# **Chemistry 2021-2022**

## Year 9

	What is being learnt?	Remote learning links
	<ul> <li>C1 Atomic Structure (C1.1,C1.2, C1.5- C1.8)</li> </ul>	https://www.bbc.co.uk/bitesize/guides/zg2h4qt/revision/1 https://www.bbc.co.uk/bitesize/guides/z3sg2nb/revision/1 https://teachers.thenational.academy/units/atomic-structure- and-periodic-table-c831
Autumn 1 (Sep-Oct)	• C2 The Periodic Table (C2.1-C2.5)	https://www.bbc.co.uk/bitesize/guides/zg923k7/revision/1 https://www.bbc.co.uk/bitesize/guides/zqwtcj6/revision/1 https://teachers.thenational.academy/units/atomic-structure- and-periodic-table-c831
	Continuation of     The Periodic Table	
Autumn 2 (Nov-Dec)	<ul> <li>C3 Structure and Bonding (C3.1- C3.4)</li> </ul>	https://www.bbc.co.uk/bitesize/guides/z93jfcw/revision/1 https://www.bbc.co.uk/bitesize/guides/zyydng8/revision/1 https://teachers.thenational.academy/units/bonding- structure-and-the-properties-of-matter-e93f

	Continuation of Term 2	https://teachers.thenational.academy/units/bonding- structure-and-the-properties-of-matter-e93f
Winter 3 (Jan-Feb)	Ionic Bonding (C3.1-3.4)	https://www.bbc.co.uk/bitesize/guides/zyydng8/revision/1
	Metallic Bonding (C3.9-3.10)	https://www.bbc.co.uk/bitesize/guides/z8db7p3/revision/1
Spring 4 (Feb-Mar)	<ul> <li>Continuation of Term 3</li> </ul>	https://teachers.thenational.academy/units/bonding- structure-and-the-properties-of-matter-e93f
	Covalent Bonding (C3.5-3.8)	https://www.bbc.co.uk/bitesize/guides/zcpjfcw/revision/1 https://www.bbc.co.uk/bitesize/guides/z9twsrd/revision/1
Summer 6 (Jun-Jul)	• Earth's Resources C12	https://classroom.thenational.academy/lessons/finite- resources-6xh6ac https://classroom.thenational.academy/lessons/life-cycle- assessments-6dhkae https://classroom.thenational.academy/lessons/phytomining- and-bioleaching-70tp4c
		https://www.bbc.co.uk/bitesize/guides/zgqhcj6/revision/2 https://www.bbc.co.uk/bitesize/guides/z96ydxs/revision/1

## Year 10

	What is being learnt?	Remote learning links
Autumn 1 (Sep-Oct)	<ul> <li>Earth's Resources (Trilogy Book C4.1- C12.3) (Chemistry Book C14.1-C14.3)</li> <li>Rates and Equilibria C8.1-8.9</li> </ul>	https://www.bbc.co.uk/bitesize/guides/zpcjsrd/revision/1 https://teachers.thenational.academy/lessons/water-safe- to-drink-60r3gc https://teachers.thenational.academy/lessons/required- practical-on-potable-water-6ngkjd https://teachers.thenational.academy/lessons/wastewater- treatment-cmup4e https://www.bbc.co.uk/bitesize/guides/z3nbqhv/revision/1 https://teachers.thenational.academy/units/the-rate-and- extent-of-chemical-change-0530 https://www.bbc.co.uk/bitesize/guides/zyhvw6f/revision/1
Autumn 2 (Nov-Dec)	• Electrolysis 6.1-6.4	<u>https://www.bbc.co.uk/bitesize/guides/zcsyw6f/revision/1</u> <u>https://teachers.thenational.academy/lessons/electrolysis-of-molten-compounds-cgw66t</u> <u>https://teachers.thenational.academy/lessons/extraction-of-aluminium-68w38r</u>

	<ul> <li>C4 Chemical Calculations (Trilogy Book C4.1-C4,4) (Chemistry Book C4.1-C4.3, C4.6)</li> </ul>	https://teachers.thenational.academy/lessons/electrolysis- of-solutions-cmv3ge https://teachers.thenational.academy/lessons/electrolysis- half-equations-c8r6ar https://teachers.thenational.academy/lessons/electrolysis- review-c4w38rhttps://www.bbc.co.uk/bitesize/guides/zgcyw6f/revision/1 https://www.bbc.co.uk/bitesize/guides/z3kg2nb/revision/1 https://teachers.thenational.academy/units/quantitative- chemistry-4db7
Winter 3	Continuation of C4     Calculations	https://www.bbc.co.uk/bitosizo/quidos/zeb/w/6f/rovision/1
(Jan-Feb)	C9 Crude Oil	https://www.bbc.co.uk/bitesize/guides/zshvw6f/revision/1 https://teachers.thenational.academy/units/organic- chemistry-7c58
Spring 4 (Feb-Mar)	<ul> <li>Continuation of C9 Crude Oil</li> </ul>	

Summer 5 (Apr-May)	<ul> <li>Atmosphere (Trilogy Book C11) (Chemistry Book C13)</li> </ul>	https://teachers.thenational.academy/units/chemistry-of- the-atmosphere-522e https://www.bbc.co.uk/bitesize/topics/zw2xjty
Summer 6 (Jun-Jul)	<ul> <li>C7 Energy Changes</li> </ul>	https://www.bbc.co.uk/bitesize/guides/zwfr2nb/revision/1 https://teachers.thenational.academy/units/energy- changes-b607

### Year 11 (Separate Award)

#### **Use of Science Workbook**

	What is being learnt?	Remote learning links
	<ul> <li>C15 Using Our Resources C15 (C15.5-15.8)</li> </ul>	https://www.bbc.co.uk/bitesize/guides/z9tvw6f/revision/1 https://teachers.thenational.academy/lessons/making- ammonia-and-the-haber-process-70rkat https://teachers.thenational.academy/lessons/the- economics-of-the-haber-process-74r32d https://teachers.thenational.academy/units/quantitative-
Autumn 1 (Sep-Oct)		<u>chemistry-4db7</u> <u>https://www.bbc.co.uk/bitesize/guides/z8wkh39/revision/1</u> <u>https://www.bbc.co.uk/bitesize/guides/zx98pbk/revision/1</u>
	<ul> <li>C12 Analysis</li> </ul>	https://www.bbc.co.uk/bitesize/guides/zqqtrwx/revision/1 https://teachers.thenational.academy/units/chemical- analysis-cf8d https://www.bbc.co.uk/bitesize/guides/zxtvw6f/revision/1 https://classroom.thenational.academy/lessons/identifying- positive-ions-75j3ce

	<ul> <li>C3 Chemical Calculations C4.4, 4.5, 4.7-4.9</li> </ul>	https://teachers.thenational.academy/lessons/testing-for- negative-ions-cdk64c https://teachers.thenational.academy/units/quantitative- chemistry-4db7 https://www.bbc.co.uk/bitesize/guides/z8wkh39/revision/1 https://www.bbc.co.uk/bitesize/guides/zx98pbk/revision/1
Autumn 2 (Nov-Dec)	<ul> <li>Continuation of Chemical Calculations</li> <li>C7 Energy Changes (C7.5-7.6)</li> </ul>	https://teachers.thenational.academy/lessons/fuel-cells- cguk4d https://www.bbc.co.uk/bitesize/guides/z2396yc/revision/1
Winter 3 (Jan-Feb)	<ul> <li>C10 Organic Chemistry</li> </ul>	https://teachers.thenational.academy/lessons/alcohols- 69j3jc https://teachers.thenational.academy/lessons/properties- and-combustion-of-alcohols-crwkad https://teachers.thenational.academy/lessons/carboxylic- acids-c8u62t https://www.bbc.co.uk/bitesize/guides/z3v4xfr/revision/1

	•	C11 Polymers	https://teachers.thenational.academy/lessons/natural-and- addition-polymers-c8t3et https://teachers.thenational.academy/lessons/condensation- polymers-70rkgd https://www.bbc.co.uk/bitesize/guides/z3v4xfr/revision/6
			https://teachers.thenational.academy/units/chemical- changes-a5ba https://www.bbc.co.uk/bitesize/guides/zcsyw6f/revision/1
	•	Revision	
Spring 4 (Feb-Mar)	•	C5 Chemical Changes	https://www.bbc.co.uk/bitesize/guides/zsm7v9q/revision/1 https://www.bbc.co.uk/bitesize/guides/zcjjfcw/revision/1 https://teachers.thenational.academy/units/chemical- changes-a5ba
	•	C13 The Earth's Atmosphere	https://www.bbc.co.uk/bitesize/topics/zw2xjty
	•	C14 The Earth's Resources	https://www.bbc.co.uk/bitesize/guides/zgqhcj6/revision/2 https://www.bbc.co.uk/bitesize/guides/z96ydxs/revision/1

### Year 11 (Combined Sciences)

#### Use of Science Workbook

	What is being learnt?	Remote learning links
Autumn 1 (Sep- Oct)	<ul> <li>C12 Analysis</li> </ul>	https://www.bbc.co.uk/bitesize/guides/zqqtrwx/revision/1 https://teachers.thenational.academy/units/chemical-analysis-cf8d
	<ul> <li>Revision Chemical Changes C5</li> </ul>	https://www.bbc.co.uk/bitesize/guides/zsm7v9q/revision/1 https://www.bbc.co.uk/bitesize/guides/zcjjfcw/revision/1 https://teachers.thenational.academy/units/chemical-changes-a5ba
Autumn 2	<ul> <li>C13 The Earth's Atmosphere</li> </ul>	https://www.bbc.co.uk/bitesize/topics/zw2xjty
(Nov- Dec)	<ul> <li>C14 The Earth's Resources</li> </ul>	https://www.bbc.co.uk/bitesize/guides/zgqhcj6/revision/2 https://www.bbc.co.uk/bitesize/guides/z96ydxs/revision/1

Winter 3	Revision of	
(Jan-	Early Units	
Feb)	C1-3	See Teams for Revision Sheets
Spring 4	Revision of	Use of Science Workbook
(Feb-	Early Units	
Mar)	C5,8,9,10	

### **Year 12**

Use of Fact Sheets on Teams for Extra Notes

	What is being learnt?	Remote learning links
Autumn 1 (Sep-Oct)	<ul> <li>Module 2 Structure and Bonding 2.2.1-2.12, 2.1.18- 2.1.19, 3.1.3-3.1.6</li> <li>Module 2 Atoms and Reactions</li> </ul>	
	2.1.1-2.1.17	
Autumn 2 (Nov-Dec)	<ul> <li>Continuation of Term 1</li> <li>Module 3 The Periodic Table 3.1.1-3.1.2, 3.1.7- 3.1.11</li> <li>Module 4 Organic 1 4.1.1-4.1.11</li> </ul>	Videos: <u>MAChemGuy</u> / <u>Khan Academy</u> Notes: Fact Sheets (Teams) / <u>Chem Guide</u> / <u>Doc</u> <u>Brown</u> Questions: <u>Physics and Maths Tutor</u>
	Continuation of Term 2	
	Module 3	

Winter 3	Physical Chemistry	
(Jan-Feb)	3.2.1-3.2.5	
	<ul> <li>Module 4 Organic 1 4.2.1-4.2.5</li> </ul>	
Spring 4 (Feb-Mar)	<ul> <li>Continuation of Term 3</li> <li>Module 3 Physical Chemistry 3.2.6-3.2.12</li> </ul>	
	<ul> <li>Module 4 Organic 2 4.2.6-4.2.12</li> </ul>	Videos: <u>MAChemGuy</u> / <u>Khan Academy</u> Notes: Fact Sheets (Teams) / <u>Chem Guide</u> / <u>Doc</u> <u>Brown</u>
Summer 6 (Jun-Jul)	<ul> <li>Y13 Book</li> <li>Module 5 Physical Chemistry 5.1.1-5.1.5 5.1.6</li> <li>Module 6 Organic Chemistry 6.1.7-6.1.11</li> </ul>	Questions: Physics and Maths Tutor

### Year 13

### Use Fact Sheets on Teams for Extra Notes

	What is being learnt?	Remote learning links
Autumn 1 (Sep-Oct)	<ul> <li>Module 5 pH 5.1.9-5.1.14</li> <li>Module 6 Nitrogen, Polymers</li> </ul>	
	<ul> <li>and Synthesis</li> <li>6.2.1-6.2.11</li> <li>Continuation of Term 1</li> </ul>	
Autumn 2 (Nov-Dec)	Module 5     Energy / Entropy     5.2.1-5.2.6	Videos: <u>MAChemGuy</u> / <u>Khan Academy</u> Notes: Fact Sheets (Teams) / <u>Chem Guide</u> / <u>Doc</u> <u>Brown</u>
		Questions: <u>Physics and Maths Tutor</u>

Winter 3 (Jan-Feb)	<ul> <li>Module 5 Standard Electrode Potentials 5.2.9-5.10</li> <li>Transition Metals 5.3.1-5.3.6</li> <li>Module 6 Analysis 6.3.1-6.3.2</li> </ul>	Videos: <u>MAChemGuy</u> / <u>Khan Academy</u> Notes: Fact Sheets (Teams) / <u>Chem Guide</u> / <u>Doc</u> <u>Brown</u> Questions: <u>Physics and Maths Tutor</u>
Spring 4 (Feb-Mar)	<ul> <li>Redox / Transition Metals 5.2.7-5.2.8 / 5.3.7</li> <li>Revision</li> </ul>	