



Zoya



Tom



Stacey



Laura



James



Connor

March 2020

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

- Zoya Ali is a Geneticist at RHC, specialising in prenatal and reproductive genetics.
- Tom Scott is a Lecturer who develops low cost nano-materials for cleaning water at low cost and has been funded by STFC.
- Stacey New, winner of the Livermorium Zone, is a Climate Scientist at the Met Office, a research partner of STFC, working to help people understand climate change and its impacts..
- Laura Mason is a Forensic Researcher at DTSL, a research partner of STFC. looking at ways to find evidence that can be used in court cases.
- James Lees is a PhD student investigating how to make a thermometer for use at a scale of just hundreds of atoms.
- Connor Prior is a PhD student trying to make new compounds which could provide new ways to make medicines.

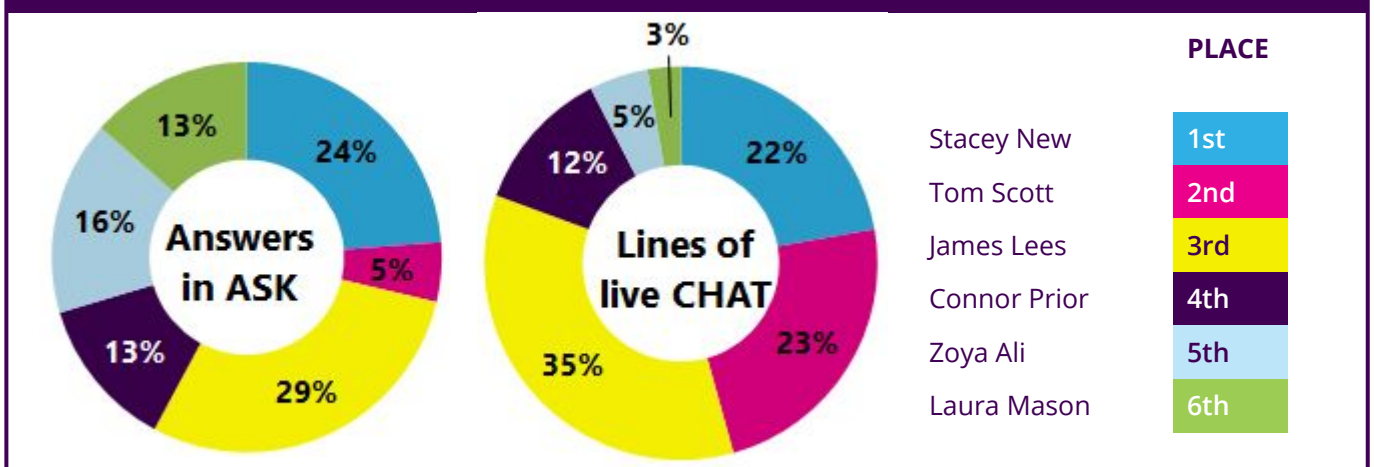
Key figures

Despite having half the average number of live chats in March 2020 zones, the chats were almost twice as busy with 687 lines per chat.

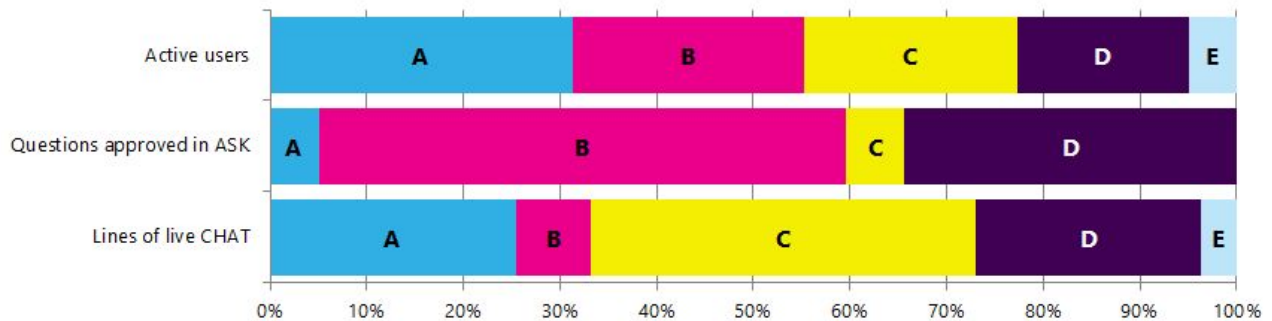
Due to the effects of coronavirus, many schools reported a large number of staff and student absences, which had an impact on their participation in the second week. Students could still access the chat from home so we still opened bookings, but there were a lower number of chats than we would normally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

	LIVERMORIUM ZONE	MAR '20 ZONES AVERAGE	2012-19 ZONES AVERAGE
Schools	5	7	10
Students logged in	182	300	385
% of students active in ASK, CHAT, VOTE, or comments	89%	86%	87%
Questions asked	221	251	637
Questions approved	99	154	284
Answers given	223	287	512
Comments	20	27	66
Votes	134	204	301
Live chats	7	14	16
Lines of live chat	4810	4869	5,722
Average lines per chat	687	358	357

Scientist activity



School activity



	YEAR GROUP(S)	CLASSES
A The Westgate School, Slough	9,10	4
B Haverstock School, London (WP)	10	2
C St Alban's Catholic High School, Ipswich (U)	8	3
D Kingsmead Academy, Taunton (U)	9	1
E Dagenham Park CE School, Dagenham (WP)	7	3

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

Many discussions in the Livermorium Zone were about the scientists' work and current research. Students were particularly interested in Stacey's research into climate change, how her work burning plants would help and for ideas on what students could do to help in their own lives. Tom was asked about building robots and how easy it is.

All the scientists were asked about the day to day aspects of their jobs, how hard it is, what they had to study, and if they would ever want to do something different.

Other questions focussed about what we could generally do to combat climate change, as well as many questions about the current coronavirus outbreak.

Students also asked about the scientists' hobbies such as favourite video games, and where the scientists wanted to travel, to allow them to get to know them on a more personal level.

Frequent words used in live chats by students and scientists



Question themes and example questions in the Zone



You said that you love video games, what is your favourite video game?

What would happen if all the mass in the universe was in one ball?

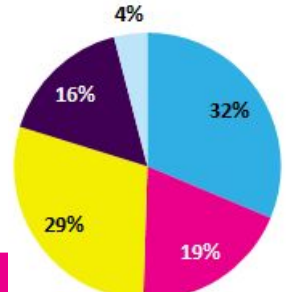
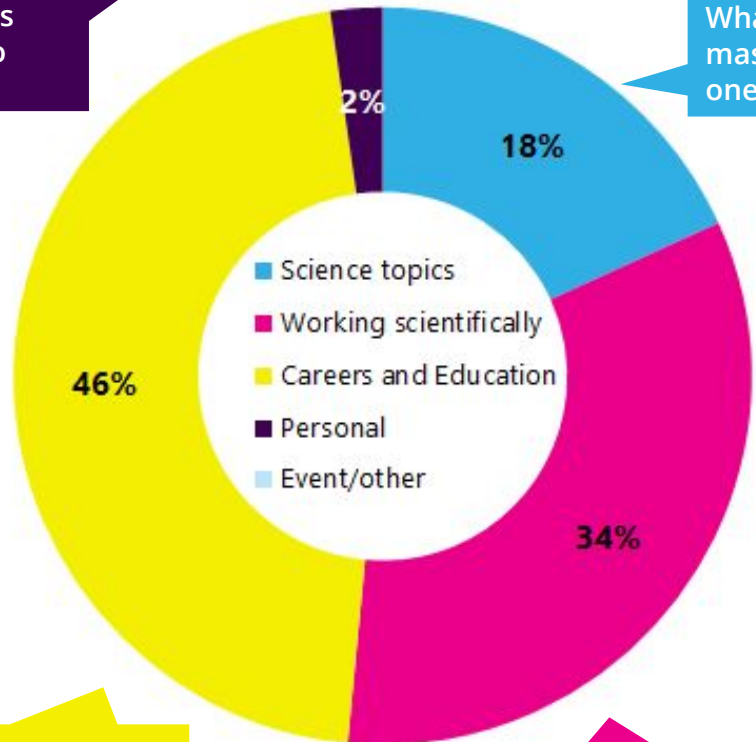
What GCSE's do you need?

When did you know science was right for you?

What kind of information do you get from the robots in the nuclear reactors?

Would you ever change profession for any reason?

Do you enjoy listening to other scientists opinions and theories?



Historic Per-Zone Averages

Examples of good engagement

The students were asking lots of questions based around climate change, and why Stacey's work on climate change involved burning plants. This allowed the scientists to share their knowledge and explain things in a way students could understand:

*"Why do you burn plants if you want to save the climate" - **Student***

*"I set fire to quite a lot of wood and plants to see how they react in a fire. I looked at this as it when a forest fire occurs it is important to understand how severe the might be. We need to understand what impact they have during a wildfire, do they make them more severe for example. I also look at how much carbon they store so we can model climate change better" - **Stacey, Scientist***

*"wow so it helps our planet in the end?" - **Student***

*"yes it will help, we need to understand the basics of science so that we can work out how best to plan for the future and make better model predictions of future climate change" - **Stacey, Scientist***

*"i love u guys u really help" - **Student***

There were lots of discussions about education, and what education was needed to become a scientist:

*"which courses did you pick at university?" - **Student***

*"I studied Geology at University before doing my Phd in Physics" - **Tom, Scientist***

*"is masters needed to become a scientist?" - **Student***

*"You don't necessarily need a masters to do a Phd, but it can be helpful! There are also lots of roles in science for those without Phds, including being technicians in research laboratory" - **Tom, Scientist***

*"Thanks!" - **Student***



Scientist winner: **Stacey New**

Stacey's plans for the prize money: *"I would like to visit my local college and run a climate change workshop for students. During this workshop I would get the students to think of and develop a board or card game based on climate science and then use the money to have it professionally created."*

Read Stacey's **thank you message**

Student winner: **away399day**

As the student winner, away399day 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 a lot of cool and amazing information
— **Student**