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The top UK sixth form that is 'Disneyland for maths'

Inside King's Maths School, the in-demand sixth form where the students are proud to be 'neeky'. Plus: searchable tables of all A-Level and GCSE maths results



Successful applicants to King's Maths School make up some of the best young mathematicians in the country
CHRIS MCANDREW FOR THE SUNDAY TIMES

King's Maths School does not look like anyone's fantasy seat of learning. It's crammed into two small, utilitarian buildings, wedged between concrete blocks in inner-city Lambeth, south London. But looks aren't everything. This is, says the teacher Hannah Holland, "Disneyland for maths" — and her pupils seem to agree.

King's, recipient of the Sixth

Form College of the Year for Academic Excellence 2025 in this year's Parent Power guide, teaches only three subjects at A-level: maths, further maths and physics. There are 80 places a year, and for those it receives more than 1,000 applications — which, by our calculations, makes it oversubscribed by 1,250 per cent. It may not be Hogwarts, but those numbers suggest something magical is going on here.

As any of the school's budding Turings will tell you, the numbers don't lie. The successful applicants make up the brightest and best young mathematicians from the capital and beyond (students commute from as far as Portsmouth and Luton).

In part, they're drawn by the school's striking results — last year, 91 per cent of students scored A* or A, 33 per cent went

on to Oxford or Cambridge, and the value-added score is an exceptionally high 0.8.

But it's more than that. In a digital world, maths is arguably the most important subject on the curriculum, but those who excel in it can have a hard time in mainstream education. Laurie, a Year 13 pupil who came to evening classes here at GCSE level, recalls attitudes at her old school. "It was, 'Oh, why

Laurie, 17 (Year 13)

What I love most about maths is

That feeling when you finally understand a really hard topic — everything clicks into place and suddenly makes sense

In the future I'd like to

Use creative and practical applications of maths to help people

My maths hero is

Ms Haar, my Year 7&8 maths teacher. I want her to know how much she inspired me



Ryan, 18 (Year 13)

What I love most about maths is

Its universality

I am interested in

Quantitative finance, particularly market modelling and stochastic calculus

My hero is

Bernhard Riemann

I'm reading

Mostly *Harmless* by Douglas Adams



is she talking about maths? Why is she such a nerd?' But here you can kind of embrace it. You're neeky [a cross between nerdy and geeky] and you can be OK with that."

It's a problem Holland is familiar with. "So often those who love maths are marginalised in some way, or don't find their tribe," she says. "But everybody here has that in common. We share that enthusiasm. We love maths."

They really do. Whiteboards line the walls in the common room and pupils during free periods chat away as they cover them with calculations. Rapidly scrawled differential equations, integrals and complex numbers meander into every corner. You get the feeling they have definitely found their tribe.

To the non-mathematicians among us, this might sound like pretty dry stuff — but Timothy

Bateup, the head teacher, is keen to point out the intriguing applications of the work, such as the school's innovative projects programme. "One group designed an AI-driven Connect 4 player," he says. "It would play the game with you and a camera would track your facial expressions as you played: depending on whether you were smiling or frowning, it would adjust the difficulty level. If you were smiling, you were probably winning, and it would make the game that bit harder."

Another project tackled the maths of successful pitstop strategies in Formula 1 racing; another still created an AI model to predict the movements of financial markets. Sure enough, after university many students go on to banking, asset management and engineering — as well as computing, accountancy and teaching.

The school was founded by

The best schools at maths in England for A-Levels

Proportion of maths entries to earn an A or A* in 2022 to 2023

Key ● Boys ● Girls ● Mixed

Search in table

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| Rank | School | Location | A and A* |
|------|--|----------------------|----------|
| 1 | ● The Harrodian School | Richmond upon Thames | 96.7% |
| 2 | ● Francis Holland School | Westminster | 95% |
| 3 | ● Tormead School | Surrey | 94.1% |
| 4 | ● Withington Girls' School | Manchester | 93.5% |
| 5 | ● St Paul's School | Richmond upon Thames | 93.4% |
| 6 | ● Queen Elizabeth's School, Barnet | Barnet | 92.9% |
| 7 | ● James Allen's Girls' School | Southwark | 92.3% |
| 8 | ● Westminster School | Westminster | 92.3% |
| 9 | ● King's College London Maths School | Lambeth | 91.1% |
| 10 | ● Cheltenham Ladies' College | Gloucestershire | 90.8% |

Data for schools with more than 10 entries only

Table: The Times and The Sunday Times • Source: Department for Education

King's College London in 2014 "to widen participation in Stem subjects for underrepresented groups," Holland says. She runs the busy outreach department, which provides summer schools and evening lessons for promising GCSE students from less affluent schools, with alumni often returning to coach the next generation.

Entrance is open to all, with a two-stage selection process: an exam designed to test problem-solving ability rather than previous maths learning, and an interview to gauge suitability and enthusiasm for the subject. "What we're really trying to assess is long-term potential," Tom Collins, the deputy head,

says. "We work hard to attract as many girls as possible to what are traditionally more male subjects" — one of those summer schools is female-only — "and our students come from all over London, with cultures from all over the world. What unites everyone is a love for maths and physics."

Proudly nerdy they may be — the popularity of Dungeons & Dragons and the thriving chess club are additional testimony to that — but King's students are still, the teachers point out, a bunch of teenagers, with all that entails. Misbehaviour is rare, partly because of the small size — every teacher knows every student by name and can

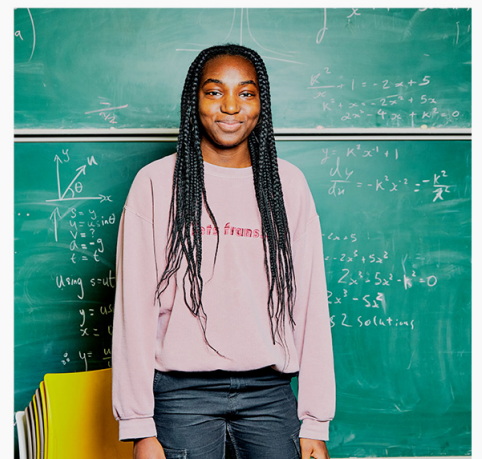
Cassidy, 17 (Year 13)

What I love most about maths is

It is both rigorous and creative

In the future I'd like to be

A scientist, I'm not exactly sure what that looks like, but I know that I want to contribute to science and maths in some way



The best schools at maths in England for GCSEs

Proportion of maths entries to earn a 7, 8 or 9 in 2022 to 2023

Key ● Boys ● Girls ● Mixed

Search in table

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| Rank | School | Location | 7, 8 and 9 |
|------|--|----------------------|------------|
| 1 | ● Westminster School | Westminster | 100% |
| 1 | ● Palmers Green High School | Enfield | 100% |
| 1 | ● Queen Elizabeth's School, Barnet | Barnet | 100% |
| 1 | ● The Henrietta Barnett School | Barnet | 100% |
| 5 | ● Wilson's School | Sutton | 99.5% |
| 6 | ● Kendrick School | Reading | 99% |
| 7 | ● Tiffin School | Kingston upon Thames | 98.9% |
| 8 | ● Sutton Grammar School | Sutton | 98.5% |
| 9 | ● St Olave's and St Saviour's Grammar School | Bromley | 98.4% |
| 10 | ● City of London School | City of London | 98.1% |

Data for schools with more than 10 entries only

Table: The Times and The Sunday Times • Source: Department for Education

intervene early before situations escalate — and partly because of the students' motivation.

"In my last school people misbehaved because they were bored or just didn't enjoy where they were, but we love it here," Laurie says. "It's just so much better." Still, when I ask students when someone last sneaked a surreptitious vape on school premises, there's an awkward silence. Perhaps that's just as well.

Unlike many other schools, there's no question of banning phones at King's. Technology, including laptops and phones, is integral to the teaching. "Having the phone in lessons can be quite useful," Bateup says. "We have chosen, rather than to ban

devices, to choose to focus on helping the students prepare for life and to be able to manage their devices effectively."

While the focus is scientific, the school is keen to provide some cultural context too. The location looks unpromising for sport, but it has arrangements with the nearby London South Bank University to offer a decent range, including basketball, football, tennis, badminton and netball. There are trips to the theatre (plenty of musicals, including Frozen and Guys and Dolls), museums (the Imperial War Museum is directly over the road) and rather more esoteric outings: a recent talk at King's College London dug deep into the preservation of biological

Adam, 16 (Year 12)

What I love most about maths is

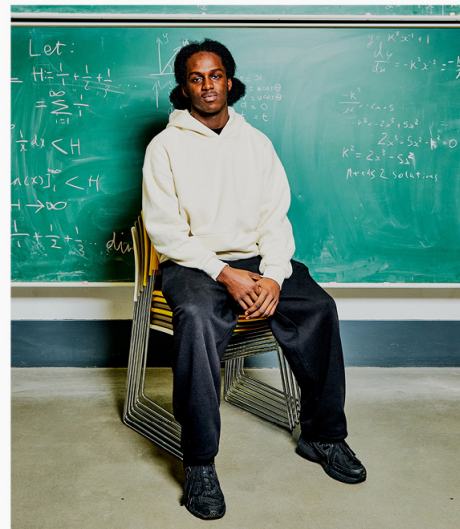
The fact that it is a sort of art. I enjoy how when solving a problem everything just falls into place

In the future I hope to

Make a positive impact on the world with my knowledge. Whether it's in the maths, finance or engineering world

My maths hero is

Al'Khwazizmi, he was a muslim mathematician who was one of the main founders of algebra or "al-jabr" meaning forcing or restoring



Daria, 16 (Year 12)

What I love most about maths is

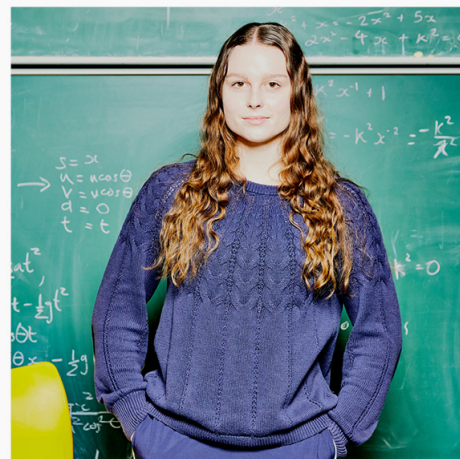
How it is both elegant and creative

In the future I'd like to be

A software engineer. I enjoy programming and I'm looking to learn more about algorithmic thinking

My maths hero is

The Ukrainian Maryna Viazovska, the second woman to be awarded the Fields Medal



specimens dating to the 1800s.

The success of King's has spawned similar initiatives from other universities, with Exeter, Imperial, Surrey, Cambridge, Leeds, Liverpool and Lancaster having launched their own sixth-form maths schools; plans are afoot in Durham, Aston and

Nottingham too. If the future will be made by the geeks, this is where the geeks themselves will be made. And if the joyfully "neeky" students of King's Maths School are anything to go by, the future is in safe hands.