Higham Lane School

KS3 and 4 Chemistry

AQA Realising potential

A level Sciences – Biology, Chemistry and Physics (Need grade 6 and above and grade 6 in Maths)

Other post 16 options – Apprenticeships, other A level subjects, other BTEC subjects, other training, College?

End of year exams!!

Recycling and Life cycle assessments

Bioleaching & phtomining

Potable water

Sewage treatment

Reacting masses and limiting reagents

Conservation of mass

Electrolysis

Redox reactions

Neutralisation reactions

$H^+ + OH^- \rightarrow H_2O$

Reactivity of metals

Fractional distillation

YEAR 11

C8 Chemical Changes

Making salts

C9 Quantitative calculations

$CuSO_4$

Relative formula mass

Moles

1 Mole

6.02×10^{23}

C10 Using resources

Carbon compounds

How bonding and structure are related to properties

The Periodic table

Model of the atom

YEAR 10

Reversible reactions and dynamic equilibrium

Rate of reaction

C7 Organic Chemistry

Structure and bonding of carbon

Chemical bonds, ionic, covalent and metallic

C6 Bonding, Structure and the properties of matter

C5 Rates of reaction

C2 Chemistry of the atmosphere

Greenhouse gases

Effects of climate change

C3 Metal reactivity

Displacement reactions

Exothermic and endothermic reactions

C4 Energy Changes

Chromatography

Chemical analysis

Evolution of the Earth's atmosphere

Greenhouse effect

Atmospheric pollutants

Metal reactivity

Purity and formulations

Model of the atom

YEAR 9

Recycling

Air pollution

Carbon cycle

8C3 Climate & Earth's resources

Conservation of mass

Temperature changes

Separating mixtures: Filtration and distillation

C1 Atoms and mixtures

Extraction of metals

Greenhouse effect

Metals and acids

Combustion

The Rock cycle

Day, night & seasons

8C1 The Periodic table & elements

Atom structure

Group 1 and 7

8C2 Chemical energy & reactions

Rock types

YEAR 8

Solar system

The periodic table

Elements & compounds

7C3 Earth structure & Universe

Displacement reactions

Rusting

Neutralisation

7C2 Acids & alkalis, Metals & non-metals

Solubility

Diffusion

Particle model

Metal reactions

Properties of metals

The pH scale

1 – 7 – 14

Acidic neutral alkaline

Separating mixtures

Changing state

7C1 Particle model and separation

YEAR 7