

GATE Accelerated IP Math

IP Math Head Start Camp — What We'll Cover

Think of the Head Start Camp as a “syllabus-tasting” session for secondary school Math: your child gets an early, hands-on introduction to key Year 1 topics — a preview and exposure. Full mastery of every topic continues in our regular weekly classes starting January 2027.

Camp 1 (Part 1- 8 hours) — Algebra-Focused

Topic	What Your Child Will Explore
Topic 1: Linear Graphs, Simultaneous Linear Equations and Linear Inequalities	Solving linear equations and graphing straight lines; working with inequalities on a number line
Topic 2: Expansion and Factorisation of Algebraic Expressions	Multiplying out brackets and factoring algebraic expressions
Topic 3: Quadratic Equations and Graphs	Solving quadratic equations and graphing curves
Topic 4: Algebraic Fractions and Formulae	Simplifying fractions that contain variables
Topic 5: Direct and Inverse Proportions	Understanding direct and inverse relationships between variables

Camp 2 (Part 2) Geometry, Trigonometry & Statistics

Topic	What Your Child Will Explore
Topic 6: Congruence and Similarity	Identifying identical shapes vs. scaled shapes
Topic 7: Pythagoras' Theorem and Trigonometric Ratios	Calculating missing sides and angles in right-angled triangles
Topic 8: Volume and Surface Area of Pyramids, Cones and Spheres	Calculating the 3D space (volume) and exterior covering (surface area) of solid objects
Topic 9: Probability	Measuring the chance of events occurring using scales, trees, and grids
Topic 10: Data Analysis	Finding data averages (mean, median, mode) and reading statistical charts (pie charts, histograms)

Camp Dates: Oct–Nov 2026 (Bukit Timah Centre & Katong V) | Regular Classes Begin: January 2027

GATE Accelerated IP Science

Science Head Start Camp — 8 Essential Sec 1 Science Topics (Biology & Chemistry)

DISCOVER > EXPERIMENT > UNDERSTAND > APPLY

Students explore 8 carefully selected Biology and Chemistry topics through hands-on experiments and activities, then consolidate each concept with targeted practice worksheets and Sec 1-style application questions. Full mastery of every topic continues in our regular weekly classes starting January 2027.

Camp 1 (Part 1-8 hours) — Build the Foundations

CHEMISTRY

Workshop	What Your Child Will Explore
CSI: Separate the Mixture <i>Experimental Chemistry</i>	A forensic-style separation challenge using filtration, chromatography and more — selecting the right apparatus and reasoning about observations and variables
The World of the Small <i>The Particulate Nature of Matter</i>	Microscope work, a Brownian motion video and particle simulations — using particle theory to explain solids, liquids and gases

BIOLOGY

Workshop	What Your Child Will Explore
Inside a Cell <i>Cell Structure & Organisation</i>	Microscope and model-based investigation — identifying plant and animal cell structures and linking each structure to its function
Escape Through the Membrane <i>Movement of Substances</i>	Diffusion and osmosis investigations — predicting how substances move into and out of cells and explaining the experimental results

Camp 2 (Part 2-8 hours) — Apply & Connect

CHEMISTRY

Workshop	What Your Child Will Explore
The Colourful World of pH <i>Acids and alkalines</i>	Testing everyday substances with natural, litmus and universal indicators — interpreting pH and designing a real-life investigation such as an acid-rain problem
Why Do Materials Behave Differently? <i>Chemical Bonding & Structure</i>	Comparing material properties hands-on — using structure and bonding ideas to explain conductivity, melting point and more

BIOLOGY

Workshop	What Your Child Will Explore
Food Detective <i>Biological Molecules & Enzymes</i>	Food tests for starch, sugars, protein and fats, plus an enzyme investigation — identifying nutrients and interpreting test results
Journey of a Meal <i>Human Nutrition & Digestion</i>	A digestive-system model challenge tracing food through the body — understanding digestion, absorption and how nutrients are used

Note: Topics are introductory previews and pacing may be adjusted during the camp. Students attend one camp per part — Camp A or B for Part 1, Camp C or D for Part 2 — with make-up sessions available on the alternate camp's corresponding day.

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