YEAR 12 CHEMISTRY LEARNING JOURNEY

Year 13

Target Grade:

periodicity

Physical properties of period 3 elements

Mass spectrometry

Trends in properties

Required Practical 4

Organic analysis

Group 7

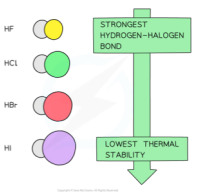


Infrared spectroscopy

NMR

Required Practical 6

Uses of chlorine and chlorate (I)



Trends and properties

Group 2

Addition polymerisation

Structure and bonding

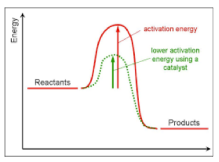
Alkenes

Redox reactions

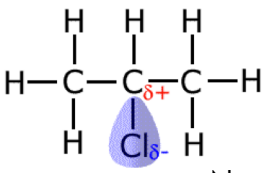
$wA + xB \rightleftharpoons yC + zD$

$K_c = \frac{[A]^w[B]^x}{[C]^y[D]^z}$

Equilibria, kC & kP

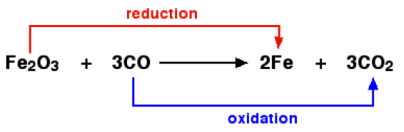


Addition reactions



Nucleophilic substitution

Ozone depletion



Linear exam result:

Alcohols

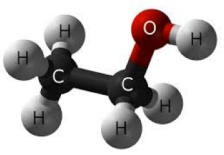
Halogenoalkanes



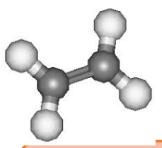
Oxidation

Required Practical 5

Alcohol production



Elimination



Free radical substitution

Isomerism

Reaction mechanisms

cracking

Introduction to organic chemistry and alkanes

Required Practical 2

Required Practical 3

Catalysts

Collision theory

Maxwell-Boltzmann distribution

calorimetry

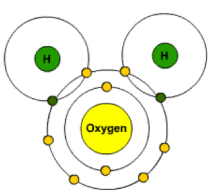
Kinetics

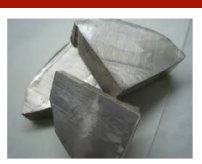
Energetics

Nomenclature

The mole and the Avogadro constant

Empirical and molecular formula





Enthalpy change

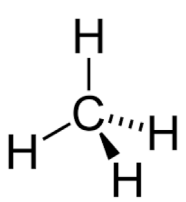
Hess's law

Amount of substance

Relative atomic mass and relative molecular mass

Covalent and dative bonding

Mass number &isotopes



The ideal gas equation

Bonding

Atomic structure

Year 12



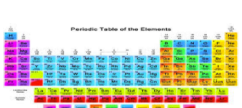
Required Practical 1

Shapes of simple molecules

Ionic bonding

Metallic bonding

Electron configuration



Fundamental particles

