



January 2023

The Forensics Zone (<u>forensics.imascientist.org.uk</u>) ran from 4 January to 3 February 2023 and was commissioned by the Royal Institution.

The Zone featured 27 scientists working across a variety of fields: from academia to industry professionals. They connected with 648 students from across the UK. 545 students (84%) actively participated by writing Chat lines and asking follow-up questions.

Key activity figures

	Zone
Students logged in	648
Students active	84%
Schools	33
Scientists	27
Live Chats requested	54
Live Chats taken place	38
Lines of live Chat	9,449
Average lines per live Chat	242
Questions asked	238
Questions approved	140
Answers given	444
Scientist comments	76
Student comments	0

Who took part?

648 students from 33 schools across the UK logged into the Zone and connected with 27 scientists.

66% of active students were from priority schools: 41% from schools in underserved locations, and 37% from widening participation schools. Out of 33 total schools, 22 were priority schools. Schools can be both widening participation and underserved and of these, 5 schools took part with 68 students (12%) attending.

Activity

54 live Chats were booked. 38 took place.

Out of the remaining 16 Chats booked, 8 were cancelled by the teacher in advance and in 8 chats, the school did not attend and did not give notice. All schools were chased and invited to rebook.

There was 1 live Chat where the teacher asked questions on behalf of their students. It is also common for students to share login details or computers during live chats. Therefore, the number of students engaged will be higher.

Students asked 238 follow-up questions of which 140 were approved and 13 were duplicates.









School activity

Students from 33 schools across the UK participated in the Zone.

School	Active users	Chats attended	Chat lines (total)	Chat lines (per user)	Questions approved
All Saints Catholic College, West Yorkshire (WP)	27	1	358	13	2
Ashwood Park Primary School, West Midlands (WP)	31	1	393	13	25
Aylesbury High School, Buckinghamshire (U)	11	2	66	6	0
Balwearie High School, Fife (WP/U)	15	1	103	7	0
Cardinal Winning Secondary School, Glasgow City (WP)	6	1	101	17	0
Chewton Mendip Primary School, Somerset *	1	1	43	43	0
Cleeve School, Gloucestershire (U)	23	1	245	11	0
Coleg Cymunedol Y Dderwen, Bridgend (Pen-y-bont ar Ogwr) (U)	6	1	81	14	0
Coleg Gwent, Torfaen	7	1	44	6	1
Dagenham Park CofE School, Essex (WP)	4	1	45	11	0
Darrick Wood School, Kent (U)	26	1	146	6	5
Denny High School, Falkirk	18	1	165	9	4
Derby College, Derbyshire (WP/U)	10	1	77	8	0
Dunfermline High School, Fife	13	1	80	6	1
Exeter College, Devon	2	0	0	0	0
Hylands School, Essex (WP/U)	15	1	99	7	0
John F Kennedy Catholic School, Hertfordshire (U)	16	1	72	5	0
Liverpool College, Merseyside	48	3	148	3	43
Malmesbury School, Wiltshire (U)	12	1	149	12	0
Malton School, North Yorkshire (U)	25	2	232	9	20
MidKent College, Kent (U)	13	1	82	6	1
New College Swindon, Wiltshire (U)	15	3	95	6	2
Orchards Academy, Kent (WP/U)	1	0	0	0	1
Sandhurst School, Berkshire	16	1	94	6	0









Sandymoor Ormiston Academy, Cheshire (WP)	27	1	239	9	0
St Bridget's Primary School, Glasgow City (WP)	27	1	435	16	0
St Dominic's High School, Antrim (WP)	46	2	625	14	15
St Margaret Ward Catholic Academy, Staffordshire	16	1	204	13	0
The Crypt School, Gloucestershire (U)	7	1	57	8	0
The Priory School, Shropshire (U)	14	1	78	6	16
Tolworth Girls' School and Sixth Form, Surrey	39	2	197	5	0
Trinity Church of England School, Kent	31	2	269	9	4
Woldgate School and Sixth Form College, North Yorkshire	6	1	33	6	0

^{*} In these chats teachers typed questions on behalf of their students, with the chat displayed on a screen.

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





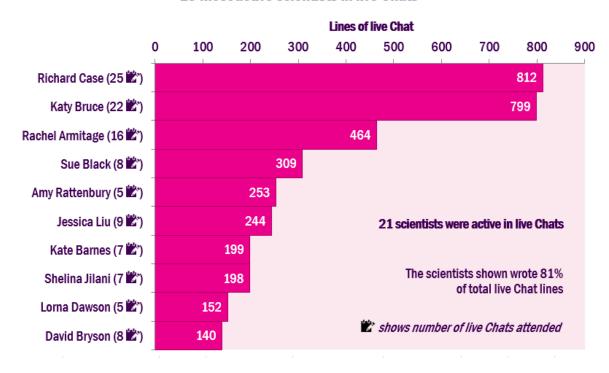




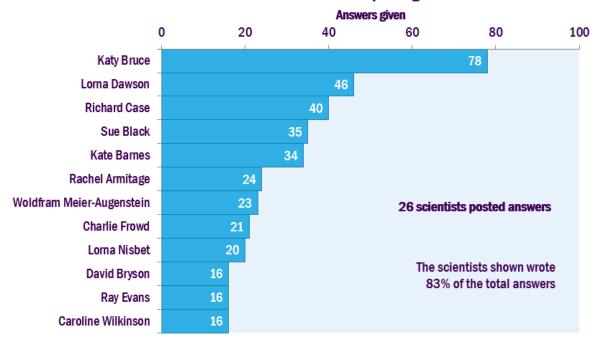
Scientist activity

During the Zone the scientists interacted with students by writing 4,394 lines of live Chat, and providing 444 answers to 140 posted questions. On average, 6 scientists took part in each live Chat.

10 most active scientists in live Chats



10 most active scientists in posting answers











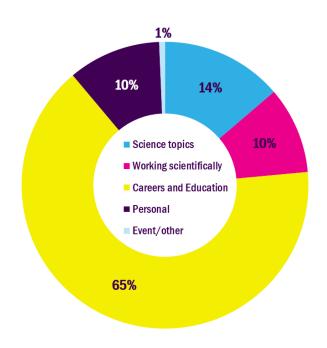
Live Chats

The word cloud below demonstrates what students and scientists talked about in live Chats. The bigger the word, the more frequently it was used.



Questions in Ask section

The chart below shows an analysis of questions students sent to the scientists. Questions are coded into overarching categories. The examples are coloured by category.



How long can the human body go without oxygen?

When you recreate a face how much is art and how much is science?

Have you ever thought about reconsidering your job because it was too scary or too hard and you thought of giving up?

When you retire from your job would you still want to do what you do now or would you like to continue doing what you do?

What is your favourite science? Biology, chemistry or physics?

Why do you want to tell everybody your story of becoming a scientist?









Good engagement

Students enjoyed the chance to ask specific questions relating to the scientists' work. Here we can see one student asking the scientist, Alex, whether there is one piece of evidence that is most important in an investigation.

Student 1: What type of evidence would be the most important in an investigation and why?

Alex (scientist): There is rarely one golden piece of evidence... you have to collect lots of different pieces. Often you only work on one type of evidence and then somebody else will put it all together to reconstruct a crime

Student 1: Oh nice

The students also wanted to find out what makes the scientists' work unique. One of the most interesting questions was about what makes things memorable... and the scientists gave some fascinating answers.

Student 1: What was your most memorable day?

Sue (scientist): The war crimes investigations in Kosovo when we were able to hand a father back the remains of his entire family - killed in an RPG - Rocket Propelled Grenade - attack.

Richard (scientist): Presenting evidence at court for the first time. It was a murder. I was very nervous, but had a great sense of achievement once complete

Jo (scientist): The first day that i put on a white CSI suit for a murder scene (whilst also being filmed by TV news crews!)

Student 2: Does that often happen?

Jo (scientist): Thankfully, murders don't happen too often, but the press often turn up at other scenes too and often annoy those trying to work









Engaging students with topics outside of the workplace can really help to boost interest in learning about a balanced lifestyle. Discussing hobbies and interests helps to show students that scientists are humans too.

Student 1: Do you have time to do hobbies?

Rachel (scientist): Yes, I get to enjoy my evenings and weekends. I like to go mountain biking or walking. I like being outdoors

Student 1: Yay I do cyclocross

Rachel (scientist): That's cool, I quite fancy trying that but not ready to give up my mtb!

Student 1: You should try go ride races to get into it

Rachel (scientist): I might try that, it does look fun. Do you race?

Student 1: Yes I race every weekend. Its very fun and its not sore if you fall!

Rachel (scientist): That's good, I might make the switch if its not sore when you fall. I seem to manage to hurt myself when I fall!









Feedback

I thought it was worth letting you know that the last two groups of students you spoke to said they thought it was fascinating and they absolutely loved it, so thank you for giving up your time to do this. It does matter. **Teacher**

Thank you for answering our questions, it has actually expanded my knowledge on science!

Thank you for your time, we loved it!

Student

Student

Wow that's got to be the most full-on Chat EVER! You guys are the best! Keep up the enthusiasm and come and study forensics!. Thanks for your questions.

Katy (scientist)

Thank you so much. Myself and my class loved the chat and they left school buzzing!

When does the theme change from forensics to something else as my children want to do it again already!!!

Teacher



CCYD STEM @CCYD_STEM Jan 23
This week in STEM club we were talking to 5 real forensic scientists! From scanning electron microscopes to prison drug testing and Egyptian mummies, being on TV programs and dealing with ethics, it sounds like forensic scientists have fascinating jobs!Thanks
@imascientist #STEM

You have told us so many interesting things about you and your job!

Student



