Chemistry 化學
Learning and Teaching Resource List 學與教資源表

https://www.edb.gov.hk/en/curriculum-development/kla/science-edu/ref-and-resources/chemistry.html

(A) Textbooks 課本
Printed Textbooks 印刷課本: http://www.edb.gov.hk/rtl

(B) Learning and teaching materials developed by EDB 教育局編制的學與教資源		
No. 編號	**Title / Description 題目 / 內容簡介**	**Web link 網址**
Senior Secondary (S4 – S6) 高中 (中四至中六)		
1	An English-Chinese and Chinese-English Glossary of Terms Commonly Used in the Teaching of Chemistry in Secondary Schools 中學化學科常用英漢及漢英辭彙	**PDF file (PDP 檔案)** http://www.edb.gov.hk/attachment/en/curriculum-development/kla/science-edu/ref-and-resources/glossary_chem2007.pdf **Online version (網上版)** http://cd1.edb.hkedcity.net/cd/science/glossarysci_eng.html
2	Platform of Teacher Resources on Senior Secondary Chemistry 高中化學教師資源平台 This website compiles the latest news and information of student activities and teacher training programmes on Chemistry / STEAM education, as well as the learning and teaching resources for Chemistry. 此網站結集化學科／STEAM 教育的最新動態、學生活動資料和教師培訓課程資料，以及化學科的學與教資源。	http://cd1.edb.hkedcity.net/cd/science/chemistry/teacher_resources/index.html
3	Investigative Study in Chemistry – Exemplars of Learning and Teaching Activities 化學的探究研習－學習活動示例 This book includes six exemplars which aim at providing students with opportunities to design and conduct investigations to solve authentic problems. 本書透過六個活動示例，幫助學生設計和進行探究，以解決與化學相關的問題。	**English version** http://cd1.edb.hkedcity.net/cd/science/chemistry/nss/is/nss_is_eng.pdf 中文版 http://cd1.edb.hkedcity.net/cd/science/chemistry/nss/is/nss_is_chi.pdf
4	Nomenclature of Organic Compounds 有機化合物命名法	https://cd1.edb.hkedcity.net/cd/science/chemistry/resource/naming/mainpage.htm

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	This resource introduces the naming system for alkanes, alkenes, halogeno compounds, alcohols, alkanoic acids and esters. 本教材提供烷烴、烯烴、鹵代化合物、醇、羧酸和酯的命名法則。	
5	Promoting the Quality of Chemistry Learning with Active Reading and Writing Tasks – Exemplars of Learning and Teaching Activities 促進化學科學習的閱讀及寫作計畫－學習活動示例 This book includes four exemplars which aim at enhancing the quality of learning of Chemistry using specially designed reading and writing tasks. (Password required) 本書提供四個活動示例，每個示例均透過特別設計的閱讀與寫作課業以促進化學的學習。(需要密碼)	http://cd1.edb.hkedcity.net/cd/science/chemistry/zipfile/active_rw.zip
6	Resource Kit for Secondary 4-5 Chemistry 中四至中五化學教材套 This package includes exemplars of learning activities and inquiry-based chemistry experiments 本教材套包括探究為本化學實驗和學習活動教材示例。	**English version** http://cd1.edb.hkedcity.net/cd/science/chemistry/resource/inquiry_e1.zip http://cd1.edb.hkedcity.net/cd/science/chemistry/resource/s45_chem_exemplars_ew.zip 中文版 http://cd1.edb.hkedcity.net/cd/science/chemistry/resource/inquiry_c1.zip http://cd1.edb.hkedcity.net/cd/science/chemistry/resource/s45_chem_exemplars_cw.zip
7	Resource Materials on A-Level Chemistry Experiments (Chinese version only) 高級程度化學實驗資料冊 This resource presents A-level chemistry experiments. 本冊子提供一系列高級程度化學實驗資料。 (Also suitable for SS Chemistry)	http://cd1.edb.hkedcity.net/cd/science/chemistry/zipfile/al-expt.zip

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	(亦適用於高中化學)	
8	Chemistry Animations 化學動畫 This resource introduces various chemistry concepts through animations. 本教材以動畫的形式，介紹各種化學概念。	https://www.youtube.com/playlist?list=PLzsY_CILZpCEr0YP61TAH5lZL1tipTZzi
9	Learning and Teaching Activities for the Revised Sixth Form Chemistry Curriculum 中六級化學課程學習活動示例 This resource presents exemplars of learning and teaching activities for A-level Chemistry, including IT for interactive learning activities, microscale chemistry experiments, reading to learn activities and inquiry-based chemistry experiments. 本教材提供一些高級程度化學課程的學習活動示例，包括運用資訊科技進行互動學習、微型化學實驗、從閱讀中學習的活動和探究為本的化學實驗。 (Also suitable for SS Chemistry) (亦適用於高中化學)	http://cd1.edb.hkedcity.net/cd/science/chemistry/LTA.html
10	Visualising Chemistry 智趣化學 This package presents 22 chemistry experiments through video to cultivate students' interests in chemistry and develop their understanding of the relevant concepts. 本教材包括 22 個化學實驗的影片，目的是提高學生學習化學的興趣及促進其對相關化學概念的理解。	**Part 1 第一部分** https://www.youtube.com/playlist?list=PLzsY_CILZpCEV3PHAoBnKDDMTDiF5G8U6 **Part 2 第二部分** https://www.youtube.com/playlist?list=PLzsY_CILZpCGdHeyV9BVD4ESdjxb3QxNd
11	Exercises on Structure Determination of Organic Compounds (Mass Spectrometry) 有機化合物結構的測定習作(質譜法) This resource presents exercise and suggested solutions on structure determination of organic compounds by mass spectrometry. 本教材提供一些有關利用質譜法測定有機化合物結構的習作	**English version** Introduction and questions: http://cd1.edb.hkedcity.net/cd/science/chemistry/s67chem/references/MS_Eng2005_Questions.pdf Suggested solutions (password

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	和建議答案。	required): http://cd1.edb.hkedcity.net/cd/science/chemistry/s67chem/references/MS_Eng2005_Solutions.pdf 中文版 指引及習作： http://cd1.edb.hkedcity.net/cd/science/chemistry/s67chem/references/MS_Chi2005_Questions.pdf 參考答案（需要密碼）： http://cd1.edb.hkedcity.net/cd/science/chemistry/s67chem/references/MS_Chi2005_Solutions.pdf
12	Writing with Chemistry Specific Genres 化學科專科語體寫作 This web-based resource aims at providing one-stop online platform for chemistry teachers for guiding students using chemistry specific genres in reading and writing tasks. In addition, the contents are also available in booklets. 本網上資源為化學科教師提供一站式的網上交流平台，指導學生進行化學科專科語體的閱讀及寫作活動。再者，相關內容亦以小冊子出版。	https://cd1.edb.hkedcity.net/cd/science/chemistry/resource/genre/
13	Resource Book for Sixth-form Practical Chemistry 中六級化學實驗資料冊 This resource consists of 12 experiments in various topics such as drug development, green chemistry and spectroscopic analysis of compounds. (Password required) 本資源包括 12 個不同範疇的實驗，例如有關藥物發展和綠色化學，以及涉及光譜分析法的實驗。(需要密碼)	http://www.cuhk.edu.hk/chem/en/resources/sscorner.html
14	Chemistry Experiment Techniques 化學實驗技巧 This web-based resource includes 23 videos demonstrating chemistry	**English version** https://youtube.com/playlist?list=PLzsY_CILZpCF-PSrM02tHLNkeLlXQ_YQp&feature=shared

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	experiment techniques and chemical analyses. 本網上資源包括 23 個示範化學實驗技巧和化學分析的影片。	**中文版** https://youtube.com/playlist?list=PLzsY_CILZpCHD081gallTU0fz66jb4Rfy&feature=shared
15	Chemistry Instructional Videos 化學教學影片 This is a collection of instructional video clips ranging from concepts and skills related to "formula and chemical equation", reactions of metals, as well as redox reactions in chemical cells. The clips are suitable for the use of S4 Chemistry students. 這是一系列學習短片，涵蓋與「方程式和反應式」、金屬的反應，以及化學電池中的氧化還原反應相關的概念和技能。 這些短片適合中四級修讀化學科的學生使用。	中文旁白及中文字幕 / Chinese narrative and subtitle： https://www.youtube.com/playlist?list=PLzsY_CILZpCElWpKJVJpGmaJekUpJo5fa 中文旁白及英文字幕 / Chinese narrative and English subtitle： https://www.youtube.com/playlist?list=PLzsY_CILZpCE166qKYntyrhQd6R7PJyU2 英文旁白及英文字幕 / English narrative and subtitle： https://www.youtube.com/playlist?list=PLzsY_CILZpCFjqlu9tXcV0ZGIdaCGT154
16	Flipped Learning – Mole Concept 翻轉學習 – 摩爾概念 These online resources include instructional videos and lecture notes on the topics of "mole calculations" of the Chemistry curriculum. 此網上資源包括化學課程中「摩爾計算」課題的教學影片及課堂筆記。	**Instructional videos 教學影片** https://www.youtube.com/playlist?list=PLU__a6solGfpCEe0btKdgQGq6Gek08xwt (English narrative and subtitle/英文旁白及字幕) https://www.youtube.com/playlist?list=PLU__a6solGfoxQ8US5sNHQpi8cfc1JtPM (Chinese narrative and subtitle/中文旁白及字幕) **Lecture notes 課堂筆記** https://drive.google.com/open?id=186DHCWODH91BPM-yj1MHQ

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		79-sogRHSAn&authuser=flipclass@chem.cuhk.edu.hk&usp=drive_fs (English version) https://drive.google.com/open?id=19-CWNQnRXpd0DxGXnkVy2rtgJ2WBOa-i&authuser=flipclass@chem.cuhk.edu.hk&usp=drive_fs (中文版)
17	Flipped Learning – Materials Chemistry 翻轉學習－物料化學 These online resources include instructional videos and lecture notes on Topic XIV "Materials Chemistry" of the Chemistry curriculum. 此網上資源包括化學課程中課題十四「物料化學」的教學影片及課堂筆記。	**Instructional videos 教學影片** https://www.youtube.com/playlist?list=PLU__a6solGfpSJVFlaLz5ID0G7XXwvlaq (English narrative and subtitle/英文旁白及字幕) https://www.youtube.com/playlist?list=PLU__a6solGfrD6tB_NtSN5sAWiuke01G_ (Chinese narrative and subtitle/中文旁白及字幕) **Lecture notes 課堂筆記** https://drive.google.com/open?id=1U8X1IjngKqgqTeC-rFhyo6asQD4HrY2B&authuser=flipclass%40chem.cuhk.edu.hk&usp=drive_fs (English version) https://drive.google.com/open?id=1UOO7W0Tu51WJ65bzK0qTHC7P4Fl_K5kj&authuser=flipclass%40chem.cuhk.edu.hk&usp=drive_fs (中文版)

(C) Other useful resources / web links 其他有用資源 / 網上資源		
No. **編號**	**Title** **題目**	**Web Link** **網址**
1	EDB Educational MultiMedia 教育局教育多媒體	https://emm.edcity.hk
2	Teaching Kit on Chemical Testing for New Senior Secondary Curriculum, Hong Kong Council for Testing and Certification & Hong Kong Baptist University 新高中課程化學測試教學組件 （香港檢測和認證局及香港浸會大學）	**English version** https://www.hkctc.gov.hk/en/career/edu/resource_teaching_kit.html 中文版 https://www.hkctc.gov.hk/tc/career/edu/resource_teaching_kit.html