March 2020

The Nihonium Zone was a general science zone for primary schools, supported by Wellcome. There were six scientists taking part:

- Pan-ngum Wirichada predicts how disease spreads and how we may be able to stop or slow it down using mathematical models.
- Natalia Brodaczewska sets up and analyses genetic tests looking for changes in the DNA of cancer patients.
- Mick Schubert, the winner of this zone, is a science writer and editor, turning complicated science into ways everyone can understand.
- Manjit Kaur is a Dermatologist at the University of Birmingham.
- Filipe Richheimer is a PhD student measuring very small objects.
- Bruce Saleeb-Mousa is a PhD student designing, making and testing tiny devices that can change the direction of the path of a light beam.

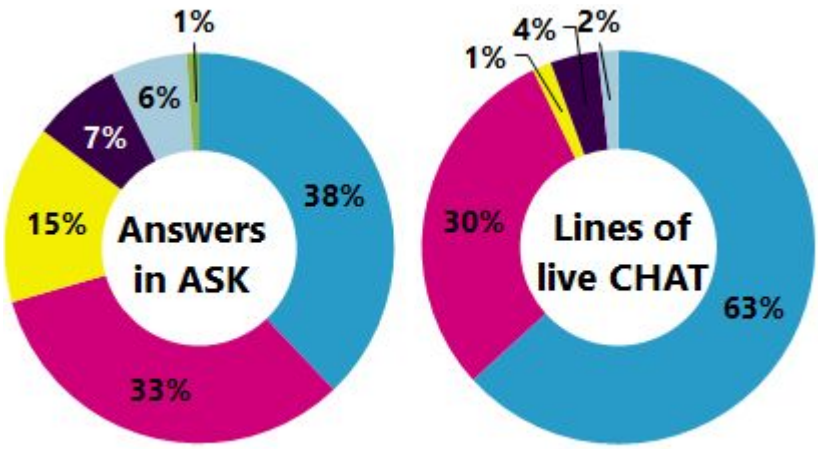
Key figures

This zone had a higher than average number of students logging into the zone, and questions asked by students. One scientist had difficulty taking part due to changing jobs at the beginning of the 2 weeks.

Due to the effects of coronavirus, many schools reported a large number of staff and student absences, which had an impact on their participation in the second week. Students could still access the chat from home so we still opened bookings, but there were a lower number of chats than we would normally see, and they were quieter on average.

	NIHONIUM ZONE	MAR '20 ZONES AVERAGE	2012–19 ZONES AVERAGE
Schools	9	7	10
Students logged in	347	300	385
% of students active in ASK, CHAT, VOTE, or comments	82%	86%	87%
Questions asked	263	251	637
Questions approved	145	154	284
Answers given	190	287	512
Comments	32	27	66
Votes	220	204	301
Live chats	16	14	16
Lines of live chat	5115	4869	5,722
Average lines per chat	320	358	357

Scientist activity



	PLACE
Mick Schubert	1st
Natalia Brodaczewska	2nd
Pan-ngum Wirichada	3rd
Filipe Richheimer	4th
Bruce Saleebmousa	5th
Manjit Kaur	6th

School activity

		YEAR GROUP(S)	CLASSES
A	Holy Trinity CE VC Primary School, Weymouth (WP/U)	4	3
B	Clytha Primary School, Newport (U)	5,6	2
C	St Winefride's RC Primary School, London (WP)	5,6	3
D	Heathfield International School, Bangkok, Thailand	STEM Club	1
E	St Mark's CE Primary School, Manchester	5	2
F	The Sydney Russell School, Dagenham (WP)	5	1
G	Friskney All Saints CE (Aided) Primary School, Boston (WP/U)	5	2
H	Hodthorpe Primary School, Worksop (U)	5,6	1
I	Hill of Banchory School, Banchory (U)	3	1

We have found that schools that are more than 30 minutes travel time from their closest Higher Education Institution are less likely to receive visits and benefit from engagement activities. We give priority to underserved (U) and widening participation (WP) schools when allocating places. Find out more about our research at https://about.imascientist.org.uk/2017/school-engagement-in-stem-enrichment-effect-of-school-location/

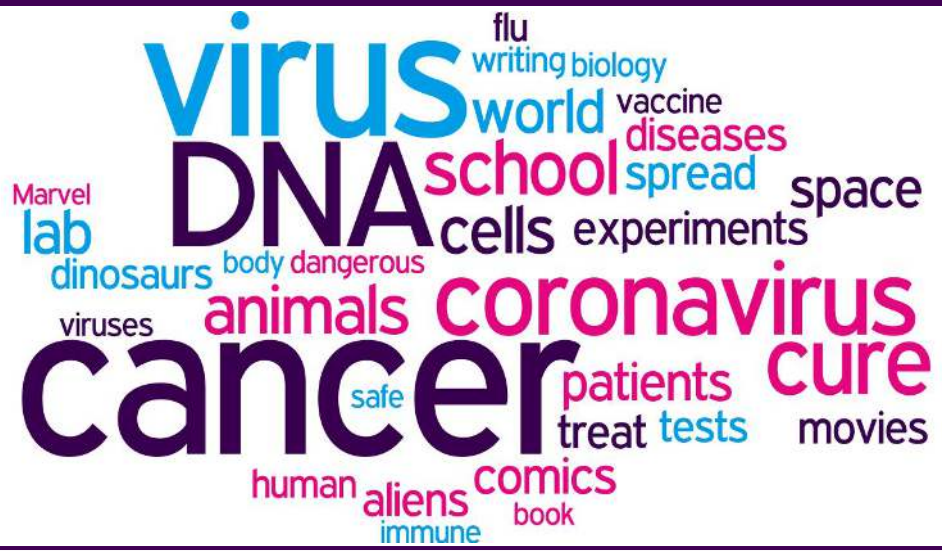
Popular topics

Discussions in the Nihonium Zone were generally based around cancer and viruses, with many questions on coronavirus.

Students asked Natalia about her work into DNA and cancer, such as what are the first signs of cancer, and how cancer develops in the body. There were many general question about viruses and disease, and about Filipe's work using lasers.

Students also asked about what the scientists did in their spare time, especially asking Mick about his work making comics.

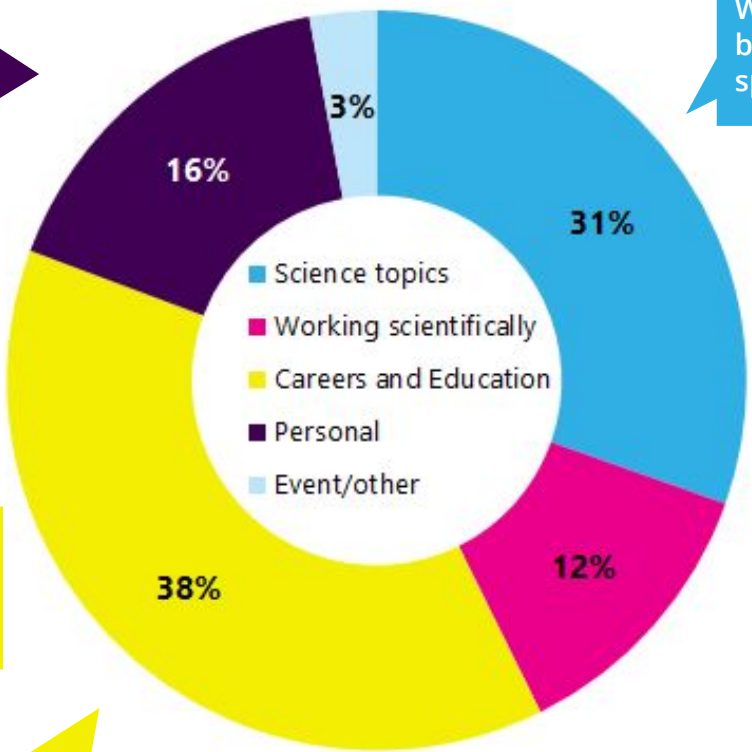
Frequent words used in live chats by students and scientists



Question themes and example questions in the Zone

Do you like Star Wars and have you ever tried to make a lightsaber/ Kaber crystal?

What would be the best material for spiderman webs?

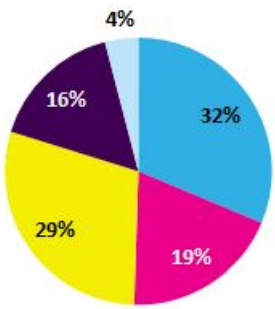


How do exotic diseases spread? Do they spread differently compared to disease like the flu?

Do you work with people or by yourself?

How many different cancer treatments have you researched?

What type of mathematics do you use to stop and slow down diseases?



Historic Per-Zone Averages

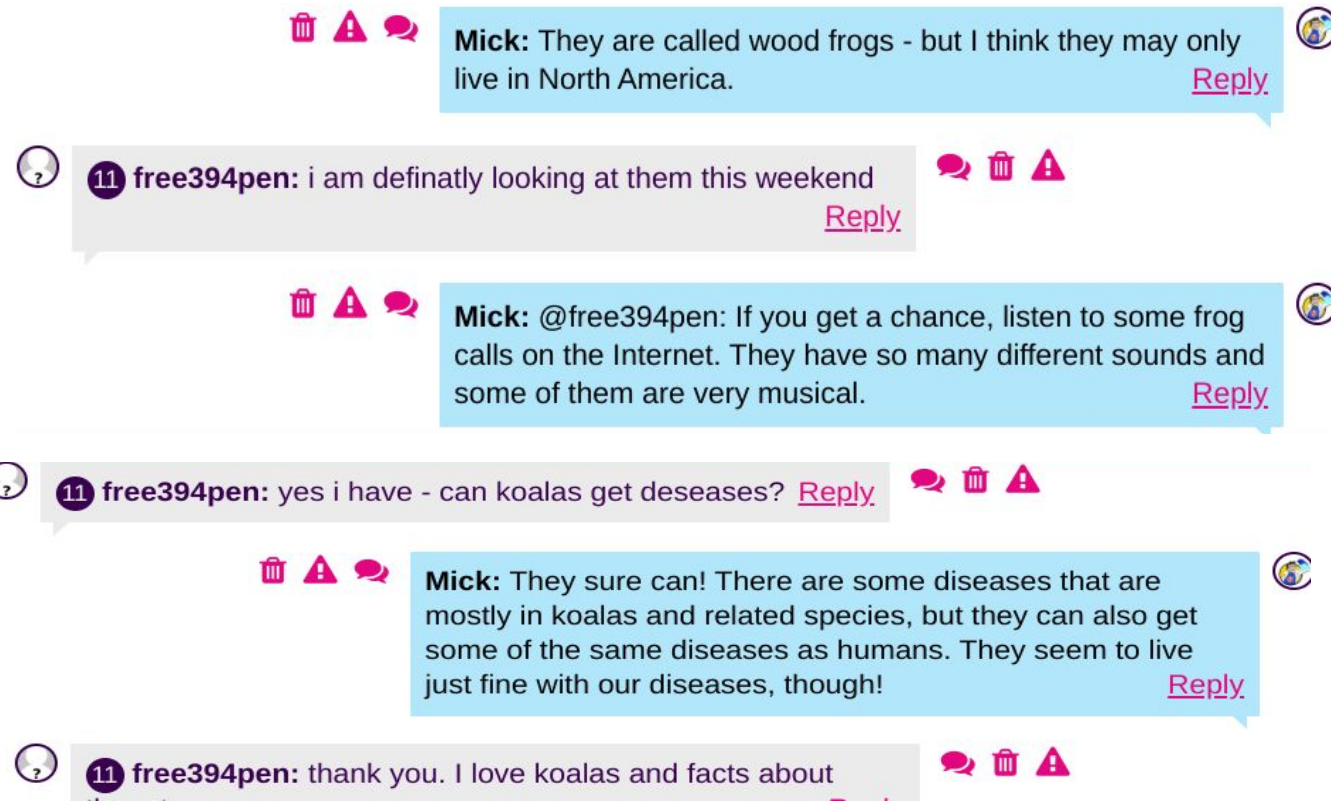
MangorollaCIC

01225 326 892 | jen@mangorol.la

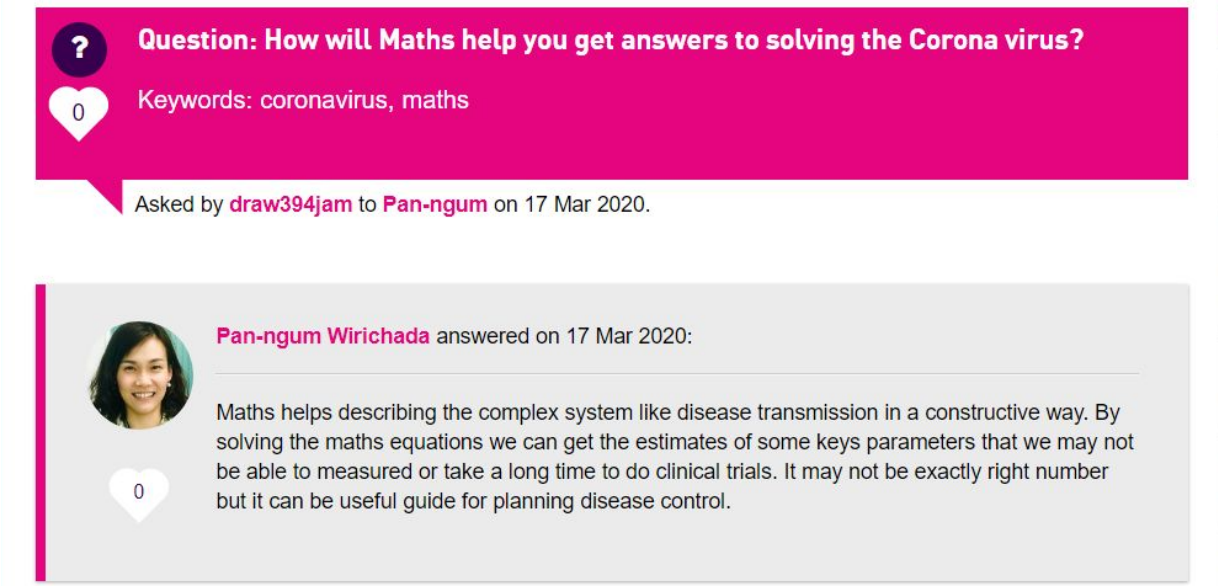
Supported by wellcome

Examples of good engagement

The students were asking lots of questions based around animals, allowing them to share their favourite animals with the scientists, connecting over a shared interest:



Scientists were also able to share their knowledge with the students, and show students the relevance of topics such as maths to current issues:



Scientist winner: Mick Schubert

Mick's plans for the prize money: "*I would use the prize money to buy science equipment that I could bring with me to show people cool experiments everywhere I go. I would also make a short science comic that I could give away to help get people excited about science!*"

Read Mick's **thank you message**

Student winner: heyitsniamh

As the student winner, heyitsniamh will receive a certificate and a gift voucher.

Feedback

We're still collecting feedback from teachers, students and scientists but here are a few of the comments made about March"s *I'm a Scientist*...

All our students have thoroughly enjoyed the experience, learned a lot and had something positive to cling to this past week
— Teacher

I would highly recommend I'm A Scientists to my colleagues, as I had an incredible experience. The ability for high school students to ask questions (including some real tough ones) directly is a fantastic outreach tool, and I feel privileged to have taken part.
— Scientist

I think this is a pretty unique method of science engagement! You get the chance to get to know and help some of the students, particularly in the evening chats!
— Scientist

Thank you for answering every question no matter what the challenge!
— Student

This has been really useful. Thank you for taking time to answer us! :)
— Student

Thank you for giving up the time and answering our questions you have informed us with alot of cool and amazing information
— Student