📚 Xcelerate Academy – GCSE 30hr Intensive Summer School

📍 Location: Landau Forte College, Derby DE1 2LF
📅 Dates: Saturday 2nd August – Sunday 31st August
🕘 Timings: Saturdays & Sundays, 9:00 am – 12:00 pm
📚 Subjects Covered: Maths, English Language, Science
🎯 Level: GCSE Students (Targeting Grade 5–9)

📍 Course Overview

Our 5-week summer school is designed to give students a powerful academic boost ahead of the new academic year and their GCSE exams. This is not just revision – it's targeted, focused, and strategic preparation led by subject specialists and GCSE examiners.

Each weekend includes 6 hours of tuition (3 hours per day, 2 hours per subject weekly), with content focused on key areas students commonly struggle with.

This is ideal for:

- Students entering Year 10 or 11 in September
- Students looking to build confidence and exam technique
- Parents who want structured summer learning in a productive environment

🎯 Course Objectives

- *Strengthen subject knowledge in high-yield GCSE topics*
- *Improve exam technique using real past-paper tasks*
- *Develop a clear understanding of what examiners expect*
- *Receive live feedback and high-quality resources*
- *Track progress weekly through mini assessments*
- *Learn in a distraction-free, supportive group environment*

✅ Why These Subjects & Topics?

Our summer school syllabus is carefully designed to target the *most important, high-impact areas* across all 3 core subjects – Maths, English, and Science. The focus is on helping students *build confidence, close knowledge gaps, and secure key marks* in their GCSEs. Every topic has been selected based on examiner insight, past paper trends, and the areas students tend to struggle with most.

🔢 Maths (Grade 7+ Focus)

Our maths sessions aim to strengthen the areas that are not only heavily weighted in the exam but also most challenging for students aiming for Grade 7 and above. Each lesson includes worked examples, problem-solving strategies, and exam-style questions to stretch ability.

Topics include:

- **Algebra (30%)**: Quadratics, equations, factorising, graph transformations, functions
- **Ratio & Proportion (20%)**: Compound measures, reverse percentage, direct and inverse proportion
- **Geometry (20%)**: Circle theorems, trigonometry, vectors, Pythagoras, geometric proof
- **Graph Skills & Problem Solving**: Complex multi-step questions with real exam context
- **Exam Paper Practice**: Targeted tasks and model solutions to boost performance

✍️ English Language (Weekly Paper Focus – Q1 to Q5)

Each week focuses on *one key question* from the GCSE English Language exam papers, ensuring that students *understand what the examiners are looking for* and how to craft high-level responses. Students will analyse model answers, receive live feedback, and practice under timed conditions.

Focus Areas:

- **Paper 1 & 2, Questions 1–4**: Comprehension, language analysis, structure, evaluation
- **Paper 1 & 2, Question 5**: Descriptive, narrative, persuasive, and argumentative writing
- **Writing Techniques**: Openings, structure, tone, persuasive devices
- **Model Comparisons**: Grade 5 vs Grade 9 breakdowns
- **Live Feedback & Redrafting**: Guided improvement sessions with tutors

🔬 Science (High-Yield Topics + Practical Skills)

Our science sessions are structured to maximise understanding and retention in areas that commonly lower student scores. Each week covers *one full science subject*, followed by *required practicals and mixed paper questions* to consolidate understanding.

Weekly Science Breakdown:

- **Biology**: Cell structure, enzymes, osmosis, respiration, practical analysis
- **Chemistry**: Atomic structure, bonding, equations, periodic table
- **Physics**: Energy, forces, motion, equations and calculation skills
- **Required Practicals & Cross-Topic Review**: Common mistakes, exam technique, mark schemes
- **Application & Exam Readiness:** Mixed paper mock practice, strategies for long-answer questions, confidence-building tips

📅 Full Summer School Schedule – Detailed Syllabus

Week 1 (2nd & 3rd August):

Maths: Number & Algebra foundations (Grade 7+ Focus)	**English: Paper 1 – Question 1 (Language Focus)**	**Science (Biology): High-Yield GCSE Biology Topics**
• Surds and indices • Product and quotient rule for indices • Algebraic manipulation and simplifying expressions • Solving equations: linear, simultaneous, and quadratics • Expanding double brackets and factorising quadratics	• Understanding how to select and interpret explicit information • Structuring a full mark response using quotes and evidence • Marking schemes, exam-style walkthroughs • Comparing Grade 4 vs Grade 9 model answers	• Cells and microscopy, transport in cells • Enzymes and digestion • Required practicals: Osmosis, Enzymes • Common misconceptions and application questions

Week 2 (9th & 10th August):

Maths: *Ratio, Proportion & Percentages (20% weighting)*	**English:** *Paper 1 – Question 2 (Language Analysis)*	**Science (Chemistry):** *GCSE Chemistry Essentials*
• Ratio in context and simplifying ratios • Compound measures (speed, density, pressure) • Direct and inverse proportion problems • Percentage change, growth & decay • Proportional reasoning word problems	• Identifying and analysing writers' language choices • Subject terminology: metaphor, simile, personification, etc. • Using quotations effectively • How to write developed PEEL paragraphs	• Atomic structure, periodic table, electron configuration • Ionic & covalent bonding • Chemical equations and balancing • Required practicals: reactions and solubility

Week 3 (16th & 17th August):

Maths: *Geometry – Angles, Circles & Proof*	**English:** *Paper 1 – Question 3 (Structure Analysis)*	**Science (Physics):** *Forces, Energy & Motion*
• Circle theorems and geometric reasoning • Angles in parallel lines and polygons • Area, perimeter, and surface area of complex shapes • Vectors – representation and geometric proof	• Identifying structural features: shifts, openings, endings • Explaining the writer's structural choices • Planning a response using the text as a whole • Examiner commentary and live modelling	• Newton's laws of motion • Work done, energy transfer and efficiency • Forces and motion equations • Required practicals: force-extension, acceleration

Week 4 (23rd & 24th August):

Maths: *Graphs, Functions & Transformations*	**English:** *Paper 2 – Question 4 (Comparison)*	**Science (Mixed Topics & Required Practicals):**
• Linear and quadratic graphs • Real-life graphs (conversion, distance-time) • Transformations of functions • Inverse and composite functions	• Comparing perspectives and viewpoints • Synthesising evidence across texts • Comparing writer's methods and tone • Mark scheme breakdown and common pitfalls	• Recap of Biology, Chemistry & Physics key concepts • Focus on high-yield required practicals • Exam-style practice & how to approach 6-mark questions • Time management strategies in science exams

Week 5 (30th August & 31st August):

Maths: *Problem Solving & Exam Mastery (Grade 7+)*	**English:** *Paper 2 – Question 5 (Persuasive Writing)*	**Science (Targeted Revision & Confidence Boost):**
• Multi-step problems involving number, algebra, and geometry • Non-calculator techniques and strategy • Timed practice under exam conditions • Feedback and improvement loop	• Developing arguments and rhetorical devices • Structuring powerful introductions and conclusions • Addressing counterarguments effectively • Grade 9 model responses and live feedback	• Key concepts recap across all 3 sciences • Exam questions from past papers with tutor guidance • Last-minute tips and exam confidence strategies • Personalised support based on diagnostic performance

📝 How to Register

To secure a place for your child, please fill out our short registration form:

🔗 Register Here

Spaces are **very limited** and places will be filled on a first-come, first-served basis. Early registration is strongly recommended.

If you have any questions, feel free to message us directly on WhatsApp: +44 7466 736597.

We're looking forward to supporting your child during this critical time in their academic journey.

– Xcelerate Academy
Helping Students Reach Their Potential