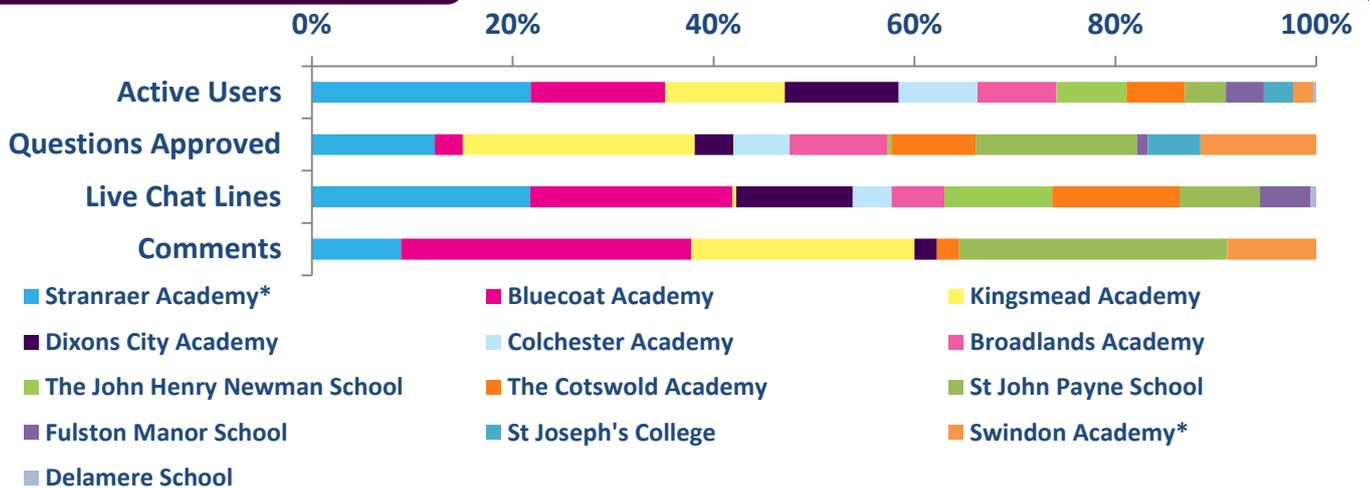


## June 2016

The Bismuth Zone was a general science zone funded by the Wellcome Trust, and included five scientists working in different areas. Thomas works in Nuclear Medicine and uses radioactive substances to look at how our bodies work, Rupesh is a research fellow who studies why plant roots grow down and shoots always grow up, Hazel works as an Application Scientist at an engineering company which makes microscopes, Elliot makes mutants to try and work out why our muscles grow when we use them, and Ellen specialises in designing and analysing shielding against gamma radiation. The scientists in this zone were very engaging and good at communicating their work with their students, particularly Thomas and Elliot, who took part in most of the live chats and answered a large amount of questions.

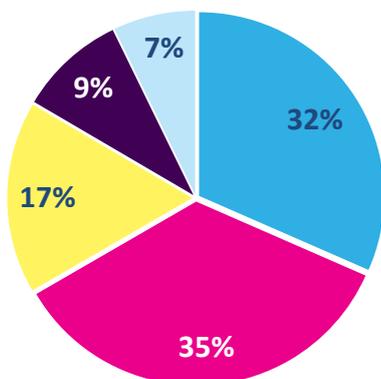
### School data at a glance



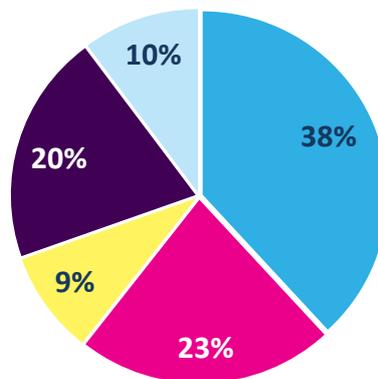
\* Widening participation schools, as defined at <http://about.imascientist.org.uk/2016/widening-participation-2016>

### Scientist activity

#### Answers



#### Lines of Live Chat



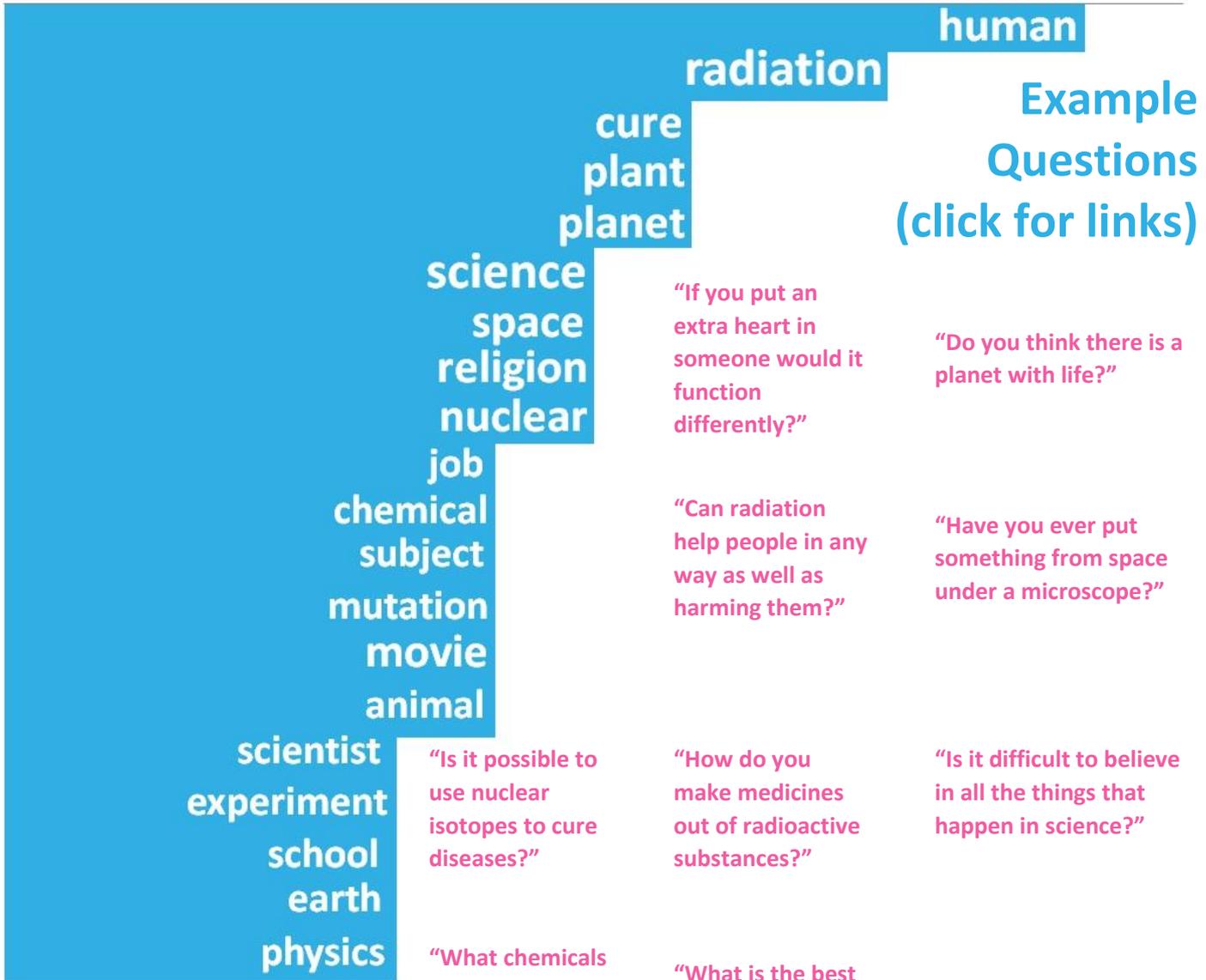
Scientist	Profile views	Position
Elliot Jokl	831	Winner
Thomas Biggans	811	2nd
Hazel Garvie-Cook	762	3rd
Rupesh Paudyal	697	4th
Ellen Gill	491	5th





Keywords of questions approves in the zone, length of bar represents frequency of use

0 2 4 6 8 10 12



### Example Questions (click for links)

“If you put an extra heart in someone would it function differently?”

“Do you think there is a planet with life?”

“Can radiation help people in any way as well as harming them?”

“Have you ever put something from space under a microscope?”

“Is it possible to use nuclear isotopes to cure diseases?”

“How do you make medicines out of radioactive substances?”

“Is it difficult to believe in all the things that happen in science?”

“What chemicals do plants mix to get oxygen? What is the best plant for producing oxygen?”

“What is the best and most fascinating thing you have seen through a microscope?”

“How strong can the human muscle really be?”

“What do you think about how the world began and do you think religions are wrong because they do not agree with scientific theories?”

“Should I be a scientist? I am not very smart though.”

“What would happen if there was no friction when driving a car?”

“How can you change DNA to make mutants?”

“Because you work with plants mostly, would you think about solving most complicated environmental problems?”

## Examples of good engagement

Often, the students asked specific scientists about their work and research. Elliot received many questions about his work with mutations, with some students understanding this as something from a comic or sci-fi movie.

*“Is it possible for people to be mutated like the X-Men?”* – Student

*“Sadly, not really. We could mutate people to make them healthier, but I don’t think we can get mutations to make us telepathic or control the weather. I wish we could, though.”* – Elliot, scientist

*“What mutations are you trying to make?”* – Student

*“I am trying to make mutations that are the same as you find in disease, to try and work out what happens.”*  
– Elliot, scientist

Ellen was asked about her work with managing radiation and nuclear waste, and the safety precautions which are involved.

*“What precautions are being taken at the moment to prevent another Chernobyl?”* – Student

*“These are all good questions! Safety is taken very very seriously in the nuclear industry, on a worldwide scale, because of the potential consequences. There are worldwide regulators and laws making sure every nuclear site has to prove it's safety before it can operate. Everyone in this industry knows what went wrong at Chernobyl inside out so we don't repeat it.”* – Ellen, scientist

## Scientist winner: Elliot Jokl

Elliot’s plans for the prize money: *“Help give more school students the chance to do hands on science. The outreach team at my university department are already fantastic at inviting school students along to try out some hands-on science. I’d love to be able to help the outreach team reach more students and get more of them thinking about studying science further, or even a career as a scientist.”* Read Elliot’s [thank you message](#).



## Student winner: Veronica

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...

 **Thomas Biggans**  
@tombo23   Follow

Very intense first chat session of [@imascientist](#) was great fun though lots of interesting questions [#IASUK](#)

*“I think I’m a Scientist is a lovely idea and it has really engaged my students in a positive way – they have really benefited from this experience, and it has boosted the confidence and curiosity of many students.”* –Teacher