I'm not a bot

1. Models of the Particulate Nature of Matter 2. Models of Bonding and Structure 3. Classification of Matter 4. What Drives Chemical Reactions? 5. How Much, How Fast and How Far? 6. What are the Mechanisms of Chemical Change? • Structure 1.1 - Introduction to the particulate nature of matter • Structure 1.2 - The nuclear atom • Structure 1.3 - Electron configurations • Structure 1.4 - Counting particles by mass: The mole • Structure 1.5 - Ideal gases IB Chemistry may not be quite as easy as this penguin makes it seems. So to help you out, I have compiled the best FREE online IB Chemistry Study Guides and Notes into one helpful article. I've organized this IB Chemistry Study Guide using the order laid out in the IB Chemistry Syllabus. 2022 IB Exam Changes Due to COVID-19 Because of the ongoing COVID-19 (coronavirus) pandemic, the IB has decided to extend the adaptations which were put in place for 2021 to 2022. May 2022 IB assessments will have two routes, exam and non-exam, depending on which your school chooses. Stay up to date with the latest information on what this means for IB diplomas, course credit for IB classes, and more with our our IB COVID-19 FAQ article. How to Use This IB Chemistry Study Guide If there is one specific topic that you need more help with, use the Command + F function on your computer to search this guide for that subject. So, if you hope to read about The Mole Concept, use Command + F to bring up the search function. Type in “Mole Concept" and it will bring up all of the study materials for The Mole Concept. If you are looking for summary material to help you study for the IB Chemistry papers, check out the Overall Reviews section for great overall study resources. I've listed the notes and guides by topic. You should glance at this article during the school year to help you study for in-class tests and quizzes if you need more assistance or if you struggled to understand certain lectures in your IB Chemistry course. If you want additional help, read our article on the best IB Chemistry books to find additional study resources. You should be learning the material over the course of the school year and not cramming right before the IB Chemistry papers. Common Errors IB Chemistry Students Make When Studying Many students struggle with IB Chemistry SL/HL. There are so many subjects to learn, and you cannot fall behind. You need to be learning during the school year in order to ace the IB Chemistry papers. Common errors students make when studying are: #1: Avoiding the topics you didn't fully comprehend in class. If you did not learn it in the classroom, you need to seek additional assistance whether through this IB Chemistry study guide, IB Chemistry books, or through tutoring. #2: Only studying a week or two before the IB Chemistry Exam. There are way too many topics to master in only a week or two (which is why the course is taught over one to two years). So, master the subjects as you learn them in class. Use this study guide if you need more help comprehending the topics you cover in class. Otherwise, you will be as nervous as this kid during the test. Core—95 hours for SL and HL Both IB Chemistry SL and HL have the same core requirements. They consist of 95 hours and cover the 11 topics listed below. Topic 1: Stoichiometric Relationships—13.5 hours for SL and HL Notes on Mole Concept and Avogadro's Constant Notes on all of Stoichiometry 1.3: Reacting masses and volumes notes Notes on Quantitative Chemistry Topic 2: Atomic Structure—6 hours for SL and HL 2.2: Electron configuration notes Notes on Atomic Structure Topic 3: Periodicity—6 hours for SL and HL 3.1: Periodic table notes 3.2: Periodic trends notes General Overview of Periodicity Topic 4: Chemical bonding and structure—13.5 hours for SL and HL 4.1: Ionic bonding and structure notes 4.2: Covalent bonding notes 4.3: Covalent structures notes 4.4: Intermolecular forces notes 4.5: Metallic bonding notes General Overview of Bonding Topic 5: Energetics/Thermochemistry—9 hours for SL and HL 5.1: Measuring energy changes notes 5.3: Bond enthalpies General Notes on Energetics Topic 6: Chemical Kinetics—7 hours for SL and HL 6.1: Collision theory and rates of reaction General Overview of Kinetics Topic 7: Equilibrium—4.5 hours for SL and HL 7.1: Equilibrium notes General Overview of Equilibrium Topic 8: Acids and Bases—6.5 hours for SL and HL 8.1: Theory of acids and bases notes 8.2: Properties of acids and bases notes 8.4: Strong and weak acids and bases notes 8.5: Acid deposition notes General Overview of Acids and Bases Topic 9: Redox Processes—8 hours for SL and HL 9.1: Oxidation and reduction notes 9.2: Electrochemical cells notes General Overview of Redox Processes Topic 10: Organic Chemistry—11 hours for SL and HL General Overview of Organic Chemistry 10.1: Fundamentals of organic chemistry notes 10.2: Functional group chemistry notes Topic 11: Measurement and Data Processing—10 hours for SL and HL Spectroscopic Identification of Organic Compounds Study Guide 11.1: Uncertainties and errors in measurements and results notes 11.2: Graphical techniques notes Additional Higher Level (AHL)—60 hours for HL You will only study the ten topics listed below if you're in IB Chemistry HL; the standard level doesn't cover these topics. Topic 12: Atomic Structure—2 hours Atomic Structure Study Guide 12.1: Electrons in atoms notes Topic 13: The Periodic Table: Transition Metals—4 hours 13.1: First row d-block elements notes 13.2: Coloured complexes notes Topic 14: Chemical Bonding and Structure—7 hours Chemical Bonding and Structure Notes 14.1: Covalent bonding and electron domain and molecular geometrics notes 14.2: Hybridization notes Topic 15: Energetics/Thermochemistry—7 hours 15.1: Energy cycles notes 15.2: Entropy and spontaneity notes Topic 16: Chemical Kinetics—6 hours Videos on Chemical Kinetics 16.1: Rate expression and reaction mechanism notes 16.2: Activation energy notes Okay, you may not get to do this. Topic 17: Equilibrium—4 hours 17.1: Equilibrium law notes Topic 18: Acids and Bases—10 hours 18.1: Lewis acids and bases notes 18.2: Calculations involving acids and bases notes Topic 19: Redox Processes—6 hours Notes on Oxidation and Reduction 19.1: Electrochemical cells notes Topic 20: Organic Chemistry—12 hours 20.1: Types of organic reactions notes 20.2: Synthetic routes notes Topic 21: Measurement and Analysis—2 hours Videos on Measurement and Data Processing 21.1: Spectroscopic identification of organic compounds notes Option—15 hours for SL and 25 hours for HL Unfortunately, there are no free online study guides for the options, but look at our article on IB Chemistry books to find books that review the options topics. Overall IB Chemistry Reviews IB Chemistry HL 31 Common Mistakes: Richard Thornley, the author of this video, has several other helpful videos on IB Chemistry SL and HL available for free on YouTube IB Chemistry Web: This site goes over the syllabus in-depth and explains key definitions and facts you need to know. What's Next? Want more of a review of what you'll learn in IB Chemistry? Then check out our in-depth guide to the IB Chemistry syllabus: SL and HL and our tips on balancing chemical equations. A prep book can be an extremely useful study tool. Learn which are the best IB Chemistry textbooks by reading our guide. How much do you know about the chemical properties of everyday things? Discover how to use muriatic acid to remove rust from your pots and pans and the effect of adding and removing certain ingredients to create the ultimate slime. Are you hoping to squeeze in some extra IB classes? Learn about the IB courses offered online. Page 2Tools designed specifically for the DP IB Chemistry: HL syllabus, to help you ace your exams, including: past papers, revision notes, and exam-style questions, created by our expert team of teachers and examinersExam specification alignedPersonalise to your abilityWritten by teachers and examinersExaminer tips and tricksExam practice with solutionsPDF downloadsStep-by-step mark schemes Alternatively contact us viaWhatsApp, Phone Call, or EmailPage 2Alternatively contact us viaWhatsApp, Phone Call, or Email The TeamThe ResourcesThe ExperienceThe ResultsThe MembershipsAboutBiologyBiology 2025ChemistryChemistry 2025PhysicsPhysics 2025 Our IB Chemistry HL revision notes break down complex topics into easy-to-understand explanations. Each concept is explained step by step, helping you grasp fundamental ideas quickly.2. Key Concepts Highlighted for Quick ReviewWe provide summarized key concepts for each topic, making last-minute revision easier. These summaries focus on essential theories, equations, and applications that frequently appear in exams.3. Past Paper Practice with Mark SchemesPracticing with past papers is one of the most effective ways to prepare. Our database includes a vast collection of IB Chemistry HL past papers with detailed mark schemes. This allows you to familiarize yourself with exam-style questions and understand what examiners expect.4. Topic-Wise Question BanksFor targeted practice, our resources offer topic-wise question banks. These help reinforce learning and identify areas where you need improvement.5. Time-Saving Study MaterialsOur materials are designed to save you time by providing direct, exam-focused content. With our structured approach, you can study efficiently without feeling overwhelmed. A personal tutor can provide tailored support based on your individual learning needs. Tutors offer one-on-one sessions that focus on the areas where you need the most improvement. Whether it’s mathematics, science, or language arts, a tutor can provide targeted strategies and techniques to ensure that you understand key concepts and are prepared for upcoming exams.Summer School and Easter Revision Services: A Great OpportunitySummer and Easter revision services are an excellent way to prepare for exams while still having time to relax. These sessions are structured to help you revisit your syllabus, revise key topics, and practice with exam papers. These services offer intensive study periods, which can be highly beneficial for students aiming to refresh their knowledge and boost confidence.Accessing the Board Syllabus for Efficient StudyingAccessing your exam board’s syllabus is one of the most effective ways to stay on track during your revision. The syllabus provides a clear outline of the topics you need to cover and allows you to prioritize areas that require more attention.The comprehensive IB Chemistry SL & HL Syllabus ensures that you are following the right path and studying the correct resource material.Where to Find the Best Educational ServicesFor further support, you can check out services offered by our Sister Companies Lite Regal International College and Lite Regal Education, both of which provide expert tutors and revision resources. Whether you need a tutor for personalized lessons or are looking to join a revision group, these services have a wide range of options to fit your study needs.