

STA KS4 AQA Combined Award Science Journey

Separate science – additional content key

A Level
Physics

A Level
Biology

Revision period
preceding GCSE
Exams

A level
Chemistry

Physics Topic 5 – Forces
PAGs: Acceleration, Extension

Numeracy – Force and momentum equations, equilibriums, graphical representations, Trigonometry
Literacy – Describing equations, explaining graphs, comparing calculations

Physics Topic 6 – Waves
PAGs: Waves, Radiation & Absorption, Light

Numeracy – Wave equations, Scale, Trigonometry
Literacy – Describing equations, evaluating waves

Physics Topic 7 – Electromagnetism

Numeracy – Magnetic Equations
Literacy – comparing magnets, explaining Mechanisms

Physics Topic 8 – Space

Literacy – Describing Star life sequences, Explaining formation of solar system

Physics
Paper 2
Mock

Chemistry
Paper 2
Mock

Chemistry Topic 9 – Chemistry of the Atmosphere

Numeracy – Graphical Analysis
Literacy – Evaluating, analyzing explaining data trends.

Chemistry Topic 8 – Chemical Analysis
PAGs: Chromatography & Identifying ions

Literacy – Recall and application of practical methods

Chemistry Topic 7 – Organic Chemistry

Numeracy – Ratios & formulas
Literacy – Description of organic processes

Chemistry Topic 6 – The Rate & Extent of Chemical Change
PAGs: Rates of reaction
Numeracy – Rates, Gradient Calculations
Literacy – Application of principles

Chemistry Topic 10 – Using Resources
PAG: water purification
Numeracy – Ratios, Yields
Literacy – Explaining & Evaluating Life cycle assessments

Biology Topic 5 – Homeostasis & response
PAGs: Reaction time & plant responses
Numeracy – Anomalies, Means & Graphical Analysis.
Literacy – Explaining feedback systems & applying them to new situations, Describing cycles in the body

Biology Topic 6 – Inheritance, Variation & Evolution

Numeracy – Ratios and percentages
Literacy – Explaining cause and effect (flow diagrams)

Biology
Paper 2
Mock

YEAR
11

Physics
Paper 1
Mock

Physics Topic 3 – Particle Model of Matter
PAGs: Density
Numeracy – Density Equation
Literacy – Describing State change and explaining state properties

Physics Topic 2 – Electricity
PAGs: IV profiles, Resistance

Numeracy – Electrical Equations,
Literacy – Describing Effects of Electricity

Physics Topic 1 – Energy
Assessed Practical Experiments: Specific Heat Capacity & Thermal insulation
Numeracy – Energy Equations, Efficiency
Literacy – Evaluation of energy sources

Biology Topic 7 – Ecology
PAGs – Field Investigations & Decay
Numeracy – Ratios and percentages, Statistical analysis
Literacy – Analysing data, Evaluating human strategies in the environment

Physics Topic 4 – Atomic Structure
Numeracy – Conservation of Mass and Charge, Half life Calculations
Literacy – Comparing Radiation, Describing uses of Radiation

Chemistry Topic 2 – Bonding, Structure of Matter and Properties of Matter

Numeracy – Valancy of Ions, compound formulas, Balancing Equations
Literacy – Comparing bonding and their Structures

Chemistry Topic 4 – Chemical Changes
PAGs: Making Salts, Electrolysis & Neutralisation

Numeracy – pH Scaling, Redox reactions
Literacy – Explaining displacement equations

Chemistry
Paper 1
Mock

Chemistry Topic 1 – Atomic Structure and the Periodic Table
Numeracy – Conservation of mass, Periodic table Structure, Electronic Structure
Literacy – Describing and explaining trends

Biology Topic 3 – Infection and Response

Numeracy – Graphical analysis of Statistical data
Literacy – Evaluation of treatments and preventative methods for disease

Chemistry Topic 3 – Quantitative Chemistry

Numeracy – Balancing Equations, Atomic/Molecular Mass, Mole and Concentration Equations + Rearranging

Chemistry Topic 5 – Energy Changes
PAGs: Temperature changes

Numeracy – Graphical representation of Exo and Endo, Enthalpy calculations
Literacy – Explaining displacement equations

Biology
Paper 1
Mock

YEAR
10

Biology Topic 4 – Bioenergetics
PAGs: Photosynthesis
Numeracy – Rate Calculations, BMI, Graphical Analysis of Rates
Literacy – Evaluations using data from numerical methods

Biology Topic 2 – Organisation
PAGs: Food Tests, Enzymes

Numeracy – Means, Graphical Analysis
Literacy – Comparing Organs, Explaining functions using properties of tissue

Biology Topic 1 – Cell Biology
PAGs: Microscopy, Osmosis

Numeracy – Magnification, Means, Graphical Analysis.
Literacy – Magnitude prefixes, Comprehension, Comparing methods of transport, Describing Specialisation