



Yo



Theo



Oli



Nina



Kerrienne



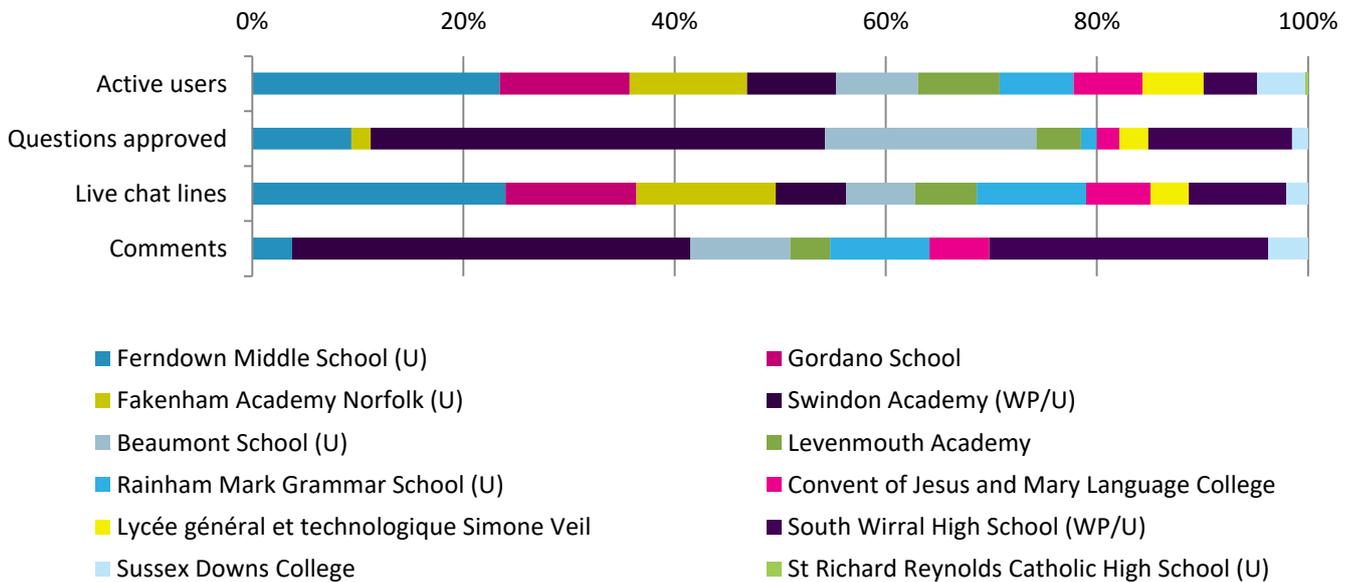
Edward

November 2017

The Neptunium Zone was a general science Zone supported by Wellcome. In this zone students met six scientists, all working in different areas. Yo is a software developer who writes code for experiments within biology and Theo works for a company that makes breath chemical detectors as a scientific writer, explaining to scientists and doctors how to use the technology in their research. Oli, the winner of this Zone, is a PhD student in environmental science studying fossils to work out the history of a threatened forest in Brazil. Nina is a geologist who has studied volcanoes and now researches materials different buildings are made from, Kerrienne is a PhD student making and testing optical fibres and Edward is a research associate in neuroscience looking at how our brain is wired up.

Chats in this Zone were lively with lots of back and forth conversations. The scientists were good at building a rapport with the students and engaging them with their subject areas. For example, after hearing about Oli's work with plants in a chat a student said 'I honestly didn't think plants could be interesting until 10 minutes ago' and that they had been inspired to study plants in the future.

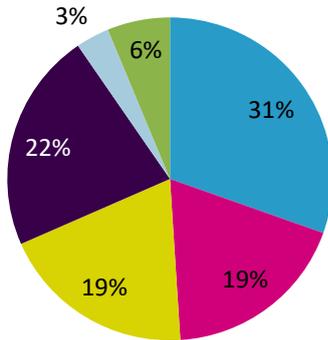
School data at a glance



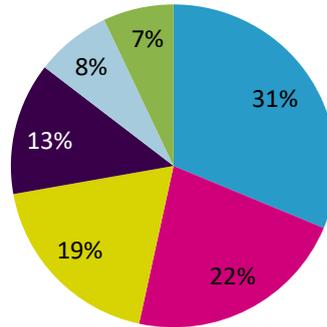
We want to increase the participation of under-represented groups going into STEM careers. Find out what we mean by our under-served (U) and WP schools (WP), and how you can support us in working with more of these at about.imascientist.org.uk/under-served-and-wp/

Scientist activity

Answers



Live chat lines



SCIENTIST	PROFILE VIEWS	POSITION
Oli Wilson	739	Winner
Edward Bracey	579	2nd
Yo Yehudi	807	3rd
Kerriane Harrington	470	4th
Theo Wilson	509	5th
Nina Jordan	397	6th

Key figures from the Neptunium Zone and the averages of the November zones

PAGE VIEWS	NEPTUNIUM ZONE	NOV '17 ZONES AVERAGE
Total zone	21,653	23,372
ASK page	1,899	1,777
CHAT page	1,910	1,997
VOTE page	1,895	1,892

	NEPTUNIUM ZONE	NOV '17 ZONES AVERAGE	IAS 2012-17 AVERAGE
Schools	12	13	10
Students logged in	456	483	385
% of students active in ASK, CHAT or VOTE	91%	87%	85%
Questions asked	626	588	705
Questions approved	330	273	305
Answers given	690	569	544
Comments	94	68	75
Votes	311	378	302
Live chats	17	19	16
Lines of live chat	7,233	7,384	5,394
Average lines per live chat	425	398	350

Popular topics

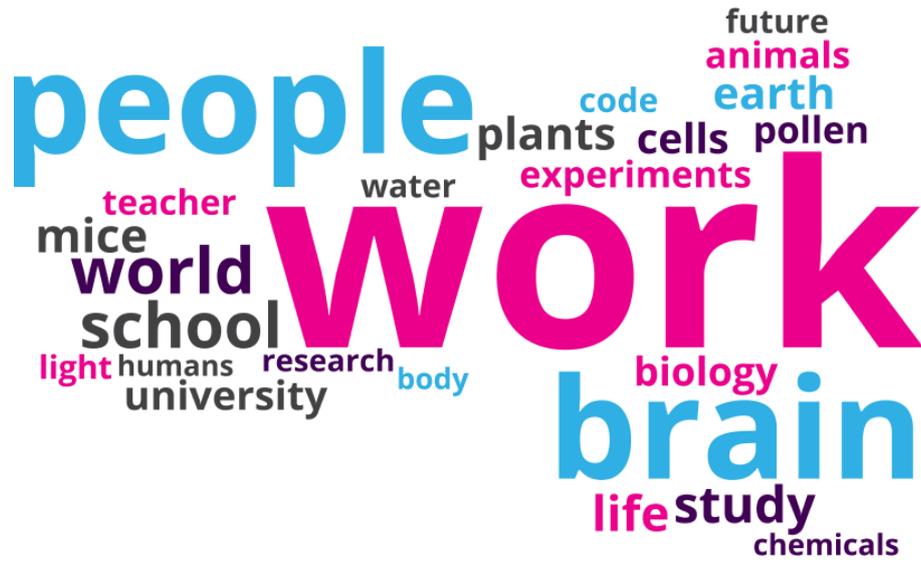
Lots of students asked the scientists for more information about things they had written on their profiles. Edward was asked about how ethical it was to experiment with mice as part of his research, how he trains them and why he uses mice over other animals. Theo mentioned on his profile that he took part in a research trip to the Sargasso Sea, and students asked questions about this trip and about the clouds he was researching.

Some students had a particular interest in computing and asked Yo about her work coding and the type of websites she develops, as well as her experiences studying at Cambridge University.

There were lots of questions about becoming a scientist and how difficult the scientists have found it to get where they are today, whether at University or applying for jobs. Students asked about the scientists' experiences at school, for example about how they stayed motivated in school, which type of science they enjoyed the most and what GCSEs and A Levels they took. Students asked the scientists about the equipment they use and whether they have ever hurt themselves in an experiment.

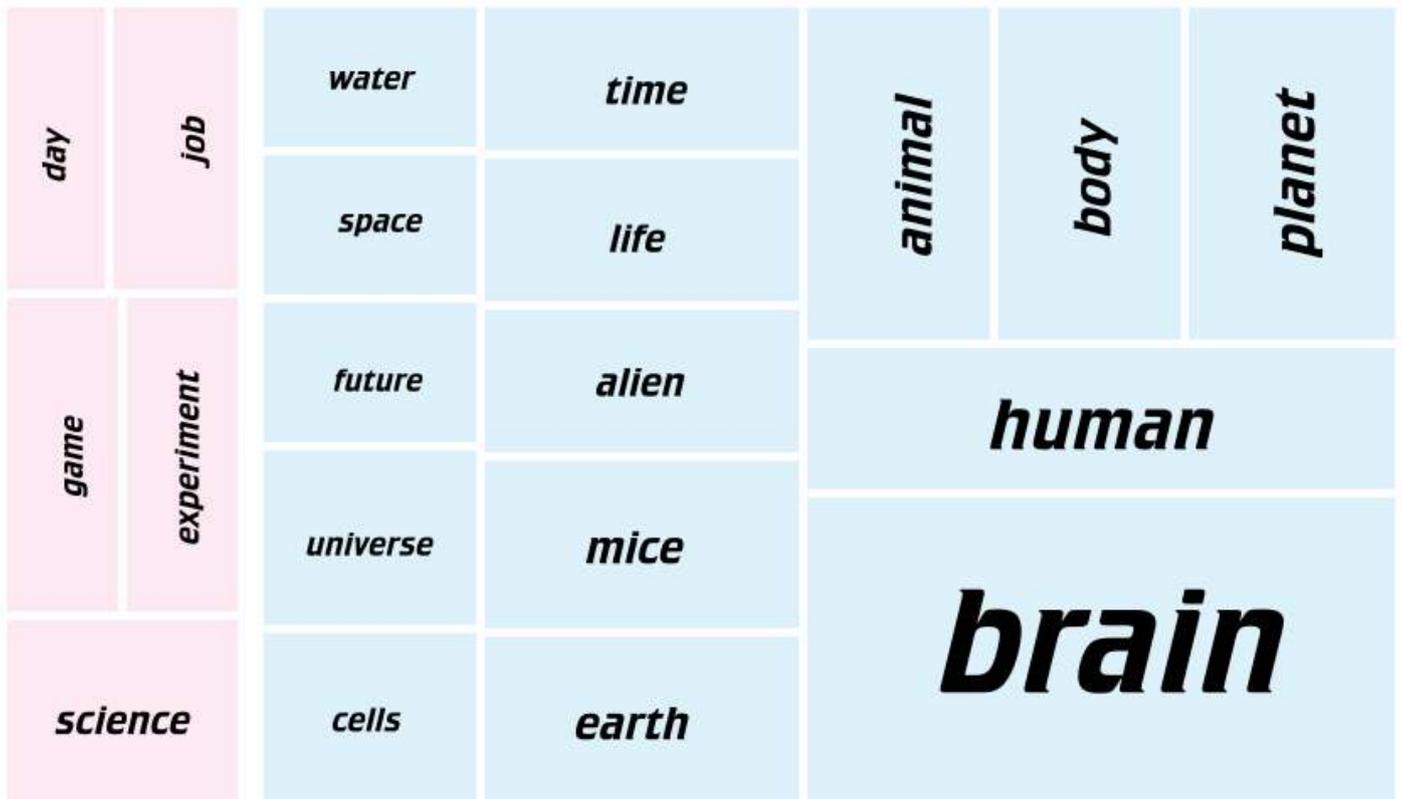


Keywords from live chats in the zone, size of the word represents its popularity



Top Keywords of questions approved in the Zone

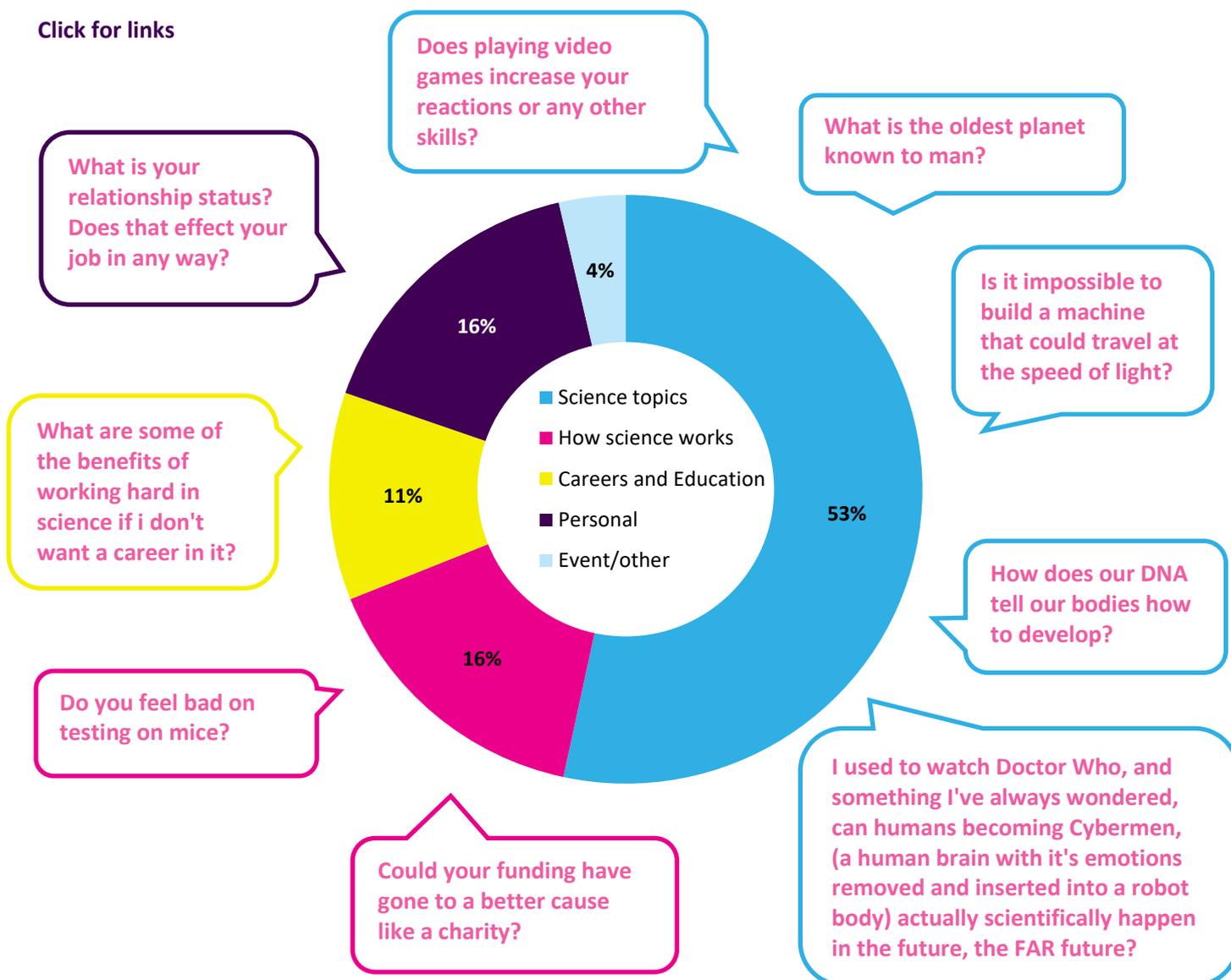
Area represents frequency of use



Being a Scientist Science Other

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

There were some really engaging Live Chats, with scientists asking students for their opinions and thoughts on different topics. A great example is this conversation between Edward and a student, stemming from Edward's research around the brain:

"So in studying perception you wish to understand how we perceive the world around us and how our brains process that information?" – Student

"Correct! Our minds are our lens on reality. I want to understand how they work so I can understand reality, and myself and other people better! What interests you about the brain?" – Edward, scientist

"In my opinion I feel our brains are like ants in that each part has its role to play in how we process information, with that we could create our own messages and make the brain see something that isn't actually there, that's what interests me" – Student

“Interesting! Do you mean different parts of the brain are different ants communicating with each other?” – Edward, scientist

“Yes, they all have a specific role to play, and they communicate with each other much like neurons. They all have the one goal which is to maintain its nest. Much like how the brain works to keep us alive and aware.” – Student

“I think that's a really nice idea! So the ants form a network between each other! They each have a little brain themselves and they're communicating with each other...Do you think an ant hive is conscious?” – Edward, scientist

“No, because the ants only follow their instincts, they are like a computer, we are more advanced.” – Student

“I think you're probably right, but perhaps ant could act like AI - like do machine learning” – Edward, scientist

Scientist winner: Oli Wilson

Oli's plans for the prize money: *“Make a set of 3D printed pollen for outreach and teaching. I'd love to take the models out to schools – they could be useful in loads of different ways, from demonstrating how fossil pollen time machines work to highlighting the unseen wonders of our world. I already have a rough plan for an outreach session, and realistic (but big!) pollen grains would make it so much more interesting and fun than printouts of photos taken down a microscope lens.”* Read Oli's [thank you message](#).



Student winner: Student username

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...

“It's fantastic to see how enthusiastic the students are and brilliant that some are thinking about a career in science. I feel like I am learning as much as the students too ...Can we do it again soon?!” – Oli, scientist

“I've learnt so much! Thankyou to all the scientists! Lots about volcanoes and the brain!!! My favourite was learning about dreams as that is something I am very curious about!” – Student