

BRAINSHINE **ACADEMY**

Online
HOME
TUITIONS



9080138609

www.brainshineacademy.com

CLASSES WE OFFER

ONE-TO-ONE:

We allocate one teacher to only one student so that the student interact with teacher and learn the concepts thoroughly.

GROUP CLASS FOR 5 STUDENTS:

We allocate one teacher for group of 5 students. This promotes friendly competition and interactive classes while simultaneously maintaining an individual learning experience for each student.

GROUP CLASS FOR 10 STUDENTS:

We allocate one teacher for group of 10 students. All the features are the same as above group class and it is cost effective.

GOAL:

Make the students master the concepts deeply.

PRACTICE STYLE:

Let the students understand the concepts through explaining with real time examples.

TEACHING APPROACH:

Teacher cues the student to discover the answer.

The teachers here are highly experienced and well-qualified, having graduated from prestigious institutions such as IIT, NIT, IIIT, CLRI, Anna University, and others. Their expertise and strong academic background contribute significantly to the high-quality education provided.

What We Do?



At Brainshine Academy, we offer comprehensive range of online tutoring services designed to support students at every stage of their academic journey.

Why choose us?

Personalized learning: We provide tutoring sessions to each student's unique needs, learning style, and pace. Our tutors adapt their methods to ensure every lesson is both engaging and effective.

Test Preparation & Exam Strategies: Our test preparation services focus on strategy, practice, and review to help you succeed in your exams.

Progress Monitoring & Feedback: We track your progress and provide regular updates on your improvement. Our tutors give constructive feedback, recommend areas for further growth, and ensure you stay on track to meet your academic goals.

Homework Assistance: We offer tutoring sessions to support you with school projects, essays, and homework.



CHEMISTRY CURRICULUM



Topic	Sub Topic	No. of Classes
Solutions	Types of solutions, expression of concentration of solutions of solids in liquids, solubility of gases in liquids, solid solutions, Raoult's law, colligative properties – relative lowering of vapour pressure, elevation of boiling point, depression of freezing point, osmotic pressure, determination of molecular masses using colligative properties, abnormal molecular mass, Van't Hoff factor.	3-4
Electrochemistry	Redox reactions, EMF of a cell, standard electrode potential, Nernst equation and its application to chemical cells, Relation between Gibbs energy change and EMF of a cell, conductance in electrolytic solutions, specific and molar conductivity, variations of conductivity with concentration, Kohlrausch's Law, electrolysis and law of electrolysis (elementary idea), dry cell–electrolytic cells and Galvanic cells, lead accumulator, fuel cells, corrosion.	4-5
Chemical Kinetics	Rate of a reaction (Average and instantaneous), factors affecting rate of reaction: concentration, temperature, catalyst; order and molecularity of a reaction, rate law and specific rate constant, integrated rate equations and half-life (only for zero and first order reactions), concept of collision theory (elementary idea, no mathematical treatment), activation energy, Arrhenius equation.	4-5
d- and f-Block Elements	General introduction, electronic configuration, occurrence and characteristics of transition metals, general trends in properties of the first row transition metals – metallic character, ionization enthalpy, oxidation states, ionic radii, colour, catalytic property, magnetic properties, interstitial compounds, alloy formation, preparation and properties of $K_2Cr_2O_7$ and $KMnO_4$. Lanthanoids – Electronic configuration, oxidation states, chemical reactivity and lanthanoid contraction and its consequences. Actinoids – Electronic configuration, oxidation states and comparison with lanthanoids.	5-6
Coordination Compounds	Coordination compounds – Introduction, ligands, coordination number, colour, magnetic properties and shapes, IUPAC nomenclature of mononuclear coordination compounds. Bonding, Werner's theory, VBT, and CFT; structure and stereoisomerism, importance of coordination compounds (in qualitative analysis, extraction of metals and biological system).	5-6



Haloalkanes and Haloarenes	Haloalkanes: Nomenclature, nature of C–X bond, physical and chemical properties, optical rotation mechanism of substitution reactions. Haloarenes: Nature of C–X bond, substitution reactions (Directive influence of halogen in monosubstituted compounds only). Uses and environmental effects of – dichloromethane, trichloromethane, tetrachloromethane, iodoform, freons, DDT.	4–5
Alcohols, Phenols and Ethers	Alcohols: Nomenclature, methods of preparation, physical and chemical properties (of primary alcohols only), identification of primary, secondary and tertiary alcohols, mechanism of dehydration, uses with special reference to methanol and ethanol. Phenols: Nomenclature, methods of preparation, physical and chemical properties, acidic nature of phenol, electrophilic substitution reactions, uses of phenols. Ethers: Nomenclature, methods of preparation, physical and chemical properties, uses.	4–5
Aldehydes, Ketones and Carboxylic Acids	Aldehydes and Ketones: Nomenclature, nature of carbonyl group, methods of preparation, physical and chemical properties, mechanism of nucleophilic addition, reactivity of alpha hydrogen in aldehydes, uses. Carboxylic Acids: Nomenclature, acidic nature, methods of preparation, physical and chemical properties; uses.	5–6
Amines	Amines: Nomenclature, classification, structure, methods of preparation, physical and chemical properties, uses, identification of primary, secondary and tertiary amines. Diazonium salts: Preparation, chemical reactions and importance in synthetic organic chemistry.	4–5
Biomolecules	Carbohydrates – Classification (aldoses and ketoses), monosaccharides (glucose and fructose), D–L configuration oligosaccharides (sucrose, lactose, maltose), polysaccharides (starch, cellulose, glycogen); Importance of carbohydrates. Proteins –Elementary idea of – amino acids, peptide bond, polypeptides, proteins, structure of proteins – primary, secondary, tertiary structure and quaternary structures (qualitative idea only), denaturation of proteins; enzymes. Hormones – Elementary idea excluding structure. Vitamins – Classification and functions. Nucleic Acids: DNA and RNA.	5–6

WHAT STUDENTS SAY

Y

★★★★★

- by Yuvaraj
attended BTech Tuition
posted on 04 Jul, 2018

"Vastly experienced, Elusive teaching, clears doubt on par to the student capacity, motivating person."

R

★★★★★

- by RAJAVIKNESH
attended Class 11 Tuition
posted on 04 Jul, 2018

"Excellent in teaching. Level of teaching is totally well and good. I recommend. Tutor is having good knowledge on teaching the subjects. Especially I get support whenever I needed."

R

★★★★★

- by Rajesh
attended Class 10 Tuition
posted on 04 Jul, 2018

"Way of explaining the concepts is very good. Theoretical as well as technically good."

G

★★★★★

- by GEETHA BIMALRAJ
attended Class 9 Tuition
posted on 05 Jul, 2018

"Excellent tutor. Very dedicated and thorough in teaching. Has been teaching for the last three years and have not had any issues. definitely recommended."

T

★★★★☆

- by Thamim Fathima Nisha.A
attended BTech Tuition
posted on 12 Jul, 2018

"Very good. He is more interactive with us. He teaches us more concepts clearly. He clears our doubts without any hesitation."

P

★★★★★

- by Pavi

attended **Class 12 Tuition**

posted on 24 Sep, 2019

"Best one for all subject well experience in all subjects daily tests and clearing doubts with an example soon. "

S

★★★★★

- by Saravanan

attended **Class 10 Tuition**

posted on 24 Sep, 2019

"Good mentor. Really helped in my exam preparation. Thank you sir for being my tuition teacher. "

B

★★★★★

- by Bharathi

attended **Class 10 Tuition**

posted on 24 Sep, 2019

"Rajavel sir is very kind and humble. He won't scold if done a mistake. We can easily understand when he teaches. He will teach us a line by line. He is the best teacher I have ever seen in my life. "

★★★★★

- by Sathidevi S Raj

attended **Class 10 Tuition**

posted on 25 Sep, 2019

"Very polite and humble. Makes the student understand the concepts in easiest and spends quality time with student. Student is very comfortable. "



thank
you

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BOOK A DEMO

To book a demo, simply visit our website and click the option "Schedule Demo class" and fill out the form. Our team will get in touch with you to schedule a convenient time for the demo.

"We motivate the students to build skills and develop confidence as they pursue educational success."