S3/S4 Chemistry

TERM 1 (Aug 13th – Nov 14th 2020)

Weeks	Course Outline
Week 1 (August 13 -15)	Revision of previous Knowledge
Week 2, 3 (Aug 17 -29)	• Rates of reaction • Everyday consumer products • Carboxylic acids • Calculations from equations
Week 4, 5 (Aug 31 – Sep 12)	• alcohols • Calculations from equations • Energy from fuels • Fuels burn releasing different quantities of energy. The quantity of heat energy released can be determined experimentally and calculated using, Eh = cm∆T
Week 6 (Sep 14 – 19)	• Rates of reaction • Fuels burn releasing different quantities of energy. The quantity of heat energy released can be determined experimentally and calculated using, Eh = cm∆T
Week 7, 8 (Sep 21 – Oct 3)	• Rates of reaction • Fuels burn releasing different quantities of energy. The quantity of heat energy released can be determined experimentally and calculated using, Eh = cm∆T Assessment
Week 9	• Functional groups and naming • Rates of reaction

(Oct 5 – 10)	
Week 10 (0ct 12 – 17)	**MID-TERM HOLIDAY**
Week 11 (Oct 19 – 24)	**ASSESSMENT OF HALF TERM WORK** • application of skills of scientific inquiry and related chemistry knowledge and understanding • Reporting experimental work
Week 12 (Oct 26 – 31)	• application of skills of scientific inquiry and related chemistry knowledge and understanding • Reporting experimental work
Week 13 (Nov 2 – 7)	• Periodic Table and atoms Revision of unit 2
Week 14 (Nov 9 - 14)	Revision of unit 2 • Periodic Table and atoms
Nov 14 – 15	**END OF TERM 1**

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TERM 2 (Nov 16th 2020 – Feb 27th 2021)

Week 1 (Nov 16 – 21)	**INTRODUCTION TO UNIT 3** • Atomic number and mass number
Week 2 (Nov 23 – 28)	• Calculating numbers of subatomic particles • Metals and properties
Week 3 (Nov 30 – Dec 5)	• Isotopes • Metallic bonding • Reactions of metals
Week 4 (Dec 7 – 12)	• Covalent bonding • Metallic bonding • Reactions of metals
Week 5 (Dec 14 -19)	• Diagrams to show how outer electrons are shared to form the covalent bond(s) in a molecule. • Covalent network structures: • order of reactivity
Week 6 (Dec 21 – 23)	• Ionic compounds • Properties and structure • Redox • Ion-electron equations
Week 6 - 7 (Dec 24 – Jan 5)	**WINTER BREAK**
Week 8 (Jan 6 – 9)	**ASSESSMENT**

Week 9 (Jan 11 – 16)	• Properties and structure • Metallic bonds, properties and structure • Redox • Ion-electron equations
Week 10 (Jan 18 – 23)	• Properties and structure Metallic bonds, properties and structure • Redox • Ion-electron equations
Week 11 (Jan 25 – 30)	• Properties and structure • Metallic bonds, properties and structure • Extraction of metals
Week 12 (Feb 1 – 5)	• Formulae and reacting quantities • Electrochemical cells
Feb (6 – 9)	**MID-TERM HOLIDAY**
Week 13 (Feb 10 -13)	• Formulae and reacting quantities • Electrochemical cells
Week 14 (Feb 15 -20)	• Formulae and reacting quantities • Electrochemical cells
Week 15 (Feb 22 – 27)	Assessment/revision
	END OF TERM 2

S3/S4 Chemistry

TERM 3 (March 1st – June 26th 2021)

Week 1 (March 1- 6)	• Plastics • Acids and bases
Week 2 (March 8 - 13)	• Acids and bases • Addition polymerisation
Week 3 (March 15 - 20)	• Acids and bases • Addition polymerisation
Week 4 (March 22 - 27)	• Acids and bases • Nuclear chemistry
Week 5 (March 29 – April 1st)	• Acids and bases • Fertilisers
Week 5 - 7 (April 2– 17)	**APRIL HOLIDAY**
Week 8 (April 19 - 24)	• Fertilisers Naming hydrocarbons
Week 9 (April 26 – May 1)	• Fertilisers Naming hydrocarbons
Week 10 (May 3 - 8)	MAY DAY, RAMADHAN/EID HOLIDAY
Week 11 (May 10 - 15)	**RAMADHAN/EID HOLIDAY**

Week 12 (May 17 – 22)	Revision Naming hydrocarbons
Week 13 (May 24 -29)	Revision Naming hydrocarbons
May 28th – May 31st, 2021	**MID-TERM HOLIDAY**
Week 14 (May 31 – June 5)	Revision Naming hydrocarbons
Week 15 (June 7 – 12)	Revision Naming hydrocarbons
Week 16 (June 14 – 19)	Revision
Week 17 (June 21 – 26)	Revision
	END OF TERM 3