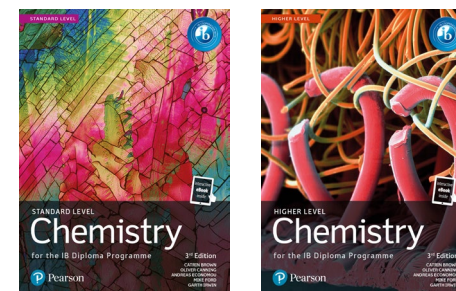





# Get ready to teach the new Subject Guide with Pearson Chemistry for the IB Diploma Programme

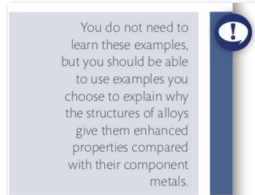
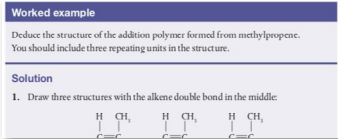
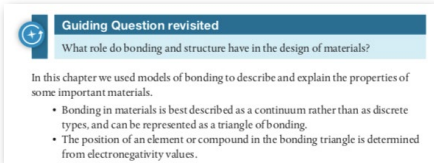
Find out everything you need to know about the changes to the syllabus and get ready to teach the new course with our Student Books, developed in cooperation with the IB, and supported by expert advice from our experienced authors.



Key changes to the IB DP Chemistry Subject Guide	Putting it into practice with Pearson Chemistry for the IB Diploma Programme Student Books
<p>The <b>syllabus content</b> is now presented in two main themes:</p> <ul style="list-style-type: none"> <li>● <b>Structure</b> <ul style="list-style-type: none"> <li>- Models of the particulate nature of matter</li> <li>- Models of bonding and structure</li> <li>- Classification of matter</li> </ul> </li> <li>● <b>Reactivity</b> <ul style="list-style-type: none"> <li>- What drives chemical reactions?</li> <li>- How much, how fast and how far?</li> <li>- What are the mechanisms of chemical change?</li> </ul> </li> </ul> <p>The conceptual relationship between these two themes – what chemicals are made from and how they behave – is emphasised throughout. This is reinforced by the fact there is no expectation that the syllabus will be taught in any particular order, or that any topic needs to be covered completely at one time.</p>	<p>Our <b>Standard Level and Higher Level Student Books</b> are structured to match the new Subject Guide, something that's been checked and <b>approved by the IB</b>. This means that it couldn't be easier to find what you're looking for from the syllabus. We've also included handy overviews of the syllabus content covered at the start of each section.</p> <p>The <b>conceptual approach</b> of the books means you're free to design your own route through the course, with topics linked to help you join everything up and to increase your students' depth of understanding.</p> <p><b>Author tip!</b> Hear more detail about how the books have been put together in cooperation with the IB from our expert authors in an <a href="#">on-demand webinar &gt;</a></p>

Key changes to the IB DP Chemistry Subject Guide	Putting it into practice with Pearson Chemistry for the IB Diploma Programme Student Books
<p>The <b>removal of the Options</b> is a main contributor to the reduction in the content of the course. However, you will note that some topics from each of the former four Options are now included in the main syllabus – for example, the bonding triangle (Option A), biofuels (Option B), fuel cells (Option C) and separation techniques (Option D). This is by no means an exhaustive list, but makes the point that all students will now be exposed to the <b>applications and global context of chemistry</b> in a range of fields.</p> <p>Students no longer pick HL options. All HL students cover the same content. This is to ensure consistency in the content covered.</p>	<p>We've got <b>separate Standard Level and Higher Level resources</b> to offer you maximum flexibility with your teaching. All of our student books take the same approach, across all subjects, making things simple and consistent for students who are taking more than one Science.</p> <div data-bbox="1682 268 2119 443" style="border: 1px solid #ccc; padding: 5px;"> <p><b>HL</b></p> <ul style="list-style-type: none"> <li>The transition metals are found in the d block. Zinc is not a transition metal as both the Zn atom and the Zn<sup>2+</sup> ion have a complete d sublevel.</li> <li>Transition metals show variable oxidation states, act as catalysts and form coloured complex ions. The colour is due to electron transitions between d orbitals of different energy. The d sublevel is split into orbitals of different energy due to the electric field created by lone pair of electrons of the ligand.</li> </ul> <p style="text-align: right;"><b>HL end</b></p> </div> <p><b>Author tip!</b> <a href="#">Get topic-specific detail in our video explainer</a></p>
<p><b>The Nature of Science</b> (NOS) continues to be an important thread that runs through the course. Some references are made to NOS in the syllabus, but mostly, you are encouraged to provide your own examples, including drawing on topical developments.</p>	<p><b>Nature of Science boxes</b> are included throughout the books as related themes and questions arise to help your students understand Chemistry in the wider context of the science world.</p> <div data-bbox="1592 616 2119 715" style="border: 1px solid #ccc; padding: 5px;"> <p><b>Nature of Science</b></p> <p>The bonding triangle is a tool that has predictive power for the properties of a substance.</p> </div> <p><b>Author tip!</b> <a href="#">Read more on NOS and how to integrate it into your Chemistry course &gt;</a></p>
<p><b>Guiding Questions</b> are a new feature of the syllabus, given at the start of each sub-topic.</p> <p>These questions are purposefully open-ended, lending themselves to increasingly detailed consideration as understanding of the topic deepens.</p> <p>Guiding Questions may serve as openers for a topic, teasing out students' prior knowledge, and perhaps helping to suggest a sequence of what will be covered.</p> <p>They could also be used as a <b>tool for assessment</b>, looking for increasing depth and breadth at different stages in the learning.</p>	<p>We've included <b>Guiding Questions at the start of each chapter</b>. These set the context for the topic and how it relates to previous knowledge. They are revisited at the end of each chapter with a <b>summary checklist</b> that will come in handy for revision.</p> <p><b>Our Student Books cover ALL of the Guiding Questions from the IB's Subject Guides.</b></p> <div data-bbox="1592 866 2119 943" style="border: 1px solid #ccc; padding: 5px;"> <p><b>Guiding Question</b></p> <p>What role do bonding and structure have in the design of materials?</p> </div>

Key changes to the IB DP Chemistry Subject Guide	Putting it into practice with Pearson Chemistry for the IB Diploma Programme Student Books
<p><b>Linking Questions</b> are another important feature of the new course. They are given in many of the syllabus Understandings, where they show a link to a different but related sub-topic. The goal of Linking Questions is to help create enhanced understanding and a network of knowledge. The content of Linking Questions is often addressed elsewhere in the text as it sometimes encourages a 'revisiting' of material and sometimes a preview of upcoming material.</p> <p>Linking Questions are unlikely to be used as questions in examinations per se, but the related concepts are considered an essential part of the course.</p>	<p><b>Linking Questions are highlighted throughout</b> the books to help students make connections and build a network of knowledge. They help students join up several different concepts from across chapters in one place.</p> <div data-bbox="1720 268 2116 427">  <p>Structure 3.1 – How do the trends in properties of period 3 oxides reflect the trend in their bonding?</p> </div>
<p>The Subject Guide includes a section titled <b>Skills in the Study of Chemistry</b>. This is not intended as a topic to be taught in isolation, but is more of a checklist of skills that students must acquire during the course.</p> <p>It replaces the Prescribed Practicals (or Mandatory Labs) from the 2016 curriculum, and clarifies the experimental techniques, technology and mathematical skills scope that is expected.</p>	<p><b>Skills boxes</b> throughout the books indicate where you might be able to explore these different skills, in particular sub topics, as well as providing links to resources for carrying out particular labs.</p> <p>You and your students get comprehensive coverage of skills beyond what's in our books with downloadable <b>expanded activity and lab PDFs</b>, as well as a <b>dedicated chapter on Skills</b>.</p> <p><b>Author tip!</b> <a href="#">Try out some lab skills worksheets for free when you download everything you need to teach five Chemistry lessons &gt;</a></p> <div data-bbox="1780 609 2116 810">  <p>Cement and mortar: investigating the parameters that affect their properties. Full details of how to carry out this experiment with a worksheet are available in the eBook.</p> </div>
<p><b>TOK links</b> are no longer included in the syllabus to avoid the perception that the listed links are the only links students need to know. The aim is to encourage students and teachers to make their own TOK links.</p>	<p>We've kept <b>TOK links</b> throughout the books, using questions that are designed to stimulate thought and consideration of knowledge issues as they arise in context, as well as including a <b>dedicated TOK chapter</b>.</p> <p><b>Author tip!</b> <a href="#">Read more on integrating TOK in your Chemistry course &gt;</a></p> <div data-bbox="1825 1013 2116 1157">  <p>To what extent do the classification systems we use in the pursuit of knowledge affect the conclusions that we reach?</p> </div>

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<p>All students will only sit two <b>external assessments</b>:</p> <p>Paper 1A: multiple-choice questions on the syllabus.</p> <p>Paper 1B: data-based questions that are syllabus-related, and questions on experimental work</p> <p>Paper 2: short-answer and extended-response questions on a wide range of syllabus content, skills, concepts and understandings.</p>	<p>Our books include formative and summative assessment opportunities, with exercises throughout and <b>exam practice questions</b> at the end of each chapter, in the style of IB exam papers, in addition to real past paper questions. Answers are available in the eBook.</p> <p><b>Auto-marked quizzes</b>, with real-time results and reporting, offer practice tackling multiple-choice questions.</p> <p><b>Hints for success</b> boxes throughout the books give advice from experienced IB examiners on how to approach questions, identifying common pitfalls.</p> <p>We've also included <b>worked examples</b> with solutions to help students tackle questions with confidence. <b>IB terminology is integrated</b> so that students become familiar with the language and terms that they will meet in exams.</p> <div data-bbox="1861 392 2114 587">  </div> <div data-bbox="1778 608 2114 746">  </div>
<p>The <b>Internal Assessment</b>, now called the <b>Scientific Investigation</b>, is an open-ended task in which the student gathers and analyses data (collaboration is possible here) in order to answer their own formulated research question (which must be individual to the student).</p> <p>The outcome of the scientific investigation is assessed through a written report of up to 3,000 words, which is now assessed based on four criteria:</p> <ul style="list-style-type: none"> <li>● Exploring and designing</li> <li>● Collecting and processing data</li> <li>● Concluding</li> <li>● Evaluating data</li> </ul> <p>Extra weighting will be given to Conclusion and Evaluation. The Communication element from the old Subject Guide is embedded in the above criteria.</p>	<p><b>Skills boxes</b> throughout the books give details of experiments which will support the skills needed for the Internal Assessment.</p> <p>The <b>Guiding Question Revisited Checklist</b> at the end of each chapter, also available to download from the eBook version, ensures students know what's required and supports them in achieving the new criteria.</p> <p>An <b>Internal Assessment chapter</b> offers support and guidance for the Scientific Investigation.</p> <div data-bbox="1682 855 2114 1018">  </div>