of a base is related to the strength of the substance.	Jordan Rose
8.7: Daily Video 1	pH and pKa	This video relates pH and pKa and uses those values to describe concentrations, or protonation states, of an acid or base in solution.	Jordan Rose
8.8: Daily Video 1	Properties of Buffers	This video describes the properties of a buffer solution and explains how a buffer stabilizes the pH of a solution.	Jordan Rose

Video Title	Topic	Video Focus	Instructor
8.9: Daily Video 1	Henderson-Hasselbalch Equation	This video describes the relationship between conjugate acid-base pairs in a buffer using the Henderson-Hasselbalch equation.	Jordan Rose
8.10: Daily Video 1	Buffer Capacity	This video explains how the concentration ratios of conjugate acid-base pairs in a buffer cause a resistance to pH change.	Jordan Rose

Unit 9

Video Title	Topic	Video Focus	Instructor
9.1: Daily Video 1	Introduction to Entropy	This video describes the concept of entropy and how the dispersal of matter and energy affect entropy values.	Jordan Rose
9.2: Daily Video 1	Absolute Entropy and Entropy Change	This video describes how to predict the sign and calculate the magnitude of the entropy change for a process.	Jordan Rose
9.3: Daily Video 1	Gibbs Free Energy and Thermodynamic Favorability	This video describes Gibbs free energy and how to determine whether or not a process is thermodynamically favored.	Jordan Rose
9.3: Daily Video 2	Gibbs Free Energy and Thermodynamic Favorability	This video describes how entropy and enthalpy both affect thermodynamic favorability.	Jordan Rose
9.4: Daily Video 1	Thermodynamic and Kinetic Control	This video explains how a process can be thermodynamically favorable but still not occur at a measurable rate.	Jordan Rose
9.5: Daily Video 1	Free Energy and Equilibrium	This video explains the relationship between the sign of the free energy change of a process and the magnitude of the process's equilibrium constant.	Jordan Rose
9.6: Daily Video 1	Coupled Reactions	This video explains how coupled reactions allow thermodynamically unfavorable processes to occur in different real-world contexts.	Kristen Cacciatore
9.7: Daily Video 1	Galvanic (Voltaic) and Electrolytic Cells	This video describes the components and operation of voltaic and electrolytic cells.	Kristen Cacciatore
9.7: Daily Video 2	Galvanic (Voltaic) and Electrolytic Cells	This video provides practice with AP-type questions about electrochemical cell fundamentals.	Kristen Cacciatore
9.8: Daily Video 1	Cell Potential and Free Energy	This video explains the relationship between half-reaction potentials and overall cell potential for standard electrochemical cells.	Kristen Cacciatore
9.8: Daily Video 2	Cell Potential and Free Energy	This video explains the relationship between free energy and cell potential.	Kristen Cacciatore
9.9: Daily Video 1	Cell Potential Under Nonstandard Conditions	This video presents various nonstandard electrochemical cells and explains how and why their cell potentials differ from those of standard cells.	Kristen Cacciatore
9.10: Daily Video 1	Electrolysis and Faraday's Law	This video explains the relationships between current, time, electrons transferred, and mass changes in electrolytic cells.	Kristen Cacciatore