

# Bramhall High School Chemistry



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



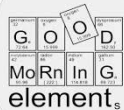
BTEC  
(Need Grade 5 in Science)



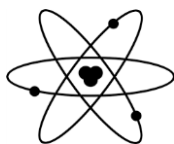
Other post 16 options – Apprenticeships, other A level subjects, other BTEC subjects, other training, College.



End of year exams!!



## Review Core Practicals and consolidation of learning



- Positive and negative ion testing
- Choosing materials
- Composite materials
- Nanoparticles

- Alkanes and alkenes and their reactions
- Ethanol production
- Alcohols
- Carboxylic acids
- Addition polymerization
- Condensation polymerization
- Polymer properties and uses
- Problems with polymers

- Crude Oil
- Fractional Distillation
- Alkanes
- Complete and incomplete combustion
- Fuels and pollution
- Cracking hydrocarbons
- Earth's early atmosphere
- Atmospheric changes
- Climate change

- Collision theory
- Factors affecting rates
- Catalysts and activation energy
- Endothermic and exothermic
- Energy in reactions

- Indicators and pH
- Acid properties
- Bases and Salts
- Acids & alkalis
- Balancing equations
- Neutralisation
- Acids with metals and carbonates
- Solubility

- Relative formula mass
- Empirical formula
- Conservation of mass
- Moles (Higher only)

- Reactivity of metals
- Ores
- Oxidation and Reduction
- Recycling and Life Cycle
- Electrolysis
- Equilibrium

- Transition metals
- Corrosion
- Electroplating and alloys
- Yield
- Atom economy
- Concentration
- Titration
- Gas volumes
- Fertilisers
- Factors affecting equilibrium
- Chemical and fuel cells

- Group 1
- Group 7
- Halogen Reactivity
- Group 0

YEAR  
11

- Ionic bonding
- Ionic properties
- Covalent bonding
- Properties of covalent structures
- Properties and bonding of metals
- Bonding models

C1b

C3

C1c

C4

C5

C6

YEAR  
10

- Structure of an Atom
- Atomic mass
- The periodic table
- Atomic number and the history of the periodic table
- Electron configuration

- Explosions
- Reactivity
- Energy and reactions
- Displacement

- Ceramics
- Polymers
- Composite materials
- Problems with materials
- Recycling



National Curriculum  
Compliant

YEAR  
9

- States of Matter
- Mixtures
- Filtration & crystallisation
- Chromatography
- Distillation
- Drinking water

C2

C1a

Reactivity

Making Materials

The Periodic Table of Elements

|    |    |    |    |    |    |    |    |    |     |     |     |     |     |     |     |     |     |
|----|----|----|----|----|----|----|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 1  | 2  | 3  | 4  | 5  | 6  | 7  | 8  | 9  | 10  | 11  | 12  | 13  | 14  | 15  | 16  | 17  | 18  |
| 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28  | 29  | 30  | 31  | 32  | 33  | 34  | 35  | 36  |
| 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46  | 47  | 48  | 49  | 50  | 51  | 52  | 53  | 54  |
| 55 | 56 | 57 | 58 | 59 | 60 | 61 | 62 | 63 | 64  | 65  | 66  | 67  | 68  | 69  | 70  | 71  | 72  |
| 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 | 81 | 82  | 83  | 84  | 85  | 86  | 87  | 88  | 89  | 90  |
| 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 100 | 101 | 102 | 103 | 104 | 105 | 106 | 107 | 108 |

- Dalton's atomic model
- Chemical properties
- Mendeleev's table
- Chemical & physical trends

- Rocks and their uses
- Igneous and metamorphic
- Weathering and erosion
- Sedimentary rocks
- Materials in the Earth

Rocks

YEAR  
8

Combustion

- Burning fuels
- Oxidation
- Fire safety
- Air pollution
- Global warming

The Periodic Table

- Metal properties
- Corrosion
- Metals and water
- Metals and acids
- Pure metals and alloys

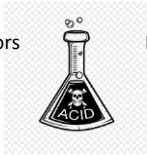
Metals and their uses



YEAR  
7



welcome



Acid and Alkalinity

Indicators

Distillation

Evaporation

Mixture

Science Skills

Mixtures and Separation

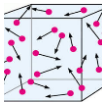
Solutions

Chromatography

Acids and Alkalis

Neutralization

Air pressure



Brownian Motion

Diffusion

Particles

Atoms, Elements and Compounds

Metals and non-metals

Chemical Reactions

Making Compounds

The air we breathe

