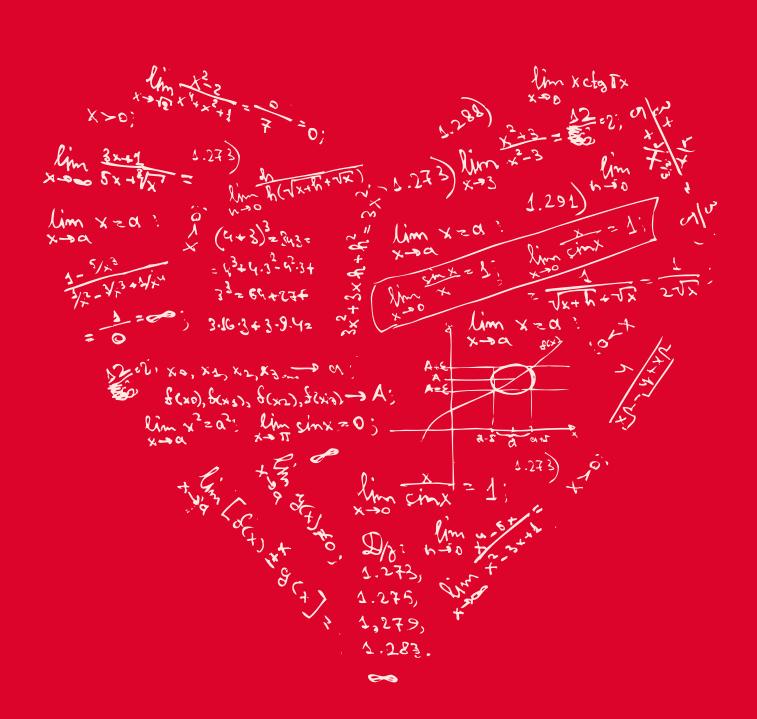
My First Love Maths: Square Root Day

Impact Report | May 2025





Introduction

To mark the rare mathematical date of Square Root Day (5/5/25), Big Ideas and RAF Youth STEM hosted a national, digital celebration with My First Love Maths: Square Root Day.

This one-day event delivered free, interactive online workshops for upper primary classes across the UK, designed to excite pupils about the power and creativity of maths and in particular, square numbers.

This innovative, curriculum-linked programme brought together thousands of students and teachers from across the UK to take part in an engaging live-streamed celebration of numbers, puzzles, and possibilities. With an energetic blend of challenges and live storytelling from a professional mathematician, Square Root Day positioned maths not as something to endure but as something to love.

Programme Aims

- 1. Celebrate Square Root Day by creating a memorable, high-impact maths event.
- 2. Introduce students to real-world mathematical careers through interactive learning with a professional mathematician.
- 3. Deliver accessible and engaging curriculum-linked challenges that build confidence and number fluency.
- 4. Reach students in all parts of the UK, including those from underserved or rural areas, via digital delivery.
- 5. Support teachers to foster positive classroom conversations around maths and creativity in STEM.

Programme Impact

- Two national live sessions delivered on 5th May 2025 (morning and afternoon)
- 7,088 pupils across 86 schools took part
- 96% of teachers felt the workshop broadened students' understanding of who can be a mathematician.
- Hundreds of live questions submitted to our guest speaker in each session
- 89.3% of pupils had never previously met a mathematician, or were not sure if they had met a mathematician
- One school, with a high percentage of FSM-eligible students, won Rubik's Cubes for their class in honor of celebrating their "first love" of maths
- 96% of teachers said they would attend future My First Love Maths events.



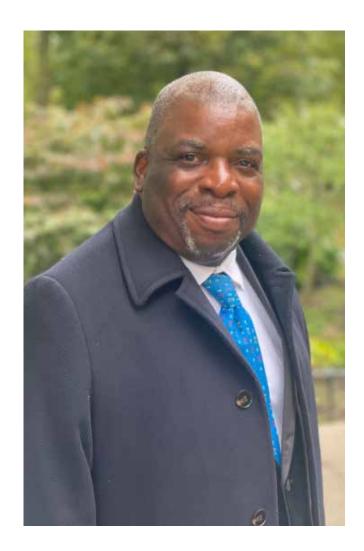
Event Overview

Each 50-minute online session created a space where maths felt playful, accessible, and full of discovery. Students were drawn in through interactive activities that encouraged pattern-spotting, collaboration, and curiosity, before connecting with a leading maths expert whose storytelling brought the subject vividly to life. Lively exchanges and imaginative challenges kept energy high, helping students see maths not just as a subject to be studied, but as something they could explore, question, and enjoy. By the end, many left with a renewed confidence and a fresh sense of excitement about what maths could be.

Guest Speaker Spotlight: Dr. Nira Chamberlain, OBE

Dr. Nira Chamberlain, one of the UK's most prominent and recognisable mathematicians, delivered both sessions. As a passionate advocate for diversity in STEM, Nira shared his journey from classroom maths to applied mathematics in engineering and defence. At the beginning of each session, Nira shared that he is currently working on using data to create more equity in his field, specifically finding ways to have more women trained and employed as maths teachers and mathematicians.

His engaging talk included stories of challenge, creativity, and why he believes everyone can find something to love in maths. Nira also answered questions from pupils, ranging from curious ("What's your favourite number?") to ambitious ("Can you use maths to design a plane?").





"It was great to see how maths can lead into a successful job from the guest speaker and to also build the confidence in those who find maths challenging. He said that he wasn't the top of his class in maths but he had a love of maths and wanted to continue with this pathway. Also when he said that a good mathematician isn't someone who finds maths easy it's someone who is resilient and is determined to find the answer."

Year 4, 5 and 6 Teacher

Student Engagement

Word Cloud Warm-Up

In response to the prompt "Why do we need numbers...", classrooms submitted hundreds of words in real time. A lively discussion followed suit.



This low-pressure, collaborative activity set a positive tone for the session and showcased the students' creativity in describing mathematical ideas.

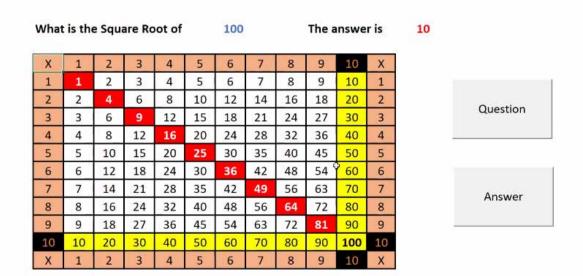
Question Submissions

Students were endlessly fascinated by Nira's work and pathway and so questions poured in from every corner of the UK.

A sample of common themes were:

- How do you become a mathematician?
- Can you use maths to design video games?
- Is maths the same in every country?
- What's the biggest number you know?





Above, an interactive Digital Square Root "Bot" that Nira Chamberlain designed for the students in our workshops.

By integrating curiosity-led challenges with number theory, pupils were encouraged to think creatively while reinforcing key learning outcomes.

"Seeing someone real doing a real maths job was great. Making maths fun and finding the joy in what can be a daunting subject was really refreshing."





Teacher and School Feedback

Following the event, teachers were invited to complete a feedback survey:

- 96% of teachers said their class enjoyed the workshop
- **92% of teachers** agreed the workshop broadened students' perceptions of maths as relevant to everyday life
- 96% of teachers felt the workshop broadened students' understanding of who can be a mathematician



- 100% of teachers expressed interest in future workshops celebrating Black mathematicians
- 96% of teachers said they would attend future My First Love Maths events
- 81% of teachers requested a copy of Nira Chamberlain's "Square Root Bot"

"In a very small school on a rural Cornish peninsula, it's pretty tricky to show children the many ways Maths can be used and enjoyed in their lives. This workshop provided a window into another world and deepened the learning opportunities we are trying to provide for the children."

Year 4, 5 and 6 Teacher



Conclusion

My First Love: Maths – Square Root Day was an energising, national celebration of maths for upper primary pupils. With engaging, accessible challenges and the inspiring presence of Dr Nira Chamberlain, the programme showed students that maths can be playful, personal, and powerful. Whether pupils were discovering square roots for the first time or asking bold questions about the future, the message was clear: maths isn't just something you learn, it's something you can love.

"The content was fantastic, it was an interesting focus on square roots which some children did not know what it was but do now and that it was based on the 5th May 2025. We also worked out the next square root day! The guest speaker was great and we took some quotes which will be displayed around the classroom to inspire the children."

Year 4, 5 and 6 Teacher

Find out more www.big-ideas.org