Maths gives you the edge

A narrative to **inspire** and **empower** high-achieving maths pupils aged 11-14

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AXIOM MATHS | Purposeful Ventures

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Introduction

This guide has been created to improve the way we talk about maths to high-attaining maths pupils in Years 7-9.

While **we** know the power of maths and why it matters, trying to explain that to pupils can be harder.

Borne out of a desire to find the right words, we held focus groups and conducted quantitative analysis with high-attaining maths pupils in Key Stage 3 to better understand the messages that can be used to talk up maths, tackling the barriers and reigniting the enjoyment and drive to study it past GCSE.

***Maths gives you the edge* leans into these insights, offering ways to overcome barriers and help high achievers fall in love with applying the power of their own mathematical minds. It celebrates their potential as well as their performance and creates 'this is my future!' moments.**

This is not intended as a script or a suggestion that every conversation about maths should sound the same. We just want to share the findings of our research so that it can be useful for all of us who talk to young people about their futures in mathematics. As such, we encourage you to use this guide in a way that works for you. Incorporate all or some of it, and please do share any questions you have along the way.

In a world where maths has become even more important in helping us understand how we can improve our lives and planet, we hope this narrative will open minds to encourage the next generation of mathematicians to realise their potential.

You're good at maths. You are. You're really good.

Your mind finds solutions where others see dead ends, spots the patterns others miss and breaks down complex problems with a combination of logic and creativity.

You might not love every moment of every worksheet, but when you finally crack a problem that was stumping you, you know you've got something.

That kind of thinking sets you apart, unlocking pathways to futures and careers you might not have considered.

Mathematical minds are reshaping every industry – from graphic design to medicine, film production to law.

And the jobs that need strong maths skills? They're often the ones offering serious money, respect, and the chance to change things.

The world needs people who think the way you do – ready to solve the problems and challenges others can't.

Maths gives you the edge. Use it.

Unpacking this message

Maths gives you the edge

Giving you the power to solve problems, find patterns and crack codes

Key message: opportunities (extrinsic value)

Maths is incredibly valuable in a world full of problems that need solving.

The people building the apps you use, creating the special effects in films, analysing sports data that changes how teams play, designing skyscrapers that scrape the skydeveloping today – they're using the same maths skills.

Key message: careers (extrinsic value)

From computer coding to designing cars that drive themselves, protecting companies against cyber-attacks to managing millions in investments – mathematical minds are in high demand.

Key message: the challenge (intrinsic value)

You might not love every moment of every worksheet, but when you finally crack a maths problem that's stumping everyone else, you know you've got something.

Key message: teamwork (intrinsic value)

When those who get maths unite, they can change the world.

Together, you see solutions no one else can.

Key message: development (intrinsic value)

Maths is more than exams. It's not just about getting the right answer – sometimes the most valuable lessons come from exploring the impossible. It's about making your mind sharper and your options bigger.

Proof point

Maths graduates earn, on average, £500,000* more over their lifetime than other graduates. This greater job security, and ability to adapt to evolving fields, gives you control of your life.

Proof point

Practising maths develops a way of thinking. Mathematicians think creatively in the abstract. This gives you practical strategies to make sense of real-world challenges. You have the power to see beyond what others see.

*Calculation for lifetime earnings premium can be found here: https://axiommaths.com/axiom-maths-research/

How high attainers think and feel about maths

- High attainers recognise their mathematical skill – they can see or do what many others struggle with. We need to acknowledge that maths makes sense to them and talk to that reality.
- High attainers like the challenge of solving problems, and **maths puzzles and teasers are an effective way of sparking this drive** to challenge themselves.
- **They don't always find maths 'fun' or enjoyable** - the monotony of some maths lessons or exercises led to feelings of boredom and frustration.
- For many high attainers there is no embarrassment about being good at maths, it's just a fact. Our messaging should recognise this audience don't always need a confidence boost to help them feel pride in being good at maths – they need a reason to continue doing it.
- **They're already thinking about the future**, so we need our narrative to open up conversations about how maths can be a part of theirs. Teachers are arguably the best messengers because they can tailor it to pupil's interests and aspirations.
- This audience enjoy teamwork and collaboration. Messaging should lean into this, encouraging the idea of working on problems together.
- **This audience can see through maths marketing** – they're wary of anything that is too try hard or cheesy.

Further substantiation of these findings can be found in the appendix.

Preferred messaging for high-attaining maths pupils

The insights gathered in focus groups were used to craft a variety of lines that speak to the shared experiences of high-achieving maths students; validating the full spectrum of what it means to excel in mathematics – from passionate devotion to pragmatic tolerance – and signalling to the future possibilities and doors that maths can open up.

Preferred messaging for high-attaining maths pupils

The messages that scored most highly in quantitative testing are as follows:

High attainers recognise their mathematical skill – they can see or do what many others struggle with	• Maths gives you the edge. (22.17%) • Maths makes you stand out. (20.83%)
High attainers like the challenge of solving problems	• Giving you the power to crack codes, find patterns and solve problems. (37.67%) • Making your mind sharper. (35.50%) • Solving problems and challenges others can't. (27.83%)
They don't always find maths 'fun' or enjoyable	• You might not love every moment of every worksheet, but when you finally crack a problem that's stumping everyone else, you know you've got something. (23.00%) • It might be hard at times – grappling with equations, or repeating maths problems over and over to get it right, but you know you've got the edge. (20.00%)

Preferred messaging for high-attaining maths pupils

They don't always need a confidence boost to help them feel pride in being good at maths – they need a reason to continue doing it	• Maths isn't just about getting the right answer – sometimes the most valuable lessons come from exploring the impossible. (19.00%) • Maths isn't just about exams – it's making your mind sharper and your options bigger. (18.50%)
They're already thinking about the future	• Maths is incredibly valuable in a world full of problems that need solving. (11.33%) • Maths can unlock a world of opportunities. (11%) • Maths graduates earn, on average, £500,000 more over their lifetime. (10.67%) • Jobs requiring strong maths skills offer good earning potential. (10%)
They recognise that maths can be important to achieving future goals	• From computer coding to designing cars that drive themselves, from protecting companies against cyber-attacks to managing millions in investments – mathematical minds are in high demand. (Mean score 1.94) • The people building the apps you use, creating the special effects in films, analysing sports data that changes how teams play,designing skyscrapers that scrape the sky – they're using the same maths skills you're developing today. (Mean score 2.01) • From graphic design to medicine, film production to law – mathematical minds are needed in every industry. (Mean score 2.06)

Industries that most excited respondents that you can work in with a good maths qualification	• Computer science (30.00%) • Engineering (27.67%) • Technology (23.83%) • Finance (22.50%) • Games design (20.67%) • AI (17.83%) • Medicine (16.83%) • Aerospace (15.33%) • Graphic design (12.50%) • Architecture (11.00%) • Sport (10.50%) • Music production (9.83%) • Film production (9.67%) • Law (9.00%) • Climate science (7.67%) • E-sports (5.33%) • Motoring (4.50%) • None of the above (2.17%)
They like teamwork and collaboration in maths	• The best minds don't work alone. They build teams that, together, change the world. (18.33%) • When you're stuck and your mate says 'Wait, what if we…' and you know you've just cracked it together. (15.83%)

Messaging by audience: Girls

Maths gives you the edge

All girls	Girls eligible for FSM	Girls in private school
Giving you the power to solve problems, find patterns and crack codes, with a combination of logic and creativity	Giving you the power to solve problems, find patterns and crack codes, with a combination of logic and creativity	Making your mind sharper
Maths is incredibly valuable in a world full of problems that need solving, and jobs that require strong maths skills offer good earning potential	Maths is incredibly valuable in a world full of problems that need solving	Maths is incredibly valuable in a world full of problems that need solving, and jobs that require strong maths skills offer good earning potential
From games design to medicine, computer science to law – mathematical minds are needed in every industry	From computer coding to designing cars that drive themselves, from protecting companies against cyber-attacks to managing millions in investments – mathematical minds are in high demand	The people building the apps you use, creating the special effects in films, analysing sports data that changes how teams play, designing skyscrapers that scrape the sky – they're using the same maths skills you're developing today
Maths isn't just about exams or being good at numbers – it's making your mind sharper and your options bigger	You might not love every moment of every worksheet, but when you finally crack a problem that's stumping everyone else, you know you've got something	You might not love every moment of every worksheet, but when you finally crack a problem that's stumping everyone else, you know you've got something
The best minds don't work alone. They build teams that, together, change the world.	Maths isn't just about exams or being good at numbers – it's making your mind sharper and your options bigger	Maths isn't just about exams or being good at numbers – it's making your mind sharper and your options bigger
You might not love every moment of every worksheet, but when you finally crack a problem that's stumping everyone else, you know you've got something		

Messaging by audience: Boys

Maths gives you the edge

All boys	Boys eligible for FSM	Boys in private school
Giving you the power to solve problems, find patterns and crack codes, with a combination of logic and creativity	Giving you the power to solve problems, find patterns and crack codes, with a combination of logic and creativity	Breaking down complex problems with a combination of logic and creativity
You might not make a big deal about being good at maths, but you know you've got the edge	Maths is incredibly valuable in a world full of problems that need solving	Maths isn't just about getting the right answer – sometimes the most valuable lessons come from exploring the impossible
Maths can unlock a world of opportunities. From computer coding to engineering cars that drive themselves, from protecting companies against cyber-attacks to managing millions in investments – mathematical minds like yours are in high demand	Maths can unlock a world of opportunities. From computer coding to engineering cars that drive themselves, from protecting companies against cyber-attacks to managing millions in investments – mathematical minds like yours are in high demand	The best minds don't work alone. They build teams that, together, change the world
Maths isn't just about getting the right answer – sometimes the most valuable lessons come from exploring the impossible	Maths isn't just about exams – it's your ticket to jobs that pay well and value what you can do with your mind	Maths is incredibly valuable in a world full of problems that need solving, and jobs that require strong maths skills offer good earning potential
The best minds don't work alone. They build teams that, together, change the world.	You might not love every moment of every worksheet, but when you finally crack a problem that's stumping everyone else, you know you've got something	From computer coding to designing cars that drive themselves, from protecting companies against cyber-attacks to managing millions in investments – mathematical minds are in high demand
	Maths isn't just about getting the right answer – sometimes the most valuable lessons come from exploring the impossible	

Messaging by audience: Year groups

Maths gives you the edge

Year 7	Year 8	Year 9
Maths makes your mind sharper	Giving you the power to solve problems, find patterns and crack codes, with a combination of logic and creativity	
Maths can unlock a world of opportunities	Maths is incredibly valuable in a world full of problems that need solving	
Jobs requiring strong maths skills offer good earning potential; maths graduates earn, on average, £500,000 more over their lifetime	Maths can unlock a world of opportunities. From computer coding to engineering cars that drive themselves, from protecting companies against cyber-attacks to managing millions in investments – mathematical minds like yours are in high demand	Jobs requiring strong maths skills offer good earning potential; maths graduates earn, on average, £500,000 more over their lifetime
The people building the apps you use, designing the games you play, engineering the cars on the road – they're using the same maths skills you're developing today	Maths isn't just about exams – it's your ticket to jobs that pay well and value what you can do with your mind	From computer coding to designing cars that drive themselves, from protecting companies against cyber-attacks to managing millions in investments – mathematical minds are in high demand
Maths isn't just about getting the right answer – sometimes the most valuable lessons come from exploring the impossible	Maths isn't just being good at numbers. It's having a brain that works differently	Maths isn't just about exams – it's making your mind sharper and your options bigger
The best minds don't work alone. They build teams that, together, change the world.		
You might not love every moment of every worksheet, but when you finally crack a problem that's stumping everyone else, you know you've got something		

Statistically relevant subgroup differences

The quantitative testing was split by equal school year splits of Year 7, Year 8 and Year 9 only (rather than age), equal gender splits and equal disadvantaged vs non-disadvantaged groups (determined by pupils' eligibility for free school meals [FSM]).

Outlined on the following pages are variances in messaging by subgroup to be aware of.

The appendix includes all data points relating to these differences.

Gender

Boys

- Boys were more inclined to choose messages relating to the thrill of solving problems and challenges.
- Boys liked the idea of being able to do something that others can't.
- Boys preferred statements about maths giving them an edge in the careers market.
- Industries that boys responded well to (that need a good maths qualification) included sport, game design, AI and e-sports.

Girls

- Significantly more girls than boys included medicine in their top three industries.
- Girls preferred the statement about mathematical minds being needed in graphic design, medicine, film production and law – possibly because it was the only statement about careers which referred to medicine.

School type

State schools

- Those in state and grammar schools (which account for 87% of the sample) preferred the line 'Maths gives you the edge'.
- While industries like technology, computer science and engineering were also popular among state school attendees, the percentages were much smaller, with this audience showing a greater spread of interest across industries.

Private schools

- Respondents from private schools were marginally more likely to prefer statements that related to maths making them stand out and their minds sharper.
- This subgroup also liked statements around maths helping to unlock future and career pathways.
- Private school attendees were more likely to choose traditionally high-earning industries such as technology, computer science and engineering.

Socioeconomic

Pupils eligible for free school meals (FSM)

- FSM respondents tended to choose the line 'Maths makes you stand out' and showed preference to the message about maths 'Breaking down complex problems with a combination of logic and creativity' over 'Solving problems and challenges others can't'.
- They were less keen on the statement 'Maths isn't just being good at numbers. It's having a brain that works differently.', with just 12.33% picking this, vs 22.33% of those not eligible for FSM.
- There was greater acknowledgement from FSM respondents that maths 'might not always be easy, but you relish the challenge'.

Pupils with parents who have achieved a lower level of education

- Those with parents who've done level 4, 5 or 6 qualifications that aren't degrees (e.g. apprenticeships), were more likely to choose practical, hands-on industries that need a good maths qualification including music production, film production and engineering.
- Those with parents who've achieved a lower level of education (without a degree) prefer the statement 'Maths isn't just about exams – it's your ticket to jobs that pay well and value what you can do with your mind.'
- Those whose parents don't have degrees prefer the statement 'The best minds don't work alone. They build teams that, together, change the world.', suggesting grander, idealistic statements may resonate more.

How to put this narrative into action

High achievers need to experience the thrill of intellectual challenge and see the direct link between their abilities and their aspirations.

This means:

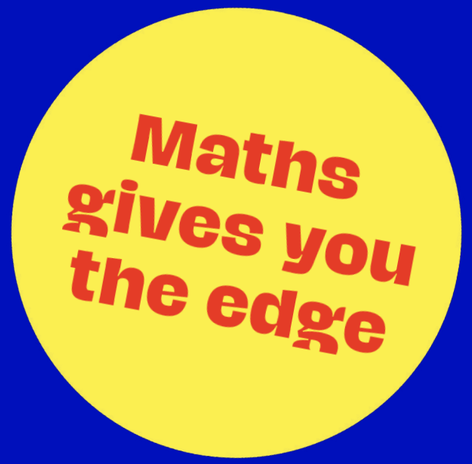
- **Reigniting the joy for maths** – helping young people fall in love with the power of their own mathematical minds.
- **Celebrating potential alongside performance** – praising not just what they can do now, but what they could become.
- **Connecting mathematics to their dreams** – showing how their mathematical edge could fuel whatever they're passionate about.
- **Creating 'this is my future!' moments** where students recognise themselves in careers.

Reigniting the joy for maths:

- Create opportunities for high attainers to test their knowledge.
- Incorporate maths puzzles and teasers into the school, classroom and home to spark interest and engagement.
- Include exercises that require high attainers to work together to solve a problem with:
  - Mathematical investigations that mirror real workplace challenges.
  - Cross-curricular projects linking maths to science, technology, and business.
  - Peer mentoring where students explore career pathways together.
- Incentivise puzzles and/or teamwork to encourage participation and collaboration.

Celebrating potential alongside performance:

- Acknowledge the grind.
- Show empathy that sometimes topics or exercises can feel repetitive or boring.
- Remind them that meaningful maths is hard, so they should sometimes feel like it's difficult – and that's fine. In fact, it's a sign they're thinking hard and making progress.
- Celebrate 'breakthrough' moments.
- Allocate time in lessons or at home to exercises or games that lift the mood or counter the 'grind'.
- Nod to the bigger picture and the value of these topics or exercises for them and for solving real-world problems – especially those that they care about.



Connecting mathematics to their dreams:

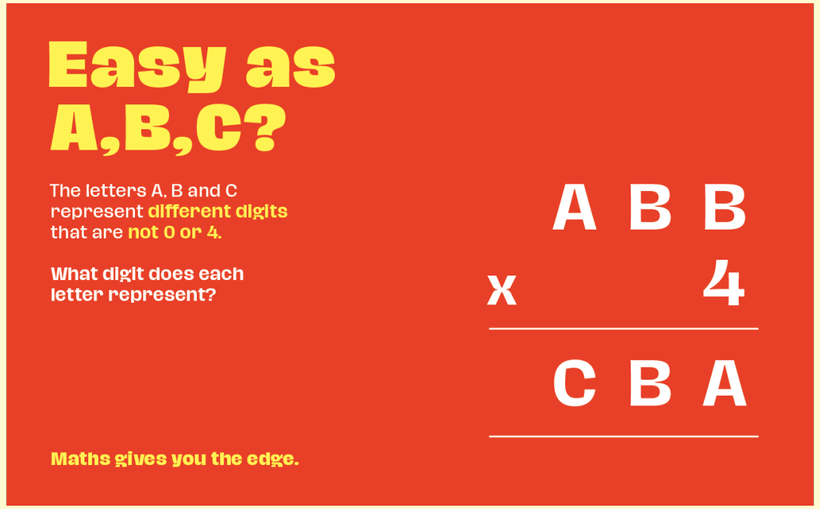
- Create opportunities to talk about their career interests and passions – and the possibilities of maths in helping them achieve this.
- Help them see maths can unlock jobs that otherwise they might not have thought about or be able to reach or afford.
- In a competitive job market, reinforce how maths can give them the edge on their peers to do what they want and/or love.
- Help them realise the extraordinary breadth of mathematical careers that extend far beyond traditional stereotypes.
- Create real-world career connections in conversations and lessons at school and at home.
- Use specific examples that speak to the individual i.e. what drives them, what they feel passionate about.

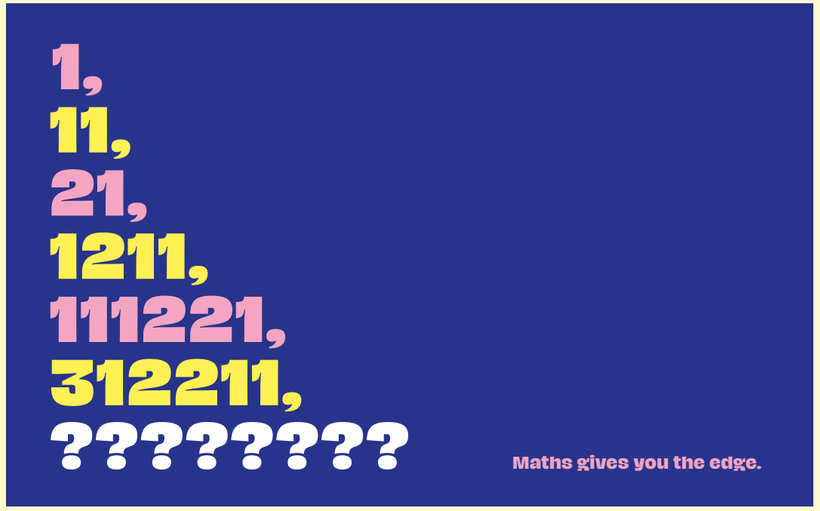
Creating 'this is my future!' moments:

- Talk about what being good at maths means – and how it sets them apart from others.
- Reference the wider value of specific assignments or homework and how it could help them and others
- Make them see maths isn't just academic skill – it's a powerful thinking tool that opens doors to:
  - Creating the technologies that will shape the future.
  - Understanding and solving global challenge.
  - Building financial independence through high-demand, well-compensated careers.
  - Thinking clearly about uncertainty in an increasingly complex world.

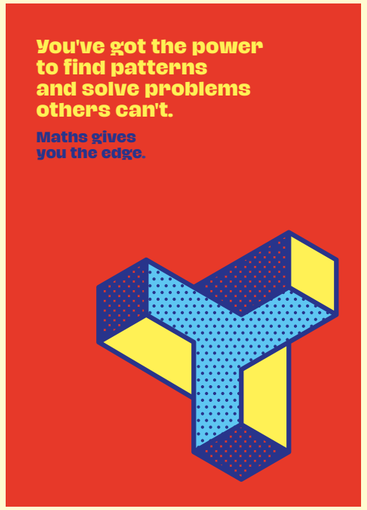
Visual examples

Posters

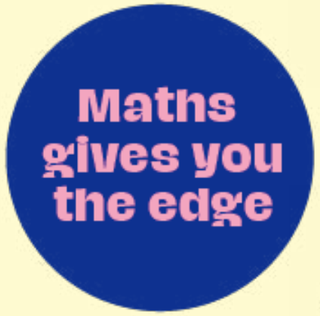


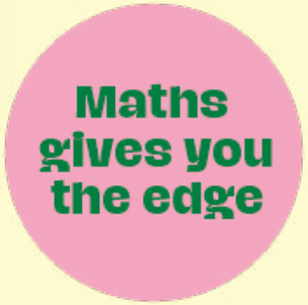


Postcards



Stickers





Appendix

- **Methodology:** How the narrative was developed
- **Research outcomes**
  - Understanding the attitudes towards maths among high-attaining maths pupils
  - Broader research on the barriers and motivators for high-performing maths pupils
- **Quantative testing outcomes**

Methodology

Maths gives you the edge is informed by existing research and understanding of the maths landscape with new research conducted with high-attaining maths pupils in Key Stage 3 across quantitative and qualitative measures between June-September 2025.

The project was split into two phases.

Phase one: Understanding the attitudes towards maths among high-attaining maths pupils

What we did

- Ran five focus groups with pupils in Years 7-9 across four UK schools to hear their views on maths as well as broader interests, hobbies, likes and dislikes. These group sessions were also used to test initial territories and messaging to better understand what motivates this audience.
- Explored broader research on the barriers to enjoying and continuing with maths.

Phase two: Estabilishing the motivating messages for high-attaining maths pupils

What we did

- The majority – all except three participants – had family members who were also good at maths (siblings, parents, cousins). From some there was a sense of pressure, particularly from parents who themselves were good at math, to keep studying it beyond GCSEs.
- Although just as many said their parents would let them choose whatever subjects were right for them and would support them because they just wanted them to be happy and successful.
- Those from lower socio-economic backgrounds felt less in control of their futures, with one participant citing that he expected to leave school at 16.

Research outcomes

a. Understanding the attitudes towards maths among high-attaining maths pupils

Insights from our focus groups:

They're matter of fact about their maths skills and enjoyment:

- Across all focus groups, there was no embarrassment, coyness, or lack of confidence around being good at maths. There's a little bit of pride, but for most, it felt like a fact.
- Being good at maths didn't seem to define them – they all had diverse / well rounded interests.
- There was a consensus that they enjoyed maths, but few considered it their favourite subject. Other subjects mentioned included history, English, sciences, art and PE.
- They talked passionately about learning about other cultures and periods in time, about how creative they felt when painting or drawing, and how they enjoyed movement and being outside.
- Conversely, when talking about maths, it was functional over emotive. They tended to enjoy maths because they were good at it' or 'found it easy' or it 'comes naturally'.

Parental and family influence is strong:

- The majority – all except three participants – had family members who were also good at maths (siblings, parents, cousins). From some there was a sense of pressure, particularly from parents who themselves were good at math, to keep studying it beyond GCSEs.
- Although just as many said their parents would let them choose whatever subjects were right for them and would support them because they just wanted them to be happy and successful.
- Those from lower socio-economic backgrounds felt less in control of their futures, with one participant citing that he expected to leave school at 16.

They like problem-solving but can find classroom learning a grind:

- Teamwork, the challenge of solving a tricky problem and the application to real-life scenarios were called out as things they like about maths.
- Wider maths contests and competitions which tested their knowledge also appealed to several respondents.
- The monotony of some maths lessons or exercises led to feelings of boredom and frustration.
- They don't like every strand of maths – there are topics they love and others that they don't.

They're pragmatic about maths as a tool to achieve their future goals:

- The vast majority of those who knew they wanted to continue maths after GCSEs said it was because they needed to do it to get the qualifications they needed for certain roles.
- Of those who didn't know whether they'd continue to study maths beyond GCSEs, all but one said they'd be open to it, if it could help them get to where they wanted to go.
- In essence, if maths wasn't seen as helpful, they'd drop it for a subject they felt was more appropriate for the career they wanted, or for one they were more passionate about.

They're already thinking about the future:

- What was most apparent was these young people – even in the younger groups – are realists and are already thinking about potential future careers. They referenced being lawyers, engineers, marine biologists, animators, doctors, architects, computer hardware engineers, games developers, biotech developers, pilots and more.
- Even if they weren't set on a specific career, they had a shortlist.

They are hyper-aware of maths 'marketing':

- This audience told us they see through / ignore maths marketing that tries to make maths 'cool'.
- There was a spoken desire for adults to be straightforward and to acknowledge the grind.
- Many are proud to like or be good at maths, but they don't necessarily want to 'wear' it on their clothes or person
- If the images in marketing materials posters are too abstract, they don't instantly get it.

b. Broader research on the barriers and motivators for high-performing maths pupils

Identity

- A widespread association of maths competence with innate "natural talent". This makes it difficult for some young people to see themselves, or be seen by others, as capable maths students. In England, young people aged 10 to 22 pervasively associate "being good at maths" with "natural talent" and "intellectual superiority". This is encapsulated in notions of "having a maths brain".[1]

Negative maths attitudes

- According to TIMSS 2019 results, primary school students in England generally reported liking maths, with only 23% of 10-year-olds saying that they disliked the subject. However, the proportion that reported disliking the subject more than doubled to 50% by age 14. This trend was more pronounced among girls. At age 10, 28% of girls expressed a dislike for maths compared to 17% of boys. At age 14, levels of dislike were higher, but with a similar gender gap; 56% of girls expressed a dislike for maths compared to 44% of boys.[2]
- A survey by Axiom Maths (2024) found that high attaining students' enjoyment of maths declined between Year 6 and Year 7. After joining secondary school, the students were less likely to say that maths is fun (from 40% to 30%) and twice as likely to say that it is "boring" (from 9% to 18%).[3]

'Maths anxiety'

- 77% of students aged eight to 13 with high maths anxiety had average or above-average maths performance.[4]
- Girls are less likely than boys to identify as "good at maths", to feel confident in their abilities and to enjoy the subject, even when achieving similar academic results. They are also more likely to report higher levels of maths anxiety.[5]
- "Many of the girls and women we support have a fear of failure and lack confidence...They always think they have to be perfect." Tanya Tracey, chief executive of the charity Girls Are Investors.[6]
- A survey of 2,000 students in years 6 to 9 found that 26% of Year 6 students from lower socioeconomic backgrounds reported feeling "nervous" when encountering a new maths topic, compared to 7% of Year 6 students from higher socioeconomic backgrounds.[7]

Archer, L., DeWitt, J., Godec, S., Henderson, M., Holmegaard, H., Liu, Q., Macleod, E., Mendick, H., Moote, J. and Watson, E. (2023). 'ASPIRES3 Main Report: Young People's STEM Trajectories, Age 10-22'. [online] discovery. ucl.ac.uk. Available at: https://discovery.ucl.ac.uk/id/eprint/10181968/

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Levine, S.C. and Pantoja, N. (2021). 'Development of children's math attitudes: Gender differences, key socializers, and intervention approaches'. Developmental Review, 62, p.100997. https://doi.org/10.1016/j.dr.2021.100997

BBC News Online, 10 March 2025. 'Girls in England lag behind boys in maths and science study'. https://www.bbc.co.uk/news/articles/c1w0l414rv4o

See ref. 3.

A lack of female peers

- A lack of female peers increases the already prevalent sense that maths is 'for boys', reducing girls' enjoyment and achievement. In maths circles, Axiom Maths has found that girls are much more likely to stop attending if they are the only girl in the group.

Parity in support

- Extra Time, a report by the Sutton Trust, found that bright but poor pupils receive much less support than their better-off peers. Whereas around a third (32%) of low-achieving pupils from advantaged backgrounds receive one-to-one tuition in science or mathematics, this falls to around one-in-twelve (7%) of high-achieving young people from disadvantaged backgrounds.[8]
- The report also revealed that poorer pupils get less help at home with their homework. Only half of 15-year-olds from disadvantaged social backgrounds in England regularly receive help with their homework from their parents, compared to more than two-thirds of those from the most advantaged backgrounds.

Parity in support

- A study by University College London (UCL) found that private school pupils in England no longer perform better at GCSE level than state school pupils in the core subjects of English, Maths and Science when the results are adjusted for socioeconomic background. Reasons for this include a shift in focus for private schools at GCSE level and private schools having the resources to expose pupils to a rich variety of cultural experiences, which could go some way to explain why they produce stronger results in the creative subjects.[9]

Jerrim, J. (Sept. 2017). 'Extra Time: Private tuition and out-of-school study, new international evidence'. Available at: https://www.suttontrust.com/wp-content/uploads/2017/09/Extra-time-report_FINAL.pdf

Anders, J., Green, F., Henderson, M., & Henseke, G. (2024). Private school pupils' performance in GCSEs (and IGCSEs). Cambridge Journal of Education, 54(6), 795–813. https://doi.org/10.1080/0305764X.2024.2420611

Quantitative testing outcomes

Key findings

Outlined are some of the data breakdowns and analysis of the quantitative testing.
Please do get in touch if you would like further information on any of the findings or to see the raw tables.

Headlines

We tested five headline statements, three of which were a variation on being good at maths giving you an edge, and two of which were a variation on being good at maths making you stand out.

Headline	Top choice
Maths gives you the edge	22.17%
Maths makes you stand out	20.83%
Maths gives you an edge	19.67%
Maths is your edge	13.50%
Maths sets you apart	13.00%
None of the above	10.83%

All the statement featuring 'edge'	55.33%
All statements about difference	33.83%
None	10.83%

Headlines referencing an 'edge' are preferred overall.

Statistically relevant subgroup differences:

- Girls are more likely to prefer none of the statements (14.67%).
- There are no statistically significant differences between the year groups.
- Those with parents who've achieved a higher level of education (degrees) much prefer 'Maths gives you the edge'.
- Those who attend private schools are marginally more likely to prefer 'Maths makes you stand out', whereas those in state and grammar schools (which account for 87% of the sample) prefer 'Maths gives you the edge'.
- Those eligible for FSM prefer 'Maths makes you stand out' (27.3%), followed by 'Maths gives you an edge' (20%), followed by 'Maths give you the edge' (16.33%).

There are key themes to the open text responses when asked why they like any of the statements referencing 'edge'. The responses reflect a balance of personal confidence, love of logic, and practical appreciation for maths. Respondents:

- Take pride in being good at maths – "Being good at maths is a superpower"
- See it as a gateway to problem-solving – "It allows me to address problem-solving skills and I love to challenge myself" and "It relaxes me trying to solve problems"
- Believe being good at maths sets them apart or ahead of others – "It gives you a head start"
- Value the career benefits and life relevance – "Maths gives you the best opportunities in life" and "It's a useful skill for most jobs"
- And also just like how the message sounds – "It just sounded the nicest"

Subheadings

Subline	Selected in their top 3
Giving you the power to crack codes, find patterns and solve problems	37.67%
Making your mind sharper	35.50%
Solving problems and challenges others can't	27.83%
Breaking down complex problems with a combination of logic and creativity	25.17%
Breaking down complex problems into manageable pieces	24.33%
Finding patterns in chaos	21.67%
Helping you solve the world's biggest problems	21.67%
Spotting solutions where others get stuck	21.00%
Spotting patterns other miss	18.33%
Finding solutions where others hit a dead end	18.00%
None of the above	2.67%

Several statements related to being able to do things others can't. Only one of these three features in the top 3 statements. The best performing statement covers the practical application of maths. The second-best performing statement focuses on personal improvement.

Statistically relevant subgroup differences:

- More boys than girls chose the statement 'Solving problems and challenges that others can't' (31.67% vs 24%). Slightly more boys (circa 2 percentage points) choose statements about doing things others can't, than girls.
- Y7s prefer the statement 'Maths makes your mind sharper' (41%), whereas only 28% of Y8s put this statement in their top 3.
- Private school attendees have a different top 3 compared to state school attendees, although one of the overall top 3 still features:
  - Making your mind sharper (44.93%).
  - Breaking down complex problems with a combination of logic and creativity (39.13%).
  - Giving you the power to crack codes, find patterns and solve problems (37.68%).
- Those eligible for FSM largely echo the main findings, although their third favourite is different – 31.66% chose 'Breaking down complex problems with a combination of logic and creativity' over 'Solving problems and challenges others can't' (24.66%).

There are key themes to the open text responses when asked why they prefer the top 3 statements. These show mental stimulation, confidence and love of logic are important. Respondents:

- Enjoy a challenge and find it mentally stimulating – "I like it when I complete a challenge – it makes me feel good"
- Feel capable and intelligent when solving problems – "I like to be challenged and I'm learning that maths makes me confident"
- Express appreciation for the logical, structured nature of maths – "I love solving problems with numbers" and "I like maths, it's very logical and makes me look smarter"
- Appreciate the real-world, practical application of maths – "It makes you think about how maths helps with more than just numbers"
- Also like concise statements – "Shorter sentence than others" and "I value how quickly they get to the point"

Statements to acknowledge the grind

We tested five headline statements about this. There's less than 7 percentage points difference between them all:

Statement	Top choice
You might not love every moment of every worksheet, but when you finally crack a problem that's stumping everyone else, you know you've got something	23.00%
It might be hard at times – grappling with equations, or repeating maths problems over and over to get it right, but you know you've got the edge.	20.00%
Practising the same thing over and over can be a bit dull, but it's worth it when you get it right.	19.00%
You might not make a big deal about being good at maths, but you know you've got the edge.	17.00%
It might not always be easy, but you relish the challenge.	16.83%
None of the above	4.17%

Statistically significant differences between subgroups:

- Boys' top 3 is different to the overall picture:
  - It might not always be easy, but you relish the challenge (21.67% vs 12% of girls).
  - You might not make a big deal about being good at maths, but you know you've got the edge (20.67% vs 13.33% of girls).
  - You might not love every moment of every worksheet, but when you finally crack a problem that's stumping everyone else, you know you've got something (20% vs 26% of girls).
- Those eligible for FSM echo the overall findings, with slightly stronger scores. However those not eligible for FSM put 'It might not always be easy, but you relish the challenge' in their top 3 (20.66%).
- There are no significant differences between type of school attended, or education level of parent.

Other statements about maths

We tested six statements. There's less than 5 percentage points between the top five statements.
Only one statement didn't perform well – perhaps because children of this age don't like to go against their friends or family:

Statement	Top choice
Maths isn't just about getting the right answer – sometimes the most valuable lessons come from exploring the impossible.	19.00%
Maths isn't just about exams – it's making your mind sharper and your options bigger.	18.50%
Maths isn't just being good at numbers. It's having a brain that works differently.	17.33%
Maths isn't just about exams – it's your ticket to jobs that pay well and value what you can do with your mind.	18.63%
You've got a skill that opens doors most people don't even realise exist.	14.67%
Your friends or your family might not see it yet, but the world needs people who think the way you do.	9.33%
None of the above	4.33%

Statistically significant differences between subgroups:

- More boys than girls prefer the statement 'You've got a skill that opens doors most people don't even realise exist' (18.33% vs 11%).
- Y7s prefer the statement 'Your friends or your family might not see it yet, but the world needs people who think the way you do' (12.5%) over Y8s (8%) and Y9s (7.5%).
- Those with parents who've achieved a lower level of education (without a degree) prefer the statement 'Maths isn't just about exams – it's your ticket to jobs that pay well and value what you can do with your mind.' (24.61%)
- Those eligible for FSM are less keen on the statement 'Maths isn't just being good at numbers. It's having a brain that works differently.', with just 12.33% picking this, vs 22.33% of those not on FSM.

Contact

For more information on ***Maths gives you the edge*** and the supporting research, or for further guidance on how to apply this narrative, please get in touch.

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