

TRILOGY CHEMISTRY - FOUNDATION TIER

Week 1

Session 1 – Atomic Structure

[Cognito Video #1](#)

[Cognito Video #4](#)

Session 2 – Practice Exam Questions

[5.1 Practice Exam Questions](#)

Session 3 – Development of the Periodic Table

[Development of the Periodic Table FreeScienceLessons](#)

Session 4 – Metals & Non-Metals

[Metals FreeScienceLessons](#)

Session 5 – Group 0

[Group 0 FreeScienceLessons](#)

Session 6 – Group 1

[Group 1 FreeScienceLessons](#)

[Group 1 FreeScienceLessons part 2](#)

Session 7 – Group 7

[Group 7 FreeScienceLessons Part 1](#)

[Group 7 FreeScienceLessons Part 2](#)

[Group 7 FreeScienceLessons Part 3](#)

Week 2

Session 1 – Practice Exam Questions

[5.2 Practice Exam Questions](#)

Session 2– Properties of Ionic Compounds

[Properties of Ionic Compounds FreeScienceLessons](#)

Session 3 – Properties of Small Covalent Molecules

[Properties of Small Covalent Molecules FreeScienceLessons](#)

Session 4– Polymers

[Bonding in Polymers FreeScienceLessons](#)

Session 5– Giant Covalent Structures

[Cognito Video #15](#)

Session 6 – Metals & Alloys

[Metals & Alloys FreeScienceLessons](#)

Session 7 – Diamond and Graphite

[Diamond and Silicon Dioxide FreeScienceLessons](#)

[Graphite FreeScienceLessons](#)

Week 3

Session 1 – Graphene and Fullerenes

[Graphene and Fullerenes FreeScienceLessons](#)

Session 2 – Practice Exam Questions

[5.2 Practice Exam Questions](#)

Session 3 - Reactivity Series & Metals and Acids

[Reactivity Series FreeScienceLessons](#)

[Acids Reacting with Metals 1 FreeScienceLessons](#)

[Acids Reacting with Metals 2 FreeScienceLessons](#)

Session 4 – Metal oxides & Oxidation

[Reaction of Metals with Oxygen FreeScienceLessons](#)

Session 5 – Metal Extraction & Reduction

[Cognito Video #31](#)
[Extraction of Metals FreeScienceLessons](#)

Session 6 – pH scale and Neutralisation

[Cognito Video #29](#)
Session 7 – Neutralisation and Making a Salt RP
[Required Practical 1 FreeScienceLessons](#)
[Malmesbury Education Video](#)

Week 4

Session 1- Electrolysis Molten Ionic Compounds

[Introducing Electrolysis FreeScienceLessons](#)
[Cognito Video #33](#)

Session 2 - Using Electrolysis to extract Metals

[Cognito Video #34](#)
[Electrolysis of Aluminium Oxide FreeScienceLessons](#)

Session 3- Electrolysis of Aqueous Ionic Compounds and RP

[Cognito Video #35](#)
[Malmesbury Education Required Practical](#)

Session 4 – Practice Exam Questions

[5.4 Practice Exam Questions](#)

Session 5- Exothermic & Endothermic Reactions and RP

[Cognito Video #36](#)
[Malmesbury Education Required Practical](#)

Session 6 – Practice Exam Questions

[5.5 Practice Exam Questions](#)

Session 7- Calculating Rates of Reaction

[Mean Rate of Reaction FreeScienceLessons](#)

Week 5

Session 1 – Factors which Affect Rate of Reaction, Collision Theory & Activation Energy

[Cognito Video #40](#)
[Effect of Concentration on Rate FreeScienceLessons](#)
[Effect of Surface Area on Rate FreeScienceLessons](#)
[Effect of Temperature on Rate FreeScienceLessons](#)

Session 2- Required Practical 11

[Malmesbury Education – disappearing cross](#)
[Malmesbury Education – collecting a gas](#)

Session 3- Catalysts

[Catalysts FreeScienceLessons](#)

Session 4- Reversible Reactions, Equilibrium – effect of changing conditions

[Reversible Reactions FreeScienceLessons](#)
[Cognito Video #41](#)

Session 5 – Practice Exam Questions

[5.6 Practice Exam Questions](#)

Session 6 – Crude Oil, Hydrocarbons and Alkanes

[Crude Oil and Hydrocarbons FreeScienceLessons](#)

Session 7 – Fractional Distillation

[Fractional Distillation FreeScienceLessons](#)
[Cognito Video #45](#)

Week 6

Session 1 – Properties of Hydrocarbons and Combustion

[Properties of Hydrocarbons FreeScienceLessons](#)
[Combustion of Hydrocarbons FreeScienceLessons](#)
[Cognito Video #44](#)

Session 2 – Cracking and Alkenes

[Cracking FreeScienceLessons](#)
[Cognito Video #46](#)

Session 3 – Practice Exam Questions

[5.7 Practice Exam Questions](#)

Session 4 – Pure Substances and Formulations

[Purity and Formulations FreeScienceLessons](#)

Session 5 – Chromatography RP 12

[Chromatography FreeScienceLessons](#)
[Malmesbury Education](#)

Session 6 – Practice Exam Questions

[5.8 Practice Exam Questions](#)

Session 7- Composition of the Earth's Atmosphere and Evolution of the Atmosphere

[The Atmosphere FreeScienceLessons](#)
[Cognito Video #52](#)

Week 7

Session 1 –Atmospheric Pollutants from Fuels

[Cognito Video #55](#)

Session 2 – Practice Exam Questions

[5.9 Practice Exam Questions](#)

Session 3 – Using Earth's Resources and Sustainable Development

[Using the Earth's Resources FreeScienceLessons](#)

Session 4 – Potable Water

[Potable Water FreeScienceLessons](#)
[Cognito Video #56](#)

Session 5 – Waste Water Treatment

[Waste Water Treatment FreeScienceLessons](#)
[Cognito Video #57](#)

Session 6 – Practice Exam Questions

[5.10 Practice Exam Questions](#)