



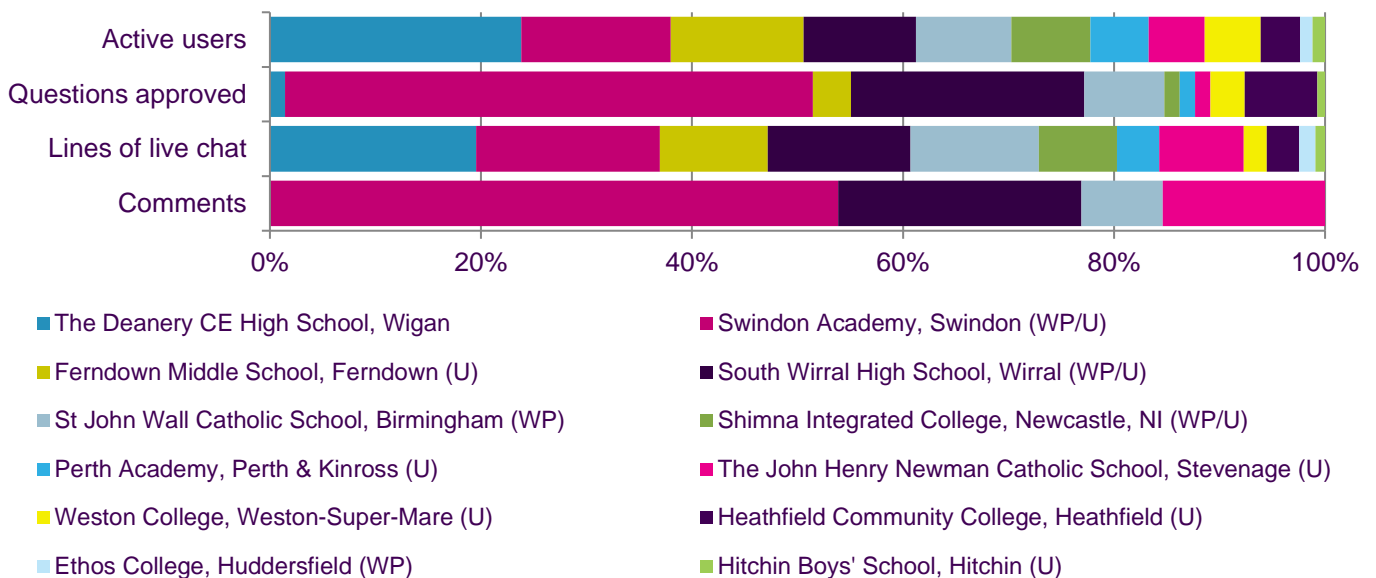
## November 2018

The Mendelevium Zone was a general science zone supported by Wellcome. It was a secondary school zone featuring six scientists:

- Morwenna Bugg reads and summarises scientific research for commissioners to decide how to work out what healthcare services we need
- Jamal Kinsella is a PhD student researching how people think while they are driving cars, so they can be taught to be safer
- Iain Staniland, the winner of this zone, works as an Antarctic wildlife ecologist researching seals, penguins and whales
- Heidi Gardner is a research assistant working out how to improve the way we conduct clinical trials
- Emma McEntee is a biostatistician working in drug development
- Carl Heron is an archaeological scientist and Director of Scientific Research at the British Museum

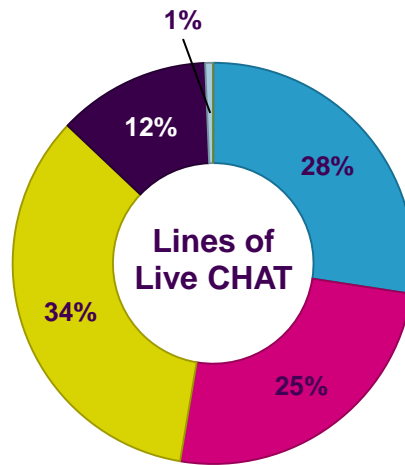
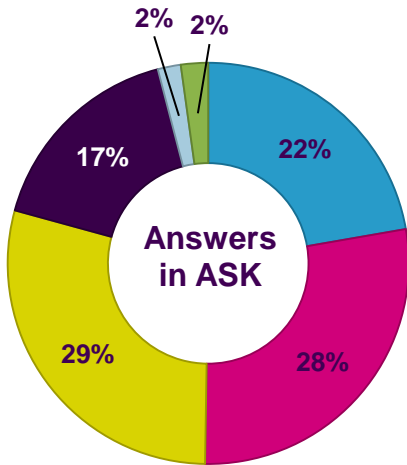
Over half of all the questions sent to the scientists in ASK were about science topics, with students wanting to know everything about the scientists' areas of research and more general science questions. One student stood out by researching Carl's journal articles and sending a 4-part question to him, including a comment on their favourite article, 'Organic Mass Spectrometry in Art and Archaeology'.

### 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)

## Scientist activity



SCIENTIST	PROFILE VIEWS	POSITION
Iain Staniland	677	Winner
Heidi Gardner	568	2nd
Emma McEntee	826	3rd
Carl Heron	591	4th
Jamal Kinsella	637	5th
Morwenna Bugg	582	6th

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

PAGE VIEWS	MENDEL-EVIUM ZONE	NOV '18 ZONES AVERAGE
<b>Total zone</b>	21,315	18,272
<b>ASK page</b>	1,373	1,482
<b>CHAT page</b>	1,766	1,443
<b>VOTE page</b>	924	742

	MENDEL-EVIUM ZONE	NOV '18 ZONES AVERAGE	IAS 2012-18 AVERAGE
<b>Mendeleevium Zone Schools</b>	12	10	10
<b>Students logged in</b>	541	471	391
<b>% of students active in ASK, CHAT or VOTE</b>	94%	87%	86%
<b>Questions asked</b>	631	711	690
<b>Questions approved</b>	276	337	302
<b>Answers given</b>	563	585	539
<b>Comments</b>	59	57	74
<b>Votes</b>	468	378	307
<b>Live chats</b>	25	21	16
<b>Lines of live chat</b>	10,579	8,300	5,642
<b>Average lines per live chat</b>	423	395	358

## Popular topics

'People' was a common word used in live chats between the students and scientists. This was in questions such as "Does your research benefit people, and if so how?" and "Would it ever be possible to create artificial cone and rod cells to repair people's damaged eyes?"

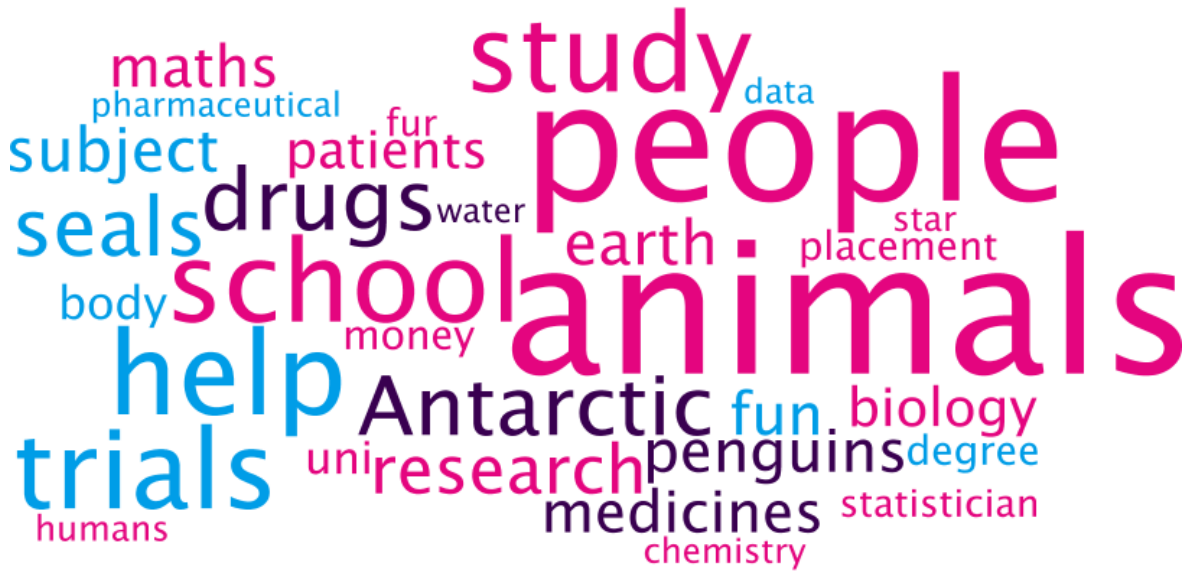
Students asked Iain about 'animals' and 'Antarctic'. Students wanted to know more about Iain's preference for Antarctic animals, and in his response to the favourite thing about his job: "I could not think of a more fun job than working with Antarctic animals"

'Trials' was a frequent keyword in CHAT, used to ask Heidi about her work, leading to students asking her to explain what clinical trials are and what they involve.

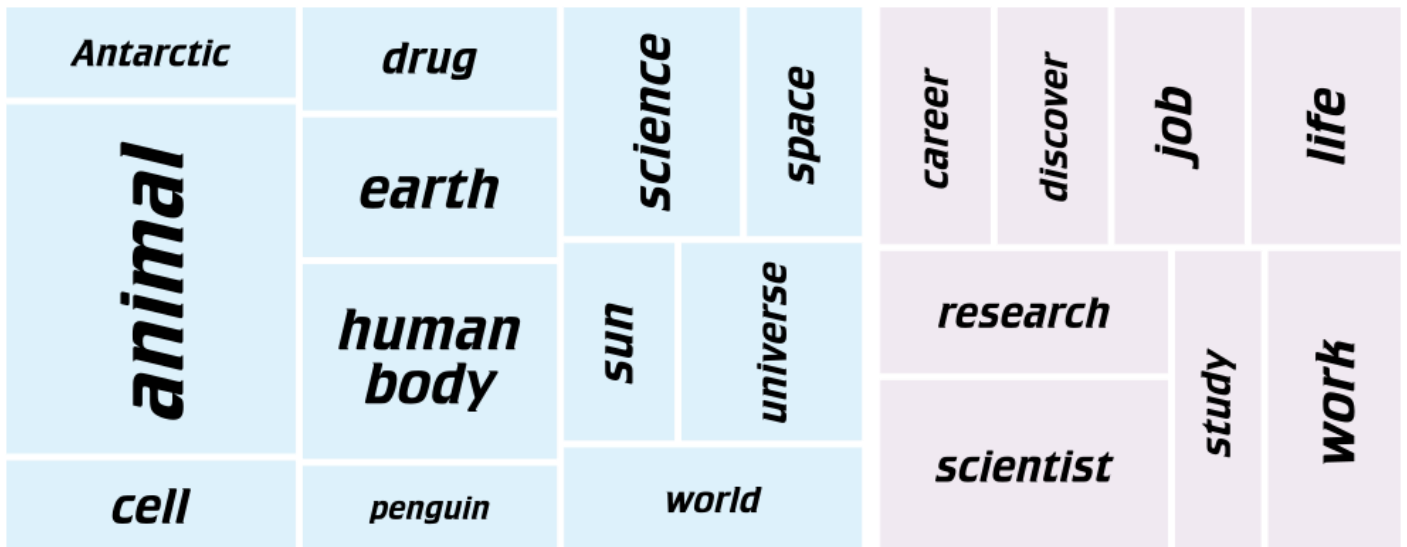
Students also wanted to know about the human body, asking a wide range of human biology questions such as "How does your body know what to do?", "How might the heart produce blood?" and "Which vitamin is most important to the human body?"



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



Top Keywords of questions approved in the Zone

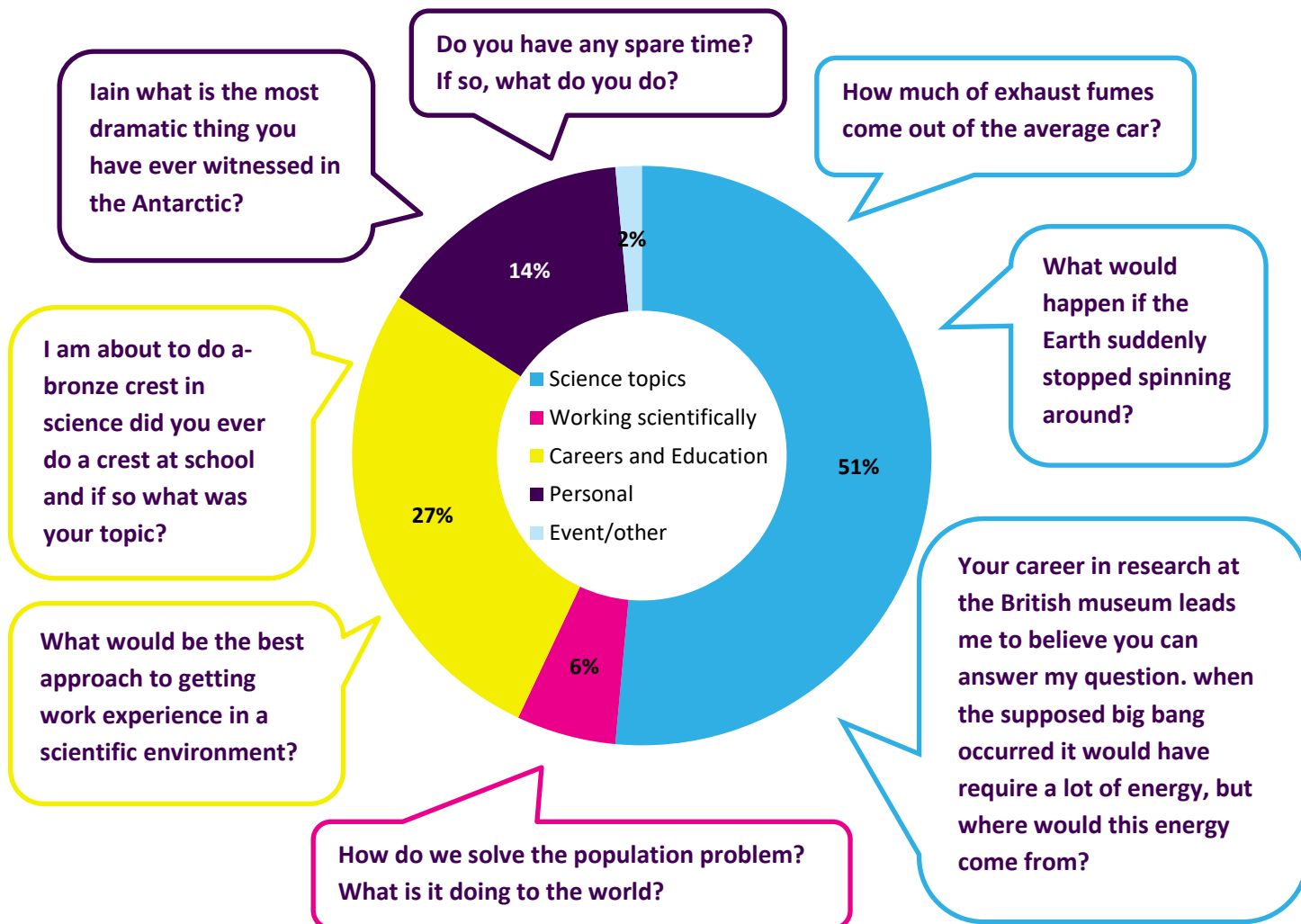


■ Science    ■ Being a scientist



## 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

One student-scientist interaction that really stood out in this zone was that of Hayden, a student who was so interested in Carl's research that they did some of their own investigation:

*Hello Carl. I was intrigued about your 'story' and your research that you undergo with your projects. I decided to do some research into some 'current' and previous projects (Don't know how current these projects are but found them all quite an interesting read [www.researchgate.net/profile/Carl\\_Heron](http://www.researchgate.net/profile/Carl_Heron))*

*After reading through a handful of them, i have a few personal questions that i would like to ask:*

- I'm sure it's tough, but do you have a single favourite project.*
- If you had to choose one project to extend on, what would you choose.*
- Were there any moments in which you had little to no hope. If so what kept you going.*
- You seem to be well traveled. However if you were to die tomorrow, would there be a country that you regret not doing a project in.*

*Thank you P.S 'Organic Mass Spectrometry in Art and Archaeology' was a personal favourite from what i have read.*

The question was approved in parts to allow Carl to answer each easily, found online here: [part one](#), [two](#), [three](#) and [four](#).

Students will share their own opinions, interests and aspirations with the scientists, which are shown to be valued within the live chat when a scientist responds. This contributes to the students' science capital\*.

In the interaction below, Emma didn't know the information the student needed, but was able to provide help as to where they could find that information as opposed to just not answering:

*"@Emma i want to be a vet or an equine vet"*– **Student**

*"That's cool! I thought about being a vet but I am too squeamish! I do like giving animals cuddles though :)"*  
– **Emma, scientist**

*"I have wanted to be a vet since i was 2 years old"*– **Student**

*"do you need science to become a vet?"*– **Student**

*"i would think you need science to be a vet as it is a technical job. but not sure exactly what subjects. I think the UCAS website could help here."* – **Emma, scientist**

*"thank you"*– **Student**

### **Scientist winner: *Iain Staniland***



Iain's plans for the prize money: *"Noise pollution is becoming serious problem in the world's oceans. Because it is often difficult to see underwater, many animals use sound to navigate, communicate, and find food. I will use the prize money to help create an exhibit to let people experience the underwater sounds of animals and the effects of such underwater noise pollution highlighting this little known problem"*

Read Iain's **thank you message**.

### **Student winner: *it's\_me***

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 scientists but here are a few of the comments made about the Mendeleevium Zone...

The format is really clever and draws you into the whole thing... Hopefully together we will have inspired a new generation of students to consider a career in science or at least to appreciate what it is all about. – **Iain, zone winner**

I'm much more interested in science after this competition. It's been so fun for me and I enjoyed every second of this comp. – **Student**

## Feedback

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

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

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

I have learnt that science is not only about working in a lab which our generation is currently referring to. Science is about more than working in a lab it is about observing our world, improving it to make a more sustainable world. – **Student**

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

It's a much more direct and challenging form of engagement than I thought it would be! In face to face environments questions seem to come pretty slowly, but with *I'm a Scientist* the questions were fast, diverse and sometimes very challenging. I found that a really good way to engage, because the students didn't seem to have much of a barrier when talking with us - probably because we weren't right in their face and in front of them as we would be in face to face events. – **Heidi, scientist**

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