March 2020

The Copernicum Zone was a general science zone funded by STFC. There were six scientists taking part in the zone:

- James Roberts is a mechanical engineer who researches how to build fusion power plants at UKAEA, an STFC partner.
- Hannah Blyth is an STFC funded PhD student studying plant pathology and looking into how fungi cause disease in wheat leaves
- Claire Hobday is materials chemist who uses STFC facilities in her research on the atomic structure of materials and the effect of pressure on them.
- Chris Carlton works for STFC managing a panel of experts who assess physics proposals for funding, in areas including nuclear physics and astronomy.
- Binuraj Menon, the winner of the Copernicium Zone, uses data from STFC facilities in his work on converting microbes to produce new types of molecules.
- Alice Rhind-Tutt is a PhD student using data from sTFC facilities to research how DNA moves, to try and find methods of preventing and curing illnesses including HIV and dementia.

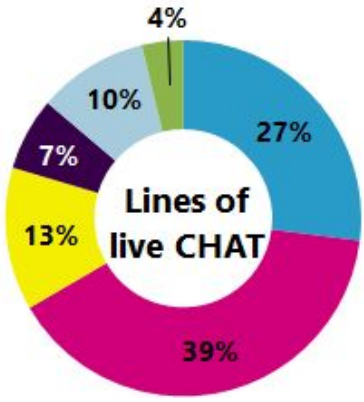
Key figures

This zone had a higher than average number of participating schools, and the second highest total number of students logged in out of all the March 2020 zones.

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.

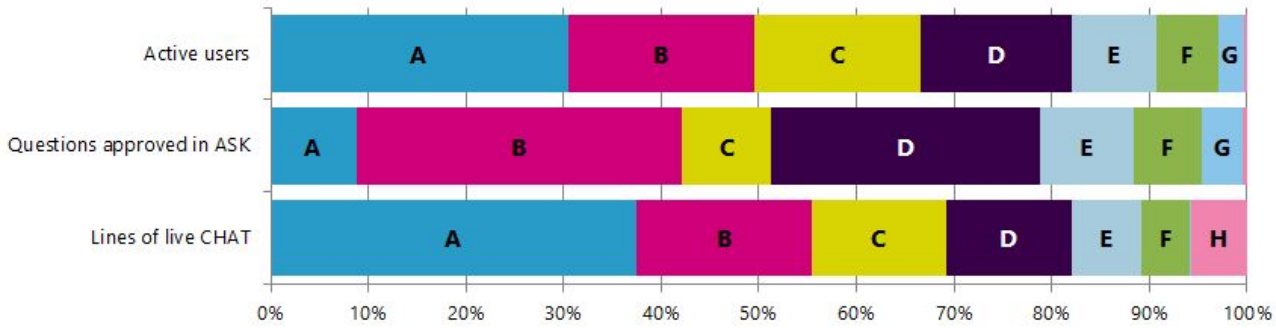
	COPERNICIUM ZONE	MAR '20 ZONES AVERAGE	2012–19 ZONES AVERAGE
Schools	8	7	10
Students logged in	380	300	385
% of students active in ASK, CHAT, VOTE, or comments	88%	86%	87%
Questions asked	374	251	637
Questions approved	240	154	284
Answers given	364	287	512
Comments	37	27	66
Votes	278	204	301
Live chats	15	14	16
Lines of live chat	7731	4869	5,722
Average lines per chat	515	358	357

Scientist activity



	PLACE
Binuraj Menon	1st
Hannah Blyth	2nd
Alice Rhind-Tutt	3rd
James Roberts	4th
Chris Carlton	5th
Claire Hobday	6th

School activity



		YEAR GROUP(S)	CLASSES
A	Northfield School and Sports College, Billingham	7	5
B	The Bishops' Blue Coat CE High School, Chester (U)	7,8	2
C	Reepham High School and College, Norwich (U)	7,9	2
D	The Petchey Academy, London (WP)	7,9,10	3
E	Sandymoor, Runcorn (WP/U)	7	4
F	Colne Community School and College, Colchester	7,8	1
G	St Mary's Catholic High School, Croydon	7	3
H	Brampton Manor Academy, London (WP) - *Students all used one account*	8	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 Copernicium Zone were generally on topic, and there were many discussions about the scientists work. For example, students asked Hannah about her research into fungi causes disease in plants, and whether this impacts on society.

Like the other zones, there were many questions also on coronavirus, as well as more general science questions, such as about how processes worked. Students wanted to know about a whole variety of topics such as climate change, viruses and bacteria, and education.

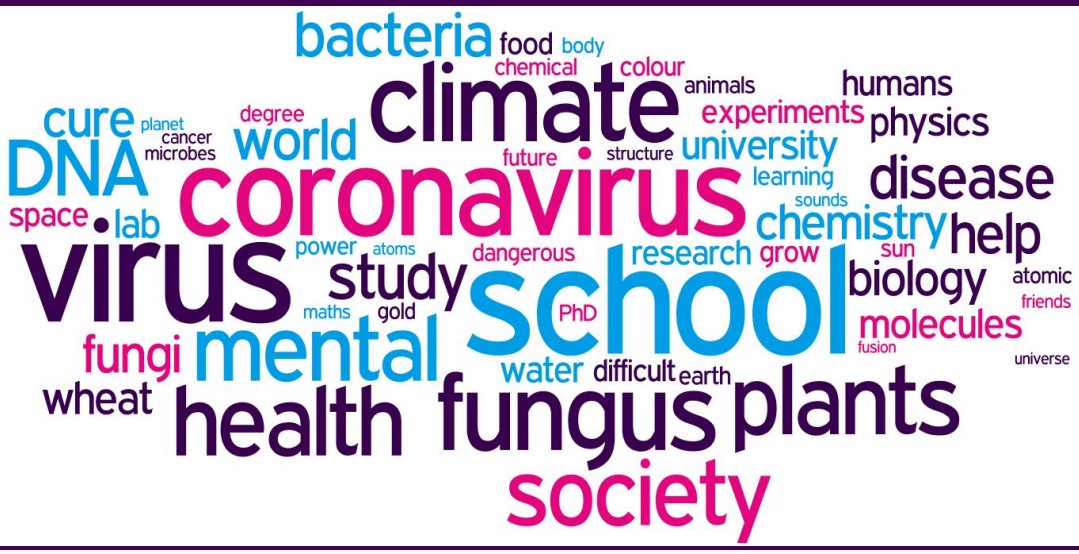
Students also asked about the scientist's favourite food, books and what they did in their spare time.

Copernicium Zone Cn

I'm a Scientist Get me out of here

Frequent words used in live chats by students and scientists

Chat



Question themes and example questions in the Zone

Ask ?

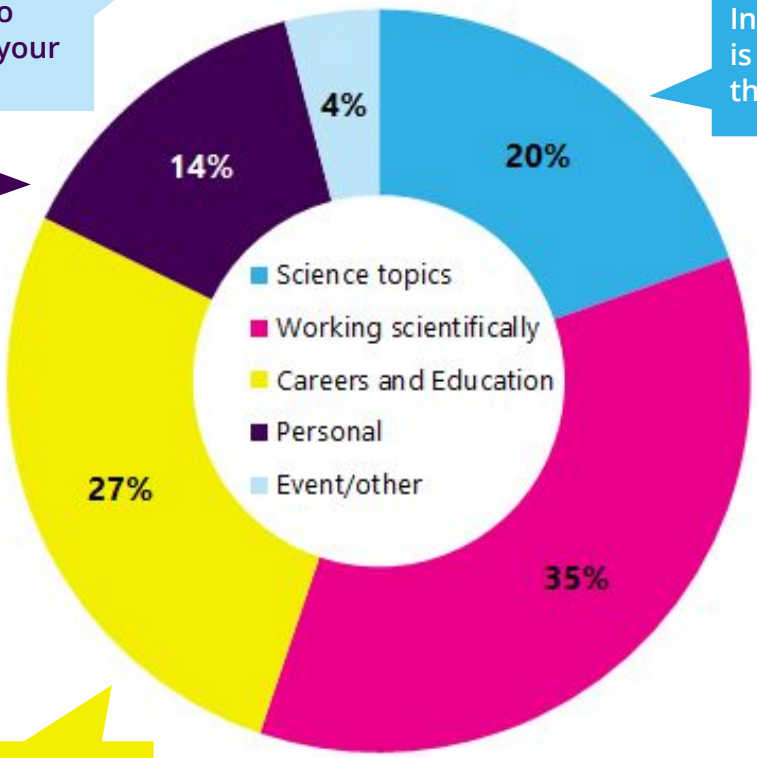
What will you teach the children you plan to take on the trip to your laboratory?

In the same way there is an absolute zero, is there a limit to heat?

Who is your favourite author?

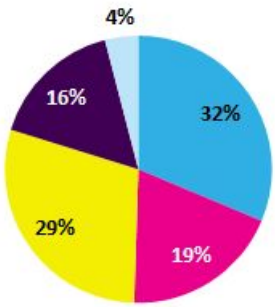
How does gold enable you to look at dna

I'm considering a career in biochemistry, what do you recommend taking at GCSE and A level?



What is the greatest thing you've achieved in your job?

What sort of molecules do you expect to make?



Historic Per-Zone Averages

MangorollaCIC

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Supported by wellcome

Examples of good engagement

Interactions between scientists and student included discussions about education, and the range of careers available if you have a science degree:

"Does GCSEs for science affect the rest of your life? - ***Student***

"Not really, there are ways to do anything that you would like regardless of what GCSEs or how good your results are - for example many universities offer foundation degrees where you have an extra year - ***Hannah, Scientist***

"It's good to try your best with your GCSEs, but there are lots of options if they don't go to plan Colleges offer booster courses and lie Hannah said universities offer foundation courses. Or you can look at apprenticeships which are great ways of earning money at the same time! - ***Alice, Scientist***

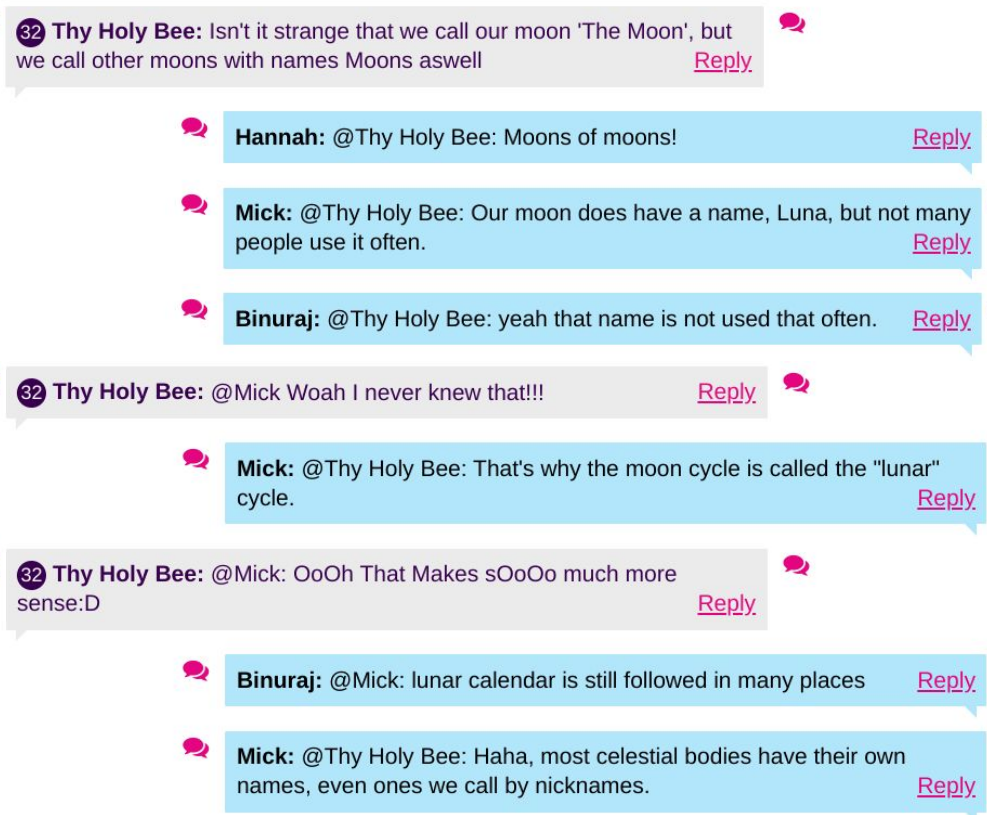
"What jobs can a science degree give you" - ***Student***

"Lots! Science graduates have lots of skills in finding and reading information, and being able to make careful conclusions from information etc! Really useful for lots of jobs" - ***Hannah, Scientist***

"Science degrees can give you lots of jobs in a lot of areas. You come out of your degree with lots of skills in logical processing of information and problem solving skills which many employers e.g. finance, policy" - ***Claire, Scientist***

"Thanks for answering all my questions, it was very interesting" - ***Student***

Students in this general zone asked questions about a wide range of topics, engaging in conversations where scientists listened to and valued the questions they asked, and the students learned new things:



Scientist winner: Binuraj Menon

Binuraj's plans for the prize money: *"I will organise for a school visit for year 1 and 2 local school kids to our laboratory. I think it is cool for kids to dress up like scientists on their visit, so it would be a scientist-themed trip. "*

Read Binuraj's **thank you message**

Student winner: made389gas

As the student winner, made389gas 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