

Revision for Chemistry: Paper 1

For knowledge organisers – see JSTC website: <https://www.jstc.org.uk/science>

Topic title	Brief content overview	Required practical	External Links
C1 Atomic structure	<ul style="list-style-type: none"> • Atomic structure • Electronic structure • History of the Atom • Separating Mixtures • Balancing Equations • Ion and Isotopes 		FreeSciencelessons on YouTube :videos 1-11 https://www.youtube.com/playlist?list=PL9IouNCPbCxULWXCO9jt0PsuAbxYpw2_1 BBC Bitesize https://www.bbc.co.uk/bitesize/topics/zcckk2p
C2 The periodic table	<ul style="list-style-type: none"> • History of the Periodic table • The Modern Periodic table • Group 1 – Alkali Metals • Group 7- the Halogens • Group 0 – the noble gases 		FreeSciencelessons on YouTube: videos 12-19 https://www.youtube.com/playlist?list=PL9IouNCPbCxULWXCO9jt0PsuAbxYpw2_1 BBC Bitesize https://www.bbc.co.uk/bitesize/topics/zcckk2p
C3 Structure and bonding	<ul style="list-style-type: none"> • Ionic bonding, structures and properties • Metallic bonding, structures and properties • Covalent bonding – simple covalent molecules • Diamond, graphite • Fullerenes and graphene 		FreeSciencelessons on YouTube: videos 1-13 https://www.youtube.com/playlist?list=PL9IouNCPbCxXmFgiKCM60SgIh-qOG_vIE BBC Bitesize https://www.bbc.co.uk/bitesize/topics/z33rrwx
C4 Quantitative chemistry	<ul style="list-style-type: none"> • Relative masses and the mole • Equations and calculations • Concentration 		FreeSciencelessons on YouTube: video 1-16 https://www.youtube.com/playlist?list=PL9IouNCPbCxUhxxFUBr4SNfwmaRB8mYX3 BBC Bitesize https://www.bbc.co.uk/bitesize/topics/zsnyy4j

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C5 Chemical Changes	<ul style="list-style-type: none"> • Reactivity series • Displacement reactions • Extracting metals • Making Salts from metals and bases • Neutralisation, pH scale • Strong and weak acids 	C8 making a dry soluble salt	FreeSciencelessons on YouTube: videos 1-10 https://www.youtube.com/playlist?list=PL9IouNCPbCxXDIRtCQEG0cGehBvJ7t9Pf BBC Bitesize https://www.bbc.co.uk/bitesize/topics/zt6ppbk
C6 Electrolysis	<ul style="list-style-type: none"> • Electrolysis • Reactions at the electrodes • Extraction of Al • Electrolysis of aqueous solutions 	C9 Electrolysis	FreeSciencelessons on YouTube: videos 14-18 https://www.youtube.com/playlist?list=PL9IouNCPbCxXDIRtCQEG0cGehBvJ7t9Pf BBC Bitesize https://www.bbc.co.uk/bitesize/topics/zt6ppbk
C7 Energy Changes	<ul style="list-style-type: none"> • Exothermic and endothermic reactions • Uses of exo and endo • Reaction profiles • Bond energy calculations 	C10 Temp changes	FreeSciencelessons on YouTube: videos 1-4 https://www.youtube.com/playlist?list=PL9IouNCPbCxX74bPz0TGvVmyGYgMarWu BBC Bitesize https://www.bbc.co.uk/bitesize/topics/z27xxfr