

## Chemistry Resources for Schools

### Resources for students

Key stage	Resource
	<b>Additional Reading</b>
KS4-5	<a href="#">Good Reads: Chemistry</a> A list of popular chemistry books.
KS4/5	<a href="#">Worcester College Bookshelf Project</a> designed to encourage the sharing and review of books that are enjoyed in each subject
KS5	<a href="#">Staircase 12</a> see subject specific materials recommended by current undergraduates
KS5	<p><a href="#">Introductory Material for undergraduate students</a></p> <p>Physical Chemistry, P W Atkins, Oxford University Press (8th edn.) 2006, [7th edn. 2001]</p> <p>Inorganic Chemistry, Shriver and Atkins, Oxford University Press (4th edn) 2006, (previous edn., 1999]</p> <p>Chemistry of the Elements, Greenwood &amp; Earnshaw, Pergamon (2nd edn.), 1997 [1st edn. 1985]</p> <p>Foundations of Organic Chemistry, Hornby &amp; Peach, Oxford Chemistry Primer, OUP, 1996</p> <p>A Guide to Mechanism in Organic Chemistry, Sykes, Pearson (6th edn.), 1986</p> <p>Organic Chemistry, Maitland, Jones, Norton, (3rd edn.) 2004</p> <p>Mathematical Methods for Science Students, G. Stephenson, Pearson (2nd edn.) 1978, rep. 1984</p> <p>Organic Chemistry, Clayden, Greeves, Warren and Wothers, OUP</p>
	<b>Websites</b>
KS5	<a href="#">Chemguide</a> A useful website for A level Chemistry. Provides an alternative 'teacher voice', mainly text.

KS3/4	<a href="#">Memrise.com</a> this has games, clips and apps to help students in learns specific aspects of History.
KS5	RSC <a href="#">Synthesis Explorer</a> synthetic routes and study key organic chemistry reactions interactively with this resource.
KS5	ACD <a href="#">ChemSketch</a> free resource for drawing molecules.
KS5	<a href="#">Nrich maths</a> resources for students intending to study Chemistry at university.
KS5	<a href="#">Questions and challenges</a> set by Oxford tutors - plus <a href="#">Additional questions</a> .
KS4/5	<a href="#">RSC Analysis Resources</a> A useful collection of resources focused on chemical analysis.
All	<a href="#">Things we don't know - Chemistry</a> explains the questions that scientists are trying to answer.
KS4/5	<a href="#">The New Scientist</a>
KS5	<a href="#">The Oxford Science blog</a>
KS1-5	<a href="#">The Chemistry Zone</a> resources for students in all years currently free until August.
KS2-5	<a href="#">Free Chemistry games/ challenges/experiments</a> for children of all ages.
ALL	<a href="#">Educational Chemistry games</a> .
KS2-4	<a href="#">Planet 42 Chemistry games</a> .
KS3	<a href="#">Salter's Institute</a> puzzles activities and challenges.

Yr. 11	<a href="#">Challenging questions involving input from a variety of subjects.</a>
KS1-5	<a href="#">STEM</a> a range of cross curricular science activities for students of all ages that can be carried out at home.
KS4/5	<a href="#">Phet simulations</a> simulations of chemistry experiments.
KS4/5	<a href="#">JCS online resources</a> for home learning- extended free trial for duration of virus.
KS4/5	<a href="#">Century Tech</a> hone learning resources free for duration of virus.
KS3-5	<a href="#">Click View</a> video material for remote learning- charges may apply.
KS4	<a href="#">S-Cool</a> Chemistry GCSE and A Level revision.
KS4	<a href="#">GCSE Bitesize Chemistry.</a>
KS3	<a href="#">KS3 Bitesize Chemistry.</a>
KS4	<a href="#">Spark Notes revision resources – Chemistry.</a>
	<b>Radio/podcasts/videos/MOOCs</b>
KS2-5	<p><a href="#">CLEAPSS YouTube Channel</a></p> <p>A large number of clips detailing practical work developed to support teachers. CLEAPSS suggest these can be used as demonstrations.</p> <p>For those with CLEAPSS membership (£), there is a guidance document (GL339) which provides descriptions and hyperlinks for specific clips.</p>
ALL	<a href="#">Royal Society YouTube Channel</a> curated by playlist, a whole set of engaging videos and clips.
ALL	<a href="#">Wothers.com</a> Engaging series of online videos of lecture-demonstrations from Cambridge University's Chemistry.

KS5	<a href="#">Oxford Research</a> turning an orange into a grapefruit.
KS5	<a href="#">Oxford Research</a> fuel cells inspired by nature.(Video)
KS5	<a href="#">Chemistry in the garden (Video).</a>
KS4-5	<a href="#">BBC Chemistry documentaries.</a> <a href="#">BBC Science and Nature.</a>
KS4/5	<a href="#">Oxford University Chemistry podcasts.</a>
KS4/5	<a href="#">Chemistry World podcasts.</a>
KS4/5	<a href="#">Royal Society of Chemistry periodic table podcast</a> there are podcasts on every element in the periodic table.
KS4/5	<a href="#">Khan Academy</a> Chemistry GCSE and A Level.
KS4-5	<a href="#">Podcasts focusing on interesting areas of Chemistry.</a>
KS4/5	<a href="#">BBC Four in Our Time</a> Chemistry podcasts.
KS4-5	<a href="#">Ted Talks- Chemistry.</a>
KS4/5	<a href="#">The Naked Scientist.</a>
KS4-5	<a href="#">Podbean</a> A Level Chemistry Revision podcasts. <a href="#">GCSE Chemistry Revision podcasts.</a>
KS4-5	Listen Notes <a href="#">GCSE</a> and <a href="#">A Level</a> Chemistry Revision podcasts.
KS4-5	Seneca Learning <a href="#">GCSE</a> Chemistry and <a href="#">A Level</a> podcasts.

KS5	<a href="#">Free Chemistry MOOCS.</a>
	<b>Magazines and Journals</b>
KS5	<a href="#">Chemistry World.</a>
KS5	<a href="#">Royal Society of Chemistry.</a>
KS5	<a href="#">The Scientist: Chemistry</a> Although a subscription magazine, there are free newsletters and access to articles on the website.
	<b>Competitions</b>
KS4-5	<p><a href="#">The Oxford Scientist Schools' Writing Competition</a> is open! It is on the theme:  <b>A scientific discovery, invention or advance that still affects the world today.</b></p> <p>For a chance to win a prize and have your piece published in <i>The Oxford Scientist</i>, send us your thoughts as a 700-word essay by Friday 1<sup>st</sup> May. Open to all UK school students in Years 10 to 13.</p> <p>Deadline 1<sup>st</sup> May 2020.</p>
KS5	<p><a href="#">Unsung Heroes of Science Video Making Competition</a> Anyone in the UK aged 16-18 can enter – we want you to make a short video celebrating a scientist who deserves wider recognition. There are no restrictions on who you can choose to celebrate – they can be alive or dead and from anywhere in the world. We want to see who inspires you in the world of science and learn more about them.</p> <p>Deadline Friday April 24<sup>th</sup> 2020.</p>
KS5	<a href="#">Chemistry Olympiad.</a>
ALL	<a href="#">Various including CREST Awards, Greenpower challenge and Chemistry Festivals.</a>
Yr 12	<a href="#">Cambridge Chemistry Challenge.</a> An excellent annual competition for students in Year 12 (and a great way to extend able Year 11). Past papers, mark schemes and commentaries available.

## Resources for teachers

Resource	Notes
<a href="#">Royal Society for Chemistry</a>	Ideas for teaching practical chemistry remotely.
<a href="#">The Royal Society of Chemistry</a>	Home learning resources for KS5.
<a href="#">The British Science Association</a>	STEM competitions- CREST and Youth Challenge British Science week Mass participation projects and more.
<a href="#">TES Chemistry</a>	Resources for teachers, lesson plans and ideas for activities.
<a href="#">The Royal Society of Chemistry Lectures</a>	masterclasses/CPD
<a href="#">Resourceaholic</a>	Resources for teaching secondary school chemistry quiz.
<a href="#">Revision Buddies</a>	Chemistry revision app- small charge applies
<a href="#">Chemistry in a box KS3</a>	
<a href="#">Chemistry in Action</a>	Video materials of study days.