



Chemistry

This branch of science is concerned with the substances of which matter is composed, the investigation of their properties and reactions, and the use of such reactions to form new substances. Pupils should be encouraged to understand how science can be used to explain what is occurring, predict how things will behave, conduct experiments, record findings and analyse causes and effects.

Chemistry Long Term Curriculum Plan

Area	Topic	Recommended Age/Stage
Introduction	Water The Water Cycle Carbon The Carbon Cycle Inorganic Chemistry Organic Chemistry Photosynthesis The Nitrogen Cycle	9-11 Y5-6
The Scientific Method	Purpose of The Scientific Method The Scientific Method Materials Safety Equipment Safety Rules Group Discussion Experiments For Each Level	9-11 Y5-6



Chemistry - Matter	Purpose of Studying Chemistry: Matter Chemistry Matter Composition of Matter Physical States of Matter	9-11 Y5-6
Properties Of Matter	Purpose of Studying Properties of Matter Physical Properties of Matter Experiments With Physical Properties Chemical Properties of Matter Experiments With Chemical Properties Energy And Changes In Matter	9-11 Y5-6
States Of Matter	Purpose of Studying States of Matter States of Matter: Gases States of Matter: Liquids States of Matter: Solids Phase Changes Energy And Phase Changes States of Matter: Plasma	9-11 Y5-6
Measurement	Purpose of Studying Measurement Linear Measurement Volume Measurement Measurement of Mass/Weight Measurement of Temperature Measurement of Density And Specific Gravity Research Topics	9-11 Y5-6



Mixtures	Purpose of Studying Mixtures Mixtures Kinds of Mixtures Solutions Suspensions Colloids Research Topics	9-11 Y5-6
The Elements	Purpose of Studying The Elements Elements Chemical Symbols Atoms Electrons, Protons, And Neutrons The Structure of The Atom Atomic Number Mass Number Isotopes Atomic Mass or Atomic Weight Electrons And Orbitals Presentation: Atoms And The Periodic Table Periodic Table Atomic Size Energy Electron Affinity Atoms and Ions Research Topics	9-11 Y5-6



Compounds	Purpose of Studying Compounds Compounds The Octet Rule Atoms And Ions Ionic Bonds And Compounds Covalent Bonds And Molecular Compounds Chemical Formulas Ionic Charges of The Elements Lewis Electron Dot Diagrams Electronegativity Polyatomic Ions Acids And Bases Oxidation Number	9-11 Y5-6
Energy	Purpose of Studying Energy Energy Kinetic Energy Potential Energy Heat Energy Changes In State Electromagnetic Energy Electrical Energy Nuclear Energy Law of Conservation Of Energy	9-11 Y5-6



Chemical Reactions	Purpose of Studying Chemical Reactions Chemical Reactions Writing Chemical Equations Balancing Chemical Equations Combination Reactions Decomposition Reactions Single-replacement Reactions Double-replacement Reactions Combustion Reactions Oxidation-reduction Reactions	9-11 Y5-6
Photosynthesis	Purpose of Studying Photosynthesis Photosynthesis The Light Reaction The Dark Reaction The Importance Of Photosynthesis	9-11 Y5-6