



Wajiha



Tom



Rosie



Phil



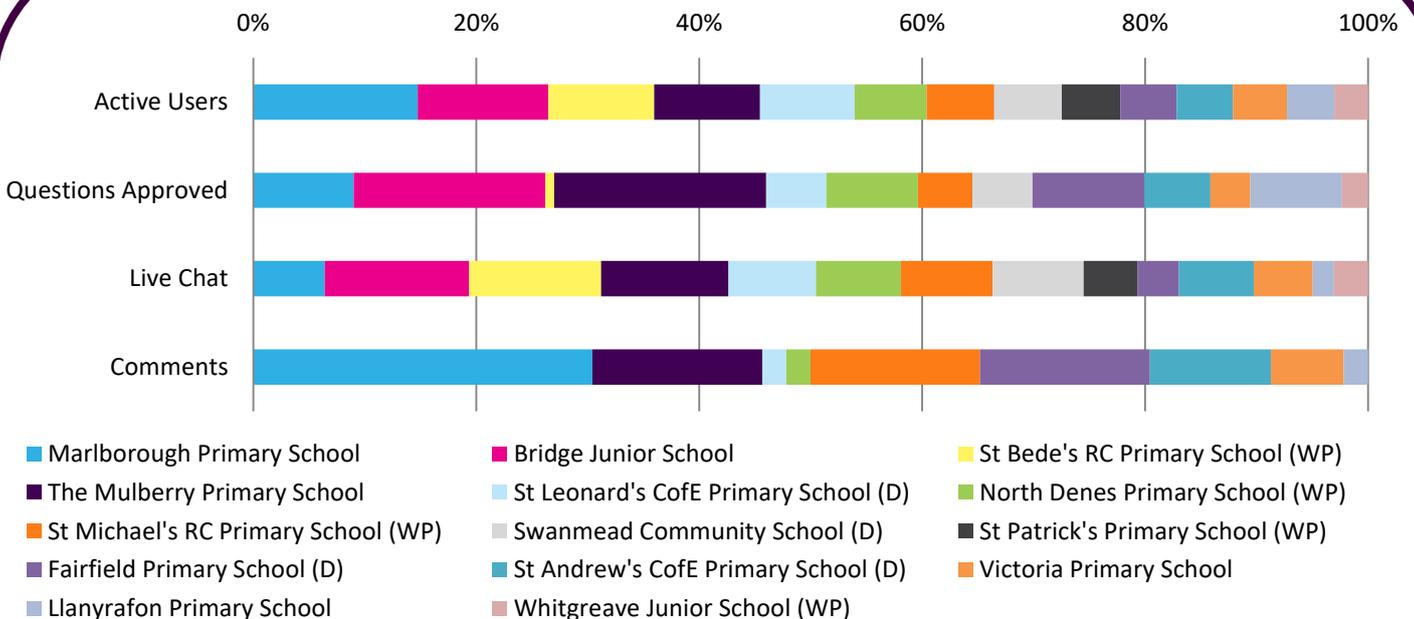
Chris

June 2017

The Thorium Zone was a general science zone specifically for primary schools, and was funded by Wellcome. Wajiha is a PhD student researching ways to make MRI scans faster, Tom is a PhD student in nuclear fusion – working out how to make a star in a box – and Rosie, the winner in this zone, is a PhD student studying how life can survive in extreme environments like inside a volcano or at the bottom of the ocean. Phil is a landscape ecologist researching ways to observe bees in flight and Chris studies wheat plants to help us grow stronger plants without disease.

This was a really busy zone with nearly 390 questions sent to scientists in the ASK section, and the highest percentage of active students out of all the zones in June's event (96%). All the scientists were great at answering directly and tailoring their language to suit younger students. Rosie and Chris were the most active scientists, providing nearly 80% of all answers by scientists and attending lots of live chats. This meant a lot of questions were related to their work, with students asking all about space and plants.

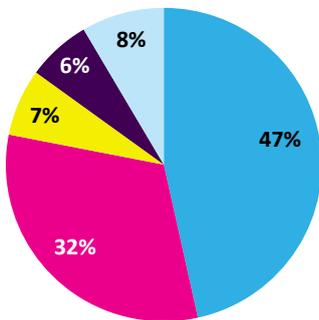
School data at a glance



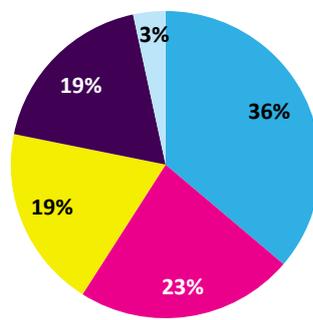
We want to increase the participation of under-represented groups going into STEM careers. Find out what we mean by our Widening Participation (WP) and distant from a major research HEI (D) schools, and how you can support us in working with more of these at about.imascientist.org.uk/widening-participation.

Scientist activity

Answers



Live Chat



Scientist	Profile views	Position
Rosie Cane	1,420	Winner
Chris Bowden	1,156	2nd
Tom Nicholas	1,359	3rd
Phil Donkersley	947	4th
Wajiha Bano	1,182	5th

Key figures from the Thorium Zone and the averages of the June zones

PAGE VIEWS	THORIUM ZONE	JUNE '17 ZONES AVERAGE		THORIUM ZONE	JUNE '17 ZONES AVERAGE	IAS 2012-17 AVERAGE
Total zone	21,831	20,354	Schools	14	14	10
ASK page	2,519	1,630	Students logged in	520	498	381
CHAT page	2,083	1,969	% of students active in ASK, CHAT or VOTE	96%	89%	85%
VOTE page	2,153	1,741	Questions asked	1,182	622	709
			Questions approved	389	271	306
			Answers given	260	400	543
			Comments	52	45	76
			Votes	451	382	299
			Live chats	20	21	16
			Lines of live chat	6,683	6,525	5,315
			Average lines per live chat	334	311	344

Popular topics

Students really engaged with the scientists' research areas, especially Tom's plans to make a star in a box. Students wanted to know how it would fit in the box, what the box would be made out of and what he will use its heat for. Chris' work on wheat was also a popular topic, with students asking how many wheat fields he is responsible for, if he will one day be able to prevent wheat from catching diseases and whether he has ever artificially created wheat.

Students asked Wajiha about MRI scanners; what they are for, how they work, what it feels like to have a scan and why we want to make them faster. Rosie's work in astrobiology sparked a lot of curiosity from students. They wanted to know about the different sorts of extreme life she is studying, the different places it lives and which planet would be the most difficult for life to survive on. This led to questions about space, the moon, the sun and the different planets in our solar system. They also wanted to know about how astronauts live when they are working in space.

Students were interested in why the scientists chose to do the jobs they have and whether they had ever wanted to do anything else. They asked about their experiences in school, if they enjoyed it, if they had any scary experiences, who supported them and whether they were good at spelling.

Off topic, students asked personal questions about Xbox and gaming, favourite colours, songs and foods, holidays and family.

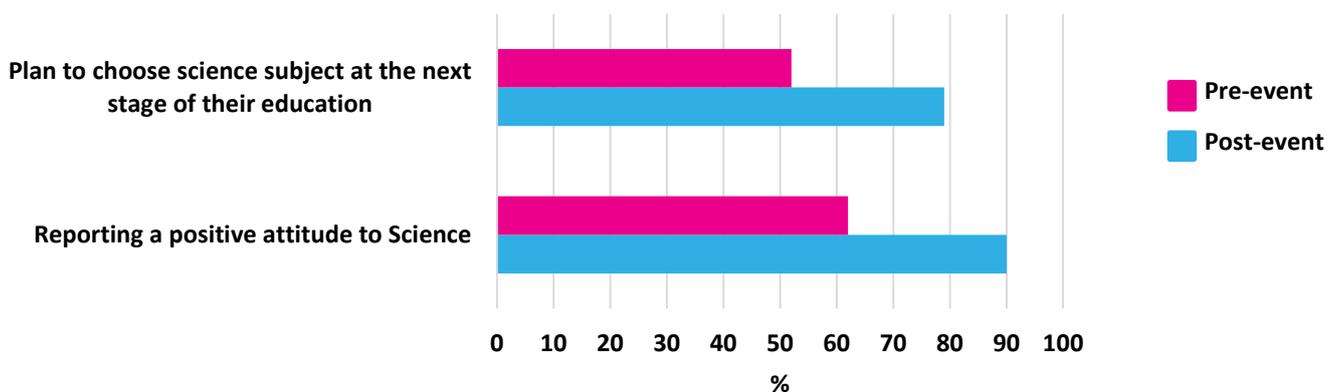


Keywords from live chats in the zone, size of the word represents its popularity



Students' attitudes to STEM

We ask students directly about how they feel about science, before and after taking part in the event. It's clear that participating in I'm a Scientist has an overall positive effect on students' attitudes to science:



Figures are averages from I'm a Scientist Zones run between 2012 and 2015. We're still collecting feedback for June 2017, but we expect to see a similar positive change.

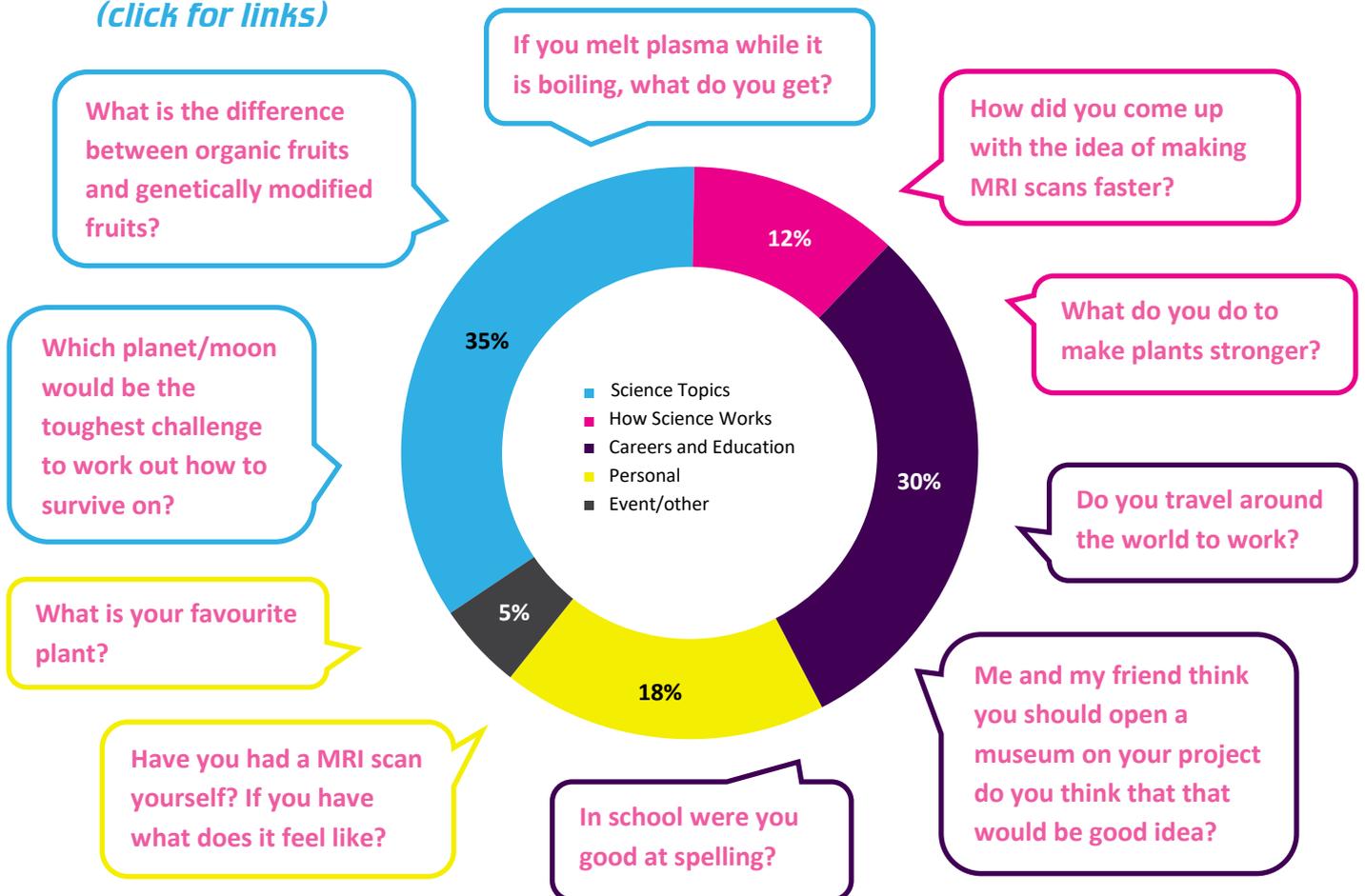


Top Keywords of questions approved in the Zone
 Area represents frequency of use, colour represents category



Careers and Education
 Science topics

Question themes and example questions in the Zone
 (click for links)



Find out about how we've coded the questions at about.imascientist.org.uk/2017/student-question-coding

Examples of good engagement

Lots of students wanted to know about Tom's work trying to 'put a star in a box' and he was great at explaining it in simple terms students could understand:

"How big of a box will you need to put a star in it? And what material would you use?" – **Student**

"We need a donut-shaped box, big enough to fit a house inside the donut. We're going to use a metal called Tungsten for the walls of the box" – **Tom, scientist**

"That sounds challenging where will you make the donut box?" – **Student**

"We are currently building our biggest one yet in the South of France (Google ITER, there are loads of great YouTube videos about it)" – **Tom, scientist**

"My auntie lives in the south of France" – **Student**

In many of the chats students showed a real curiosity about space and our solar system:

"Is there life on the moon?" – **Student**

"Nope, there isn't any life on our moon! At least, not any life that we've found yet" – **Chris, scientist**

"Do you know what it is like on the moon?" – **Student**

"I'm afraid I don't, Rosie might be the better person to ask!" – **Chris, scientist**

"@Rosie do you know what it is like on the moon?" – **Student**

"Yes! The moon would be cold as it does not have a protective 'atmosphere' like we have here on Earth. You would also be able to jump much higher on the moon as there is less gravity!" – **Rosie, scientist**

Scientist winner: Rosie Cane

Rosie's plans for the prize money: *"I would like to use the money to inspire children to investigate and gain an interest in science using the exciting subject of astrobiology. [I want to] show how exciting and accessible physics can be, along with chemistry, geology and many other sciences that play a part in understanding our own planet and the billions of others out there!"* Read Rosie's [thank you message](#).



Student winner: Mad Scientist

For great engagement during the event, this student will receive a gift voucher and a certificate.

Feedback

We're still collecting feedback from teachers, students and scientists but here are a few of the comments made during the event...

"I've enjoyed it so much, I've learnt lots thanks!" – **Student**

"Getting to talk to so many inspiring young people and answering all of your questions was so worth it and I would recommend this competition to anyone that loves science!" – **Rosie, Scientist**