



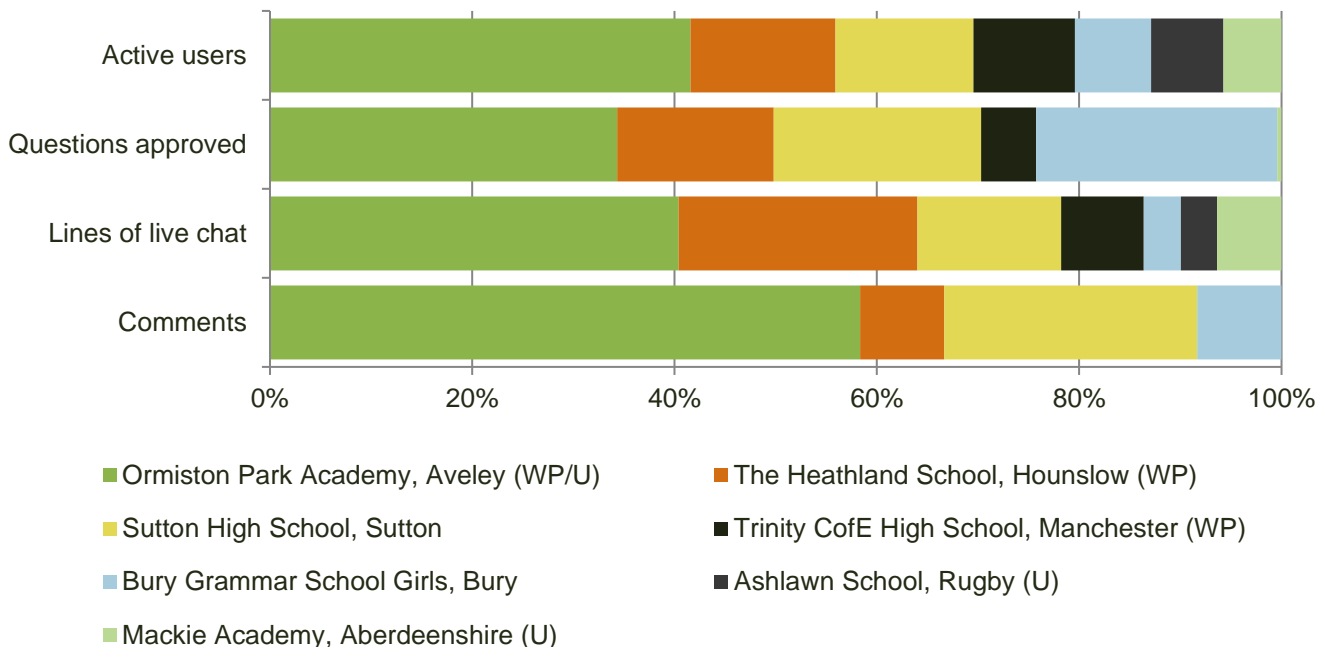
## November 2018

The Millisecond Zone has been possible due to extra capacity from contributions from NCOP consortia. This was a general zone and featured six engineers:

- Sophie Rimmer is a PhD student researching how we can make machines waste less energy
- Pauline Issard is the director and CEO of Trackener; a company revolutionising horse care with technology
- Michelle Hands is a construction site engineer who shows those on site where and how to build things
- Henry Watts, the winner of this zone, turns cutting edge research into a set of physical products to be installed in submarines and ships
- Fidel Olaye is an electrical engineer working at Mott Macdonald, where he works on various road and highway design projects
- Chris Neale builds and designs virtual cloud storage spaces for customers of DXC.technology

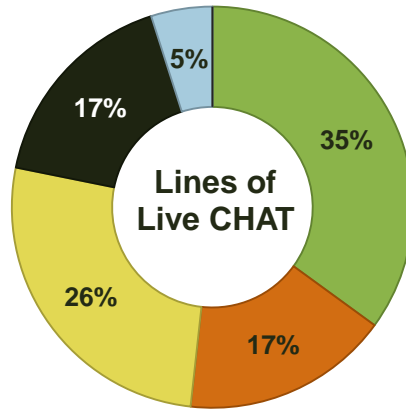
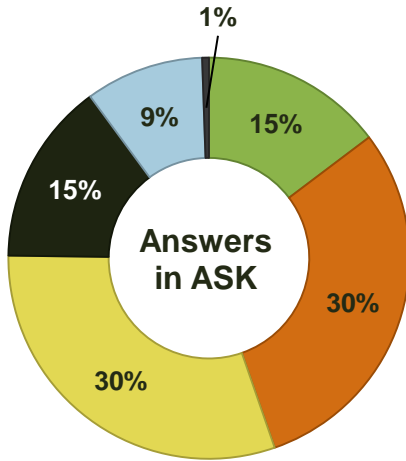
Students in this zone were very interested in finding out what it is like to be an engineer, asking lots of questions about careers and education options for engineering jobs. They also wanted to know about the engineers' hobbies and what they did with their spare time (sometimes being shocked to learn they have free time at all!).

### 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)

## Engineer activity



ENGINEER	PROFILE VIEWS	POSITION
Henry Watts	323	Winner
Fidel Olaye	357	2nd
Michelle Hands	342	3rd
Sophie Rimmer	413	4th
Chris Neale	207	5th
Pauline Issard	296	6th

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

PAGE VIEWS	MILLISECOND ZONE	NOV '18 ZONES AVERAGE
Total zone	10,181	14,630
ASK page	810	1,119
CHAT page	1,108	1,536
VOTE page	434	589

	MILLISECOND ZONE	NOV '18 ZONES AVERAGE	IAE 2012-18 AVERAGE
Millisecond Zone Schools	7	9	11
Students logged in	322	392	399
% of students active in ASK, CHAT or VOTE	87%	87%	85%
Questions asked	459	518	586
Questions approved	239	275	225
Answers given	367	471	438
Comments	26	26	43
Votes	235	293	296
Live chats	13	16	17
Lines of live chat	5,618	6,188	5,451
Average lines per live chat	432	394	314

## Popular topics

In both ASK and CHAT, students were most interested in the engineers' education and career path. 'School' was a popular topic used in live chats, with students asking questions such as: "What was your favourite subject/lesson in school?" and "Did you ever 'flunk' school and if you did, how did this set you back?"

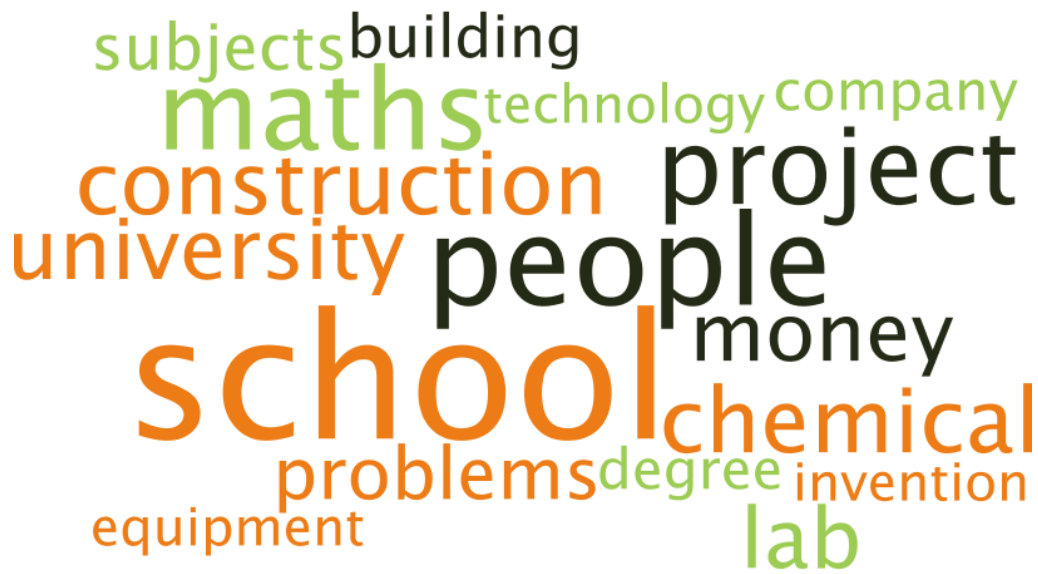
'People' was another common word in the live chats. Students wanted to know how the engineers' work would affect people and society.

In ASK, over 60% of questions concerned careers and education. The students asked for advice on which GCSE/A Level subjects to take, or which university to go to. They also asked a lot of questions concerning the engineers' day-to-day job content, wanting to know "Is your job stressful?" and "Are you allowed to work from home?"

The students were interested in Michelle's role and asked "Why did you decide to work on a construction site?". They were also aware of the gender imbalance in engineering, asking Sophie and Pauline "Because there are not many engineers that are female did that affect you?"

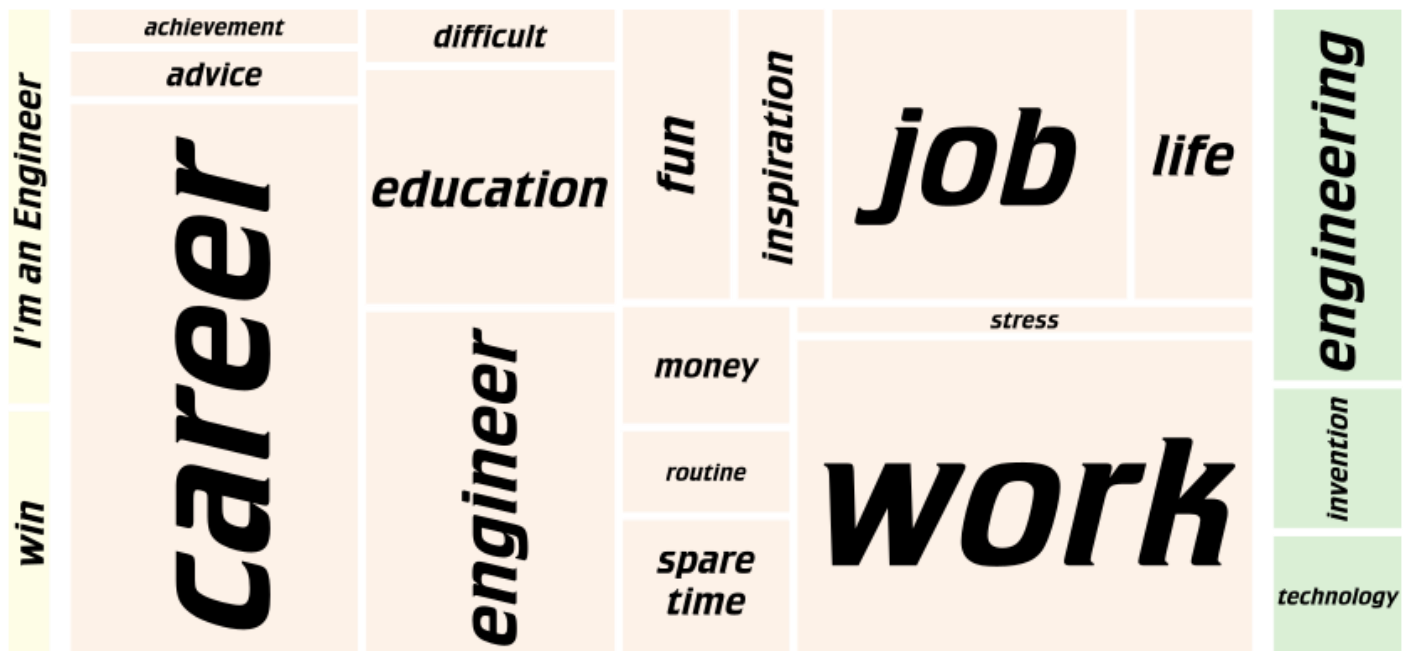
## Chat

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



## Ask

Top Keywords of questions approved in the Zone

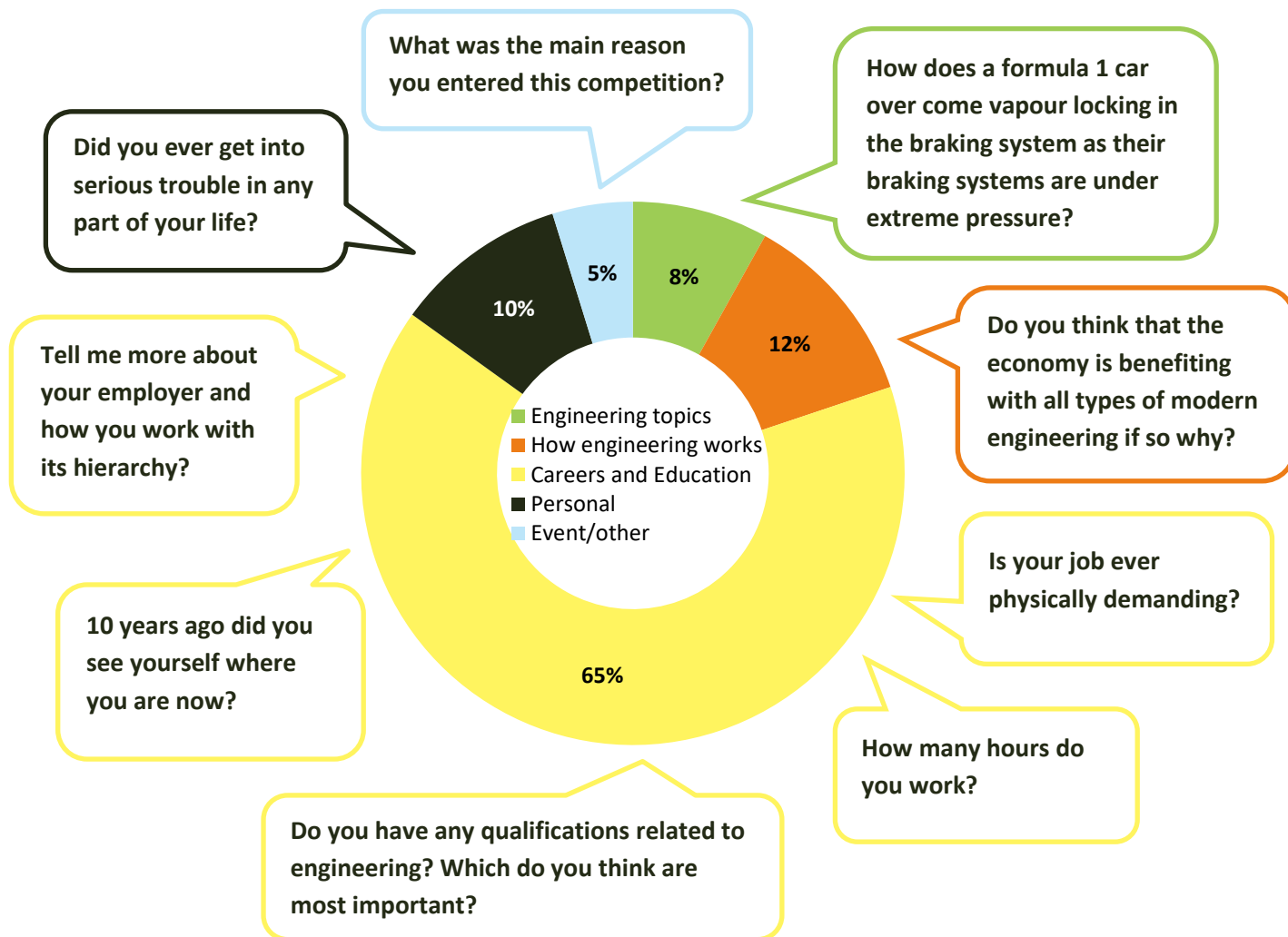


Other    Being an engineer    Engineering

When keywording, questions were marked as 'career' if they concerned the engineers' career path, 'job' when a question was about a specific role and 'work' when a question is about their typical day in their role.

## 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](https://about.imascientist.org.uk/student-question-coding)



## Examples of good engagement

In one live chat, a student shared their dream jobs with the engineers. Henry and Michelle responded with support, with Henry even suggesting projects they could work on:

*"My dream job is to be a car mechanic or scientist" – Student*

*"Chase that dream! You could be both – think about the rise of electric vehicles and all the research that needs doing!" – Henry, engineer*

*"Thanks i will" – Student*

*"You don't get many female car mechanics so I would definitely choose that :)" – Michelle, engineer*

*"Or driverless vehicles or flying taxis, the list is always growing. I'm excited for you!" – Henry, engineer*

*"Thanks to u both appreciate it" – Student*

One student's question sparked discussion about the engineers' travels, showing that an engineering job can take you further than the students' might have guessed.

*"@Sophie what is your favorite part of your job and why" – Student*

*“Going to different countries for things like conferences and site visits is pretty cool, and you can normally tag a couple of days holiday onto the end of the work trip” – Sophie, engineer*

*“what is the furthest u have gone to do a job” – Student*

*“I’ve worked in Germany and Belgium but am planning to go to Canada next year for a training course and site visit” – Sophie, engineer*

*“@all have you been anywhere interesting?” – Student*

*“I’ve been lots of cool places but Dubai was off the hook! So many huge buildings and fun stuff to do.” – Henry, engineer*

*“I worked in Germany for 3 months which was pretty interesting, it was summer so there was loads of stuff to do when not working” – Sophie, engineer*

*“@Sophie what country are you in right now if u dont mind answering” – Student*

*“I usually work in UK, I only travel to other countries for site visits or conferences a few times a year” – Sophie, engineer*

*“@Sophie ok thank you for answering my questions” – Student*



### **Engineer winner: Henry Watts**

Henry’s plans for the prize money: *“want to provide some electronics training kits for a local primary school to try and inspire some very young minds into developing the necessary curiosity to wonder how the world works and in particular how engineering makes it happen.”*

Read Henry’s [thank you message](#).

### **Student winner: Lily-May**

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 engineers but here are a few of the comments made about November’s *I’m an Engineer* activity...

[I have learnt] that programming is also engineering and is part of my life! – Student

I’m thrilled to have won the Millisecond Zone and I have already engaged with a local school to see how I can put some engineering into their curriculum this winter, robot-santa perhaps? – Henry, zone winner

It allows the quietest of pupils to have a voice and to understand science/engineering opportunities and facts to become a reality in their own world. Promotes great conversations before, during and after the event. 👍👏🙏  
thank you to the whole team – Teacher

Having come into this thinking that engineering design only affects the making of infrastructure, this has been a real eye-opener to the world of engineering in daily life. thanks. – Student