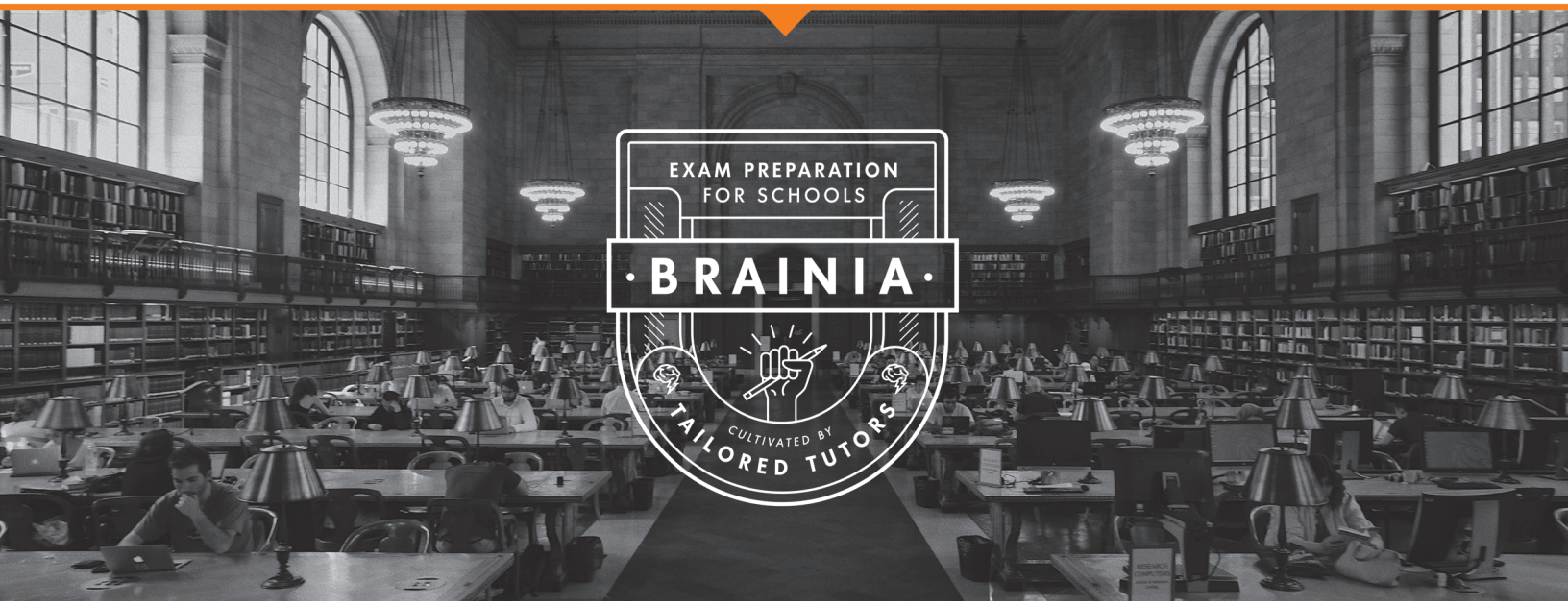
EDEXCEL A LEVEL CHEMISTRY GLOSSARY



What's included:

*definitions required by specification

1. ATOMIC STRUCTURE
2. FORMULAE & CALCULATIONS
3. BONDING
4. ENTHALPY I
5. KINETICS
6. EQUILIBRIA
7. REDOX
8. ACIDS & BASES
9. ENTHALPY II
10. TRANSITION METALS
11. ORGANIC FORMULAE
12. ISOMERISM
13. ALKANES
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15. ALKENES
16 ALCOHOLS
17. CARBONYLS & CARBOXYLIC ACIDS
18. NITROGEN CONTAINING COMPOUNDS
19. AROMATIC COMPOUNDS
20. ORGANIC ANALYSIS

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ATOMIC STRUCTURE

Atomic Number*	
Mass Number*	
Isotope*	
TOF Mass Spectrometer (Stages)	
First Ionisation Energy*	
Successive Ionisation Energies*	
Relative Atomic Mass*	
Relative Isotopic Mass*	
Relative Molecular Mass	
Relative Formula Mass	

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FORMULAE & CALCULATIONS

Molecular Formula*	
Empirical Formula*	
A Mole	
Avogadro's Constant	
Molar Mass	
Molar Gas Volume	
% Atom Economy	
% Yield	
Ideal Gas Equation	

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BONDING

Covalent Bond	
Co-ordinate Bond	
Electrostatic Attractions	
Ionic Bonding	
Metallic Bonding	
V.S.E.P.R.	
Electronegativity	
Permanent Dipole Force	
Induced Dipole Forces	
Hydrogen Bonding	

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ENTHALPY I

Enthalpy Change (ΔH)	
Standard Conditions	
Standard States	
Standard Enthalpy of Reaction ($\Delta_\ominus H_r$)*	
Standard Enthalpy of Formation ($\Delta_\ominus H_f$)*	
Standard Enthalpy of Combustion ($\Delta_\ominus H_c$)*	
Standard Enthalpy of Neutralisation ($\Delta_\ominus H_{neut}$)*	
Heat Change (Q)	
Hess' Law	
Mean Bond Enthalpy*	

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KINETICS

Collision Theory	
Catalyst	
Homogeneous Catalyst*	
Heterogeneous Catalyst*	
Activation Energy*	
Order of Reaction*	
Overall Order*	
Half-Life*	
Rate Constant*	
Rate Determining Step*	
Arrhenius Equation	

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EQUILIBRIA

Dynamic Equilibrium	
Le Chatelier's Principle	
Homogeneous	
Equilibrium Constant - Kc	
Equilibrium Constant - Kp	
Mole Fraction	
Mole Fraction	
Partial Pressure	

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REDOX

Oxidation Number*	
Oxidation	
Reduction	
Oxidising Agent*	
Reducing Agent*	
Disproportionation*	
Standard Hydrogen Electrode	
Standard Electrode Potential ($E^{\ominus}$)	
E.M.F.	

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ACIDS & BASES

Bronsted-Lowry Acid	
Bronsted-Lowry Base	
Conjugate Acid/Base Pairs	
pH*	
Strong Acid / Base	
Weak Acid / Base	
Ka*	
pKa*	
Ionic product of Water (Kw)	
Buffer Solution*	
Acid Buffer	
Basic Buffer	

ENTHALPY II

Born-Haber Cycle	
Enthalpy of Formation	
Ionisation Energy	
Enthalpy of Atomisation*	
Bond Enthalpy	
Electron Affinity*	
Lattice Enthalpy	
Enthalpy of Hydration*	
Enthalpy of Solution*	
Entropy	
Gibbs Free Energy	

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TRANSITION METALS

Transition Metal	
Ligand*	
Complex Ion	
Coordinate Number*	
Substitution Reaction	

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ORGANIC FORMULAE

General Formula	
Homologous Series*	
Molecular Formula	
Empirical Formula	
Structural Formula	
Skeletal Formula	
Displayed Formula	
Aliphatic	
Aromatic	

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ISOMERISM

Structural Isomer*	
Chain Isomer	
Positional Isomer	
Functional Group Isomer	
Stereoisomer*	
E/Z Isomer*	
Cis-Trans isomer*	

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ALKANES

Alkane	
Fractional Distillation	
Thermal Cracking	
Catalytic Cracking	
Free Radical*	
Free Radical Substitution	

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HALOGENOALKANES

Halogenoalkane	
Nucleophile*	
Nucleophilic Substitution	
Elimination Reaction	

ALKENES

Alkene	
C=C Double Bond	
Electrophile*	
Electrophilic Addition	
Addition Polymerisation	
Test for an Alkene	

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ALCOHOLS

Alcohol	
Hydration of Alkenes	
Fermentation	
Oxidation of Alcohols	
Elimination Reaction	
Test for an Alcohol	

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CARBONYLS & CARBOXYLIC ACIDS

Aldehyde	
Ketone	
Nucleophilic Addition	
Tests for Aldehydes / Ketones	
Carboxylic Acid	
Test for a Carboxylic Acid	
Ester	
Acid Anhydride	
Acyl Chloride	
Nucleophilic Addition-Elimination	

NITROGEN CONTAINING COMPOUNDS

Amine	
Nucleophilic Substitution	
Amide	
Nitrile	
Amino Acids	
Protein	
Condensation Polymerisation	

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AROMATIC COMPOUNDS

Benzene	
Pi-System	
Electrophilic Substitution	
Nitration	
Friedel-Crafts Acylation	
Halogenation	

ORGANIC ANALYSIS

Mass Spectroscopy	
Molecular Ion Peak	
Fragmentation	
IR Spectroscopy	
^{1}H-NMR	
^{13}C-NMR	
Thin Layer Chromatography	
Column Chromatography	
Gas Chromatography	
GC-MS	