



Warren



Shanti



Pizza



Paul



Nadine



Alex

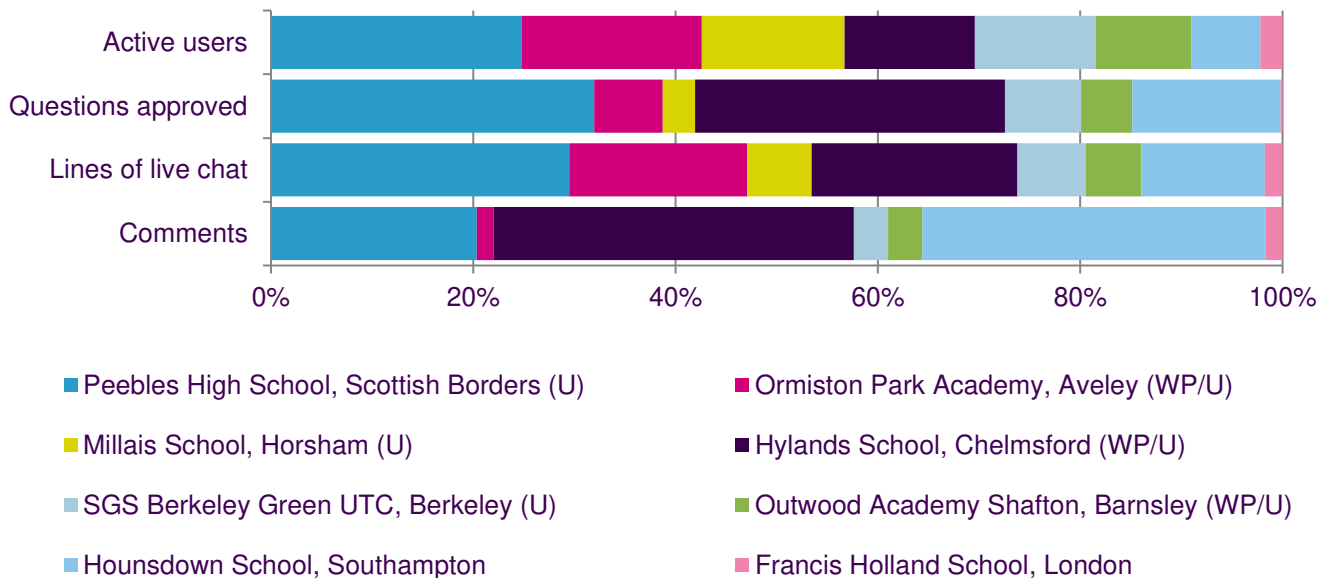
## November 2018

The Memory Zone was a themed zone funded by The British Psychological Society and featured six psychologists:

- Warren Mansell uses a scientific theory of control to make an impact on diverse areas such as mental health, skill learning, coping with dementia and robotics
- Shanti Shanker is a psychology lecturer at Bournemouth University looking to understand the role of brain structures in memory, attention and forgetting
- Pizza Chow is a bio-psychologist aiming to better understand how animals think and behave
- Paul Matusz studies the brain to understand how people of all ages learn new information and how those skills can be enhanced through the use of technology
- Nadine Mirza is conducting research into why people from different cultures are not getting the necessary help needed for dementia and what to do about it
- The zone winner, Alex Reid, is a sleep researcher at the University of York, looking at the way sleep influences the brain and the storage of memories

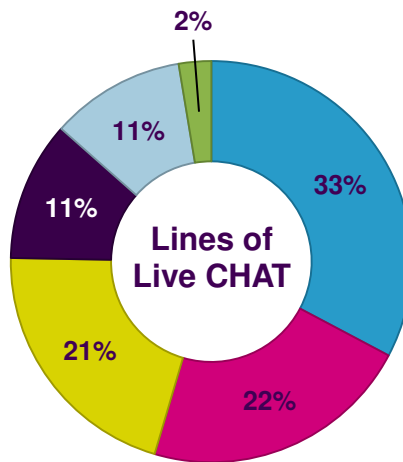
This zone received a higher than average number of questions in ASK compared with other *I'm a Scientist* zones this November. Most of the students had clearly taken time to read the psychologists' profiles to ask specific questions about their research area or career history.

### 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](http://about.imascientist.org.uk/under-served-and-wp)

## Psychologist activity



PSYCHOLOGIST	PROFILE VIEWS	POSITION
Alex Reid	765	Winner
Nadine Mirza	817	2nd
Paul Matusz	595	3rd
Pizza Chow	846	4th
Warren Mansell	711	5th
Shanti Shanker	546	6th

## Key figures from the Memory Zone and the averages of the November zones

PAGE VIEWS	MEMORY ZONE	NOV '18 ZONES AVERAGE
Total zone	25,322	18,272
ASK page	1,791	1,482
CHAT page	1,628	1,443
VOTE page	764	742

	MEMORY ZONE	NOV '18 ZONES AVERAGE	IAS 2012-18 AVERAGE
Memory Zone Schools	8	10	10
Students logged in	444	471	391
% of students active in ASK, CHAT or VOTE	93%	87%	86%
Questions asked	938	711	690
Questions approved	532	337	302
Answers given	768	585	539
Comments	93	57	74
Votes	398	378	307
Live chats	19	21	16
Lines of live chat	7,961	8,300	5,642
Average lines per live chat	419	395	358

## Popular topics

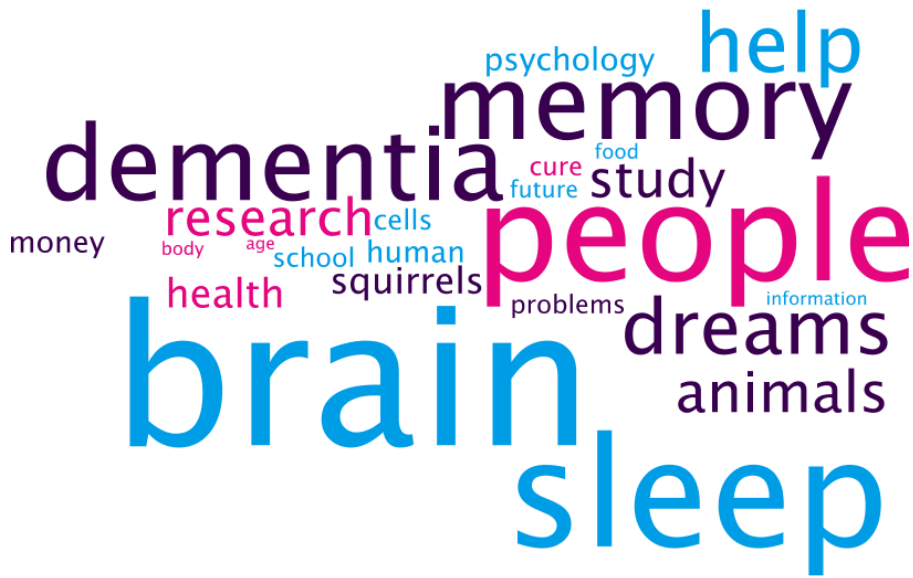
Students were very engaged with the zone theme and the psychologists' work. In both ASK and CHAT students asked about memory loss and dementia, and they were very interested in the biology of the brain in addition to psychology.

In ASK, students' questions were more focussed on careers and research methods. Mental health was a prevalent topic in ASK too, with students wanting to know things like "What causes someone to have mental health problems?", "Can we cure mental health?" and "How will your research help mental health?"

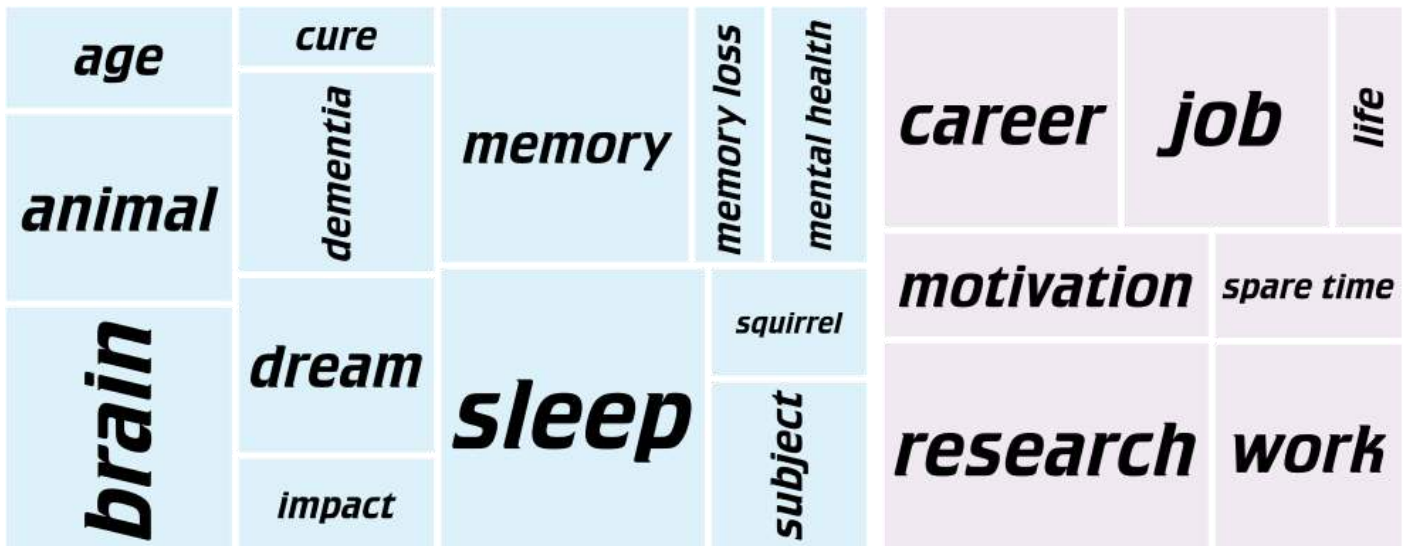
'Sleep' was a regular topic in both ASK and CHAT, linked to Alex's area of research. Some students linked the zone theme to this, for example in one live chat a student asked Alex: "if sleep helps you prepare your memories then why is it harder for old people to prepare memories?"



Keywords from live chats in the zone. Size of the word represents its popularity



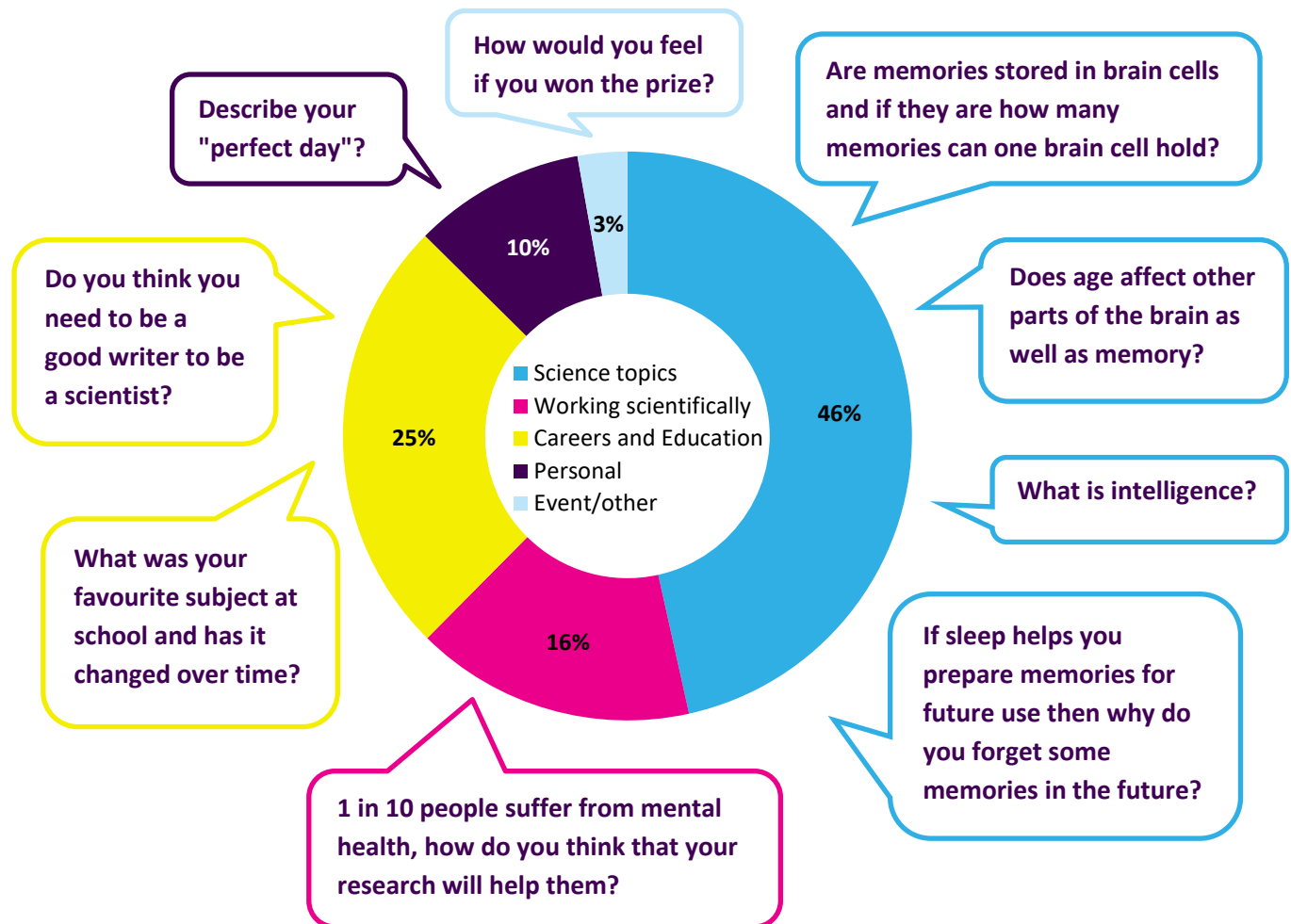
Top Keywords of questions approved in the Zone



■ Psychology ■ Being a psychologist

## Question themes and example questions in the Zone

Find out about how we've coded the questions at [about.imascientist.org.uk/student-question-coding](http://about.imascientist.org.uk/student-question-coding)



## Examples of good engagement

Students were very interested in Alex's research into sleep and often asked questions combining this with other topics discussed in the zone, such as mental health. One student used Alex's response to their question to pose another about diagnosing PTSD:

*"Can mental illnesses alter the way someone dreams?" – Student*

*"Great question! Part of your sleep state, Rapid Eye Movement (REM) sleep is closely involved in processing negative memories. You also get the most REM at the end of the night when your sleep is the shallowest. As such, you are more likely to wake up during this stage, possibly with a negative dream." – Alex, psychologist*

*"So can PTSD be diagnosed by the way someone dreams?" – Student*

*"PTSD is diagnosed using a big manual called the DSM, and I don't know if dreaming is one of the specific criterion used (others may take priority). It is a very common feature of PTSD though, but it is a symptom, not a cause." – Alex, psychologist*

In addition to questions about the scientists' areas of research, students also wanted to know what a typical day as a scientist might involve, which in this case prompted further questions about how projects and research were balanced:

*"What do you do in a daily basis at your job?" – Student*

*"In term time I teach a lot on a range of subjects (including baby psychology) but outside of term time I sometimes run experiments in our sleep lab. I prefer to do these outside of term as they are very tiring to run (a lot of late nights!)" – Alex, psychologist*

*"Hey, so for example, I study the mechanisms by which adults and children learn and I try to test how we can use virtual reality and games to improve rehabilitation in children how dont see very well like those that have lazy eye. SO I often metet with doctors and teachers, but also with other neuroscientists and scientists working with big amounts of different type of data. And I also write a lot of scientific articles and teach students how to do research :)" – Paul, psychologist*

*"So basically research to help improve peoples lives and prepare them for the future?" – Student*

*"Yeah. Our traditional medicine especially when it comes to rehabilitation is quite backward - and us as neuroscientists we get to know so many cool thigns about how the brain CAN learn and how we can try to use technolog y to make learning even easier and genreally fun!" – Paul, psychologist*

*"My current position allows me to mostly do research - so all I need to do is design experiments to test hypotheses, collect data, run data analysis and write. Best is to present findings and meet other people in conference" – Pizza, psychologist*

*"so are you doing any projects at this moment in time or mostly collecting research?" – Student*

*"Yes I am running a sleep study on eyewitness memory, and if sleep can actually make this worse in some ways!" – Alex, psychologist*



### **Psychologist winner: Alex Reid**

Alex's plans for the prize money: *"create a small yet much needed library of science and psychology demos myself and other staff members in our department can use in primary schools or public events to do talks and provide interactive exhibits."*

Read Alex's [thank you message](#).

### **Student winner: CrunchyCurry**

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

### **Feedback**

We're still collecting feedback from teachers, students and psychologists but here are a few of the comments made about the Memory Zone...

A question I asked was: 'have you achieved everything you want as a scientist, or are you still working to achieve your goals?' A response I got was: 'as a scientist I have achieved my short term goals but there's a whole lot more long term stuff I'm hoping to do! Right now I'm at the very beginning of what I hope will be an amazing career!' This really shocked me as I thought there wasn't as many science related jobs as there obviously is! – Student

The questions I received were excellent: insightful, creative, bold, sometimes funny and occasionally very tricky! To be on the 'front lines' and see you engage with the scientific community in this way was something to behold. – Alex, winner

## Feedback

Here are a few of the comments made about November's *I'm a Scientist* activity...

The students were actually cheering when the first scientist answered a question. It was a fantastic moment. – **Teacher**

I have learnt about other scientists' lives and that even if they are scientists they have the same life as us. – **Student**

The whole event probably involved more students from a wider variety of backgrounds than any single real-life event. – **Scientist**

I have learnt that many scientists did not have any clue as to what they wanted to be when they left school. – **Student**

I have learned that science isn't just sitting with some test tubes pouring them into a big pot and that they are real, rather interesting jobs that I could consider going into. – **Student**

I would like to say thank you. Friday when our children went on the live chat, there was so much excitement with the children when they saw the scientist replying. The buzz they got from it was fantastic. It is a long time since I've seen children buzzing from science. – **Teacher**