
Shannah

Richard

Matthew

John

Emma

Anna

June 2019

The Plants Zone was a themed zone for primary schools zone supported by Wellcome. It featured six scientists:

- Shannah Gates is a PhD student growing root cultures to be used in medicinal compounds.
- Richard Gammons is researching how to use plants as chemicals to make fuels.
- Matthew Alkan is investigating whether driving cars is changing the smells of plants, affecting bees that use a plant's scent to find and pollinate it.
- John Paterson is trying to understand how pollinators, like bees and hoverflies, know when the seasons are changing and why this is important for flowers and crops.
- Emma Markham works at the Biotechnology and Biological Sciences Research Council funding research which helps people and the planet.
- Anna Gardner, the winning scientist, is a researcher of trees, studying how climate change might change oak leaves in the future.

Key figures from the Plants Zone and the averages of the June zones

PAGE VIEWS	PLANTS ZONE	MAR '19 ZONES AVERAGE
Total zone	20,652	14,954
ASK page	2,535	1,171
CHAT page	1,508	1,374
VOTE page	1,788	1,415

	PLANTS ZONE	MAR '19 ZONES AVERAGE	IAS 2012-19 AVERAGE
Plants Zone Schools	10	10	10
Students logged in	433	380	391
% of students active in ASK, CHAT or VOTE	95%	89%	86%
Questions asked	817	319	664
Questions approved	360	173	293
Answers given	601	414	529
Comments	133	46	70
Votes	354	303	308
Live chats	26	20	17
Lines of live chat	7,734	6,730	5,742
Average lines per live chat	297	346	357

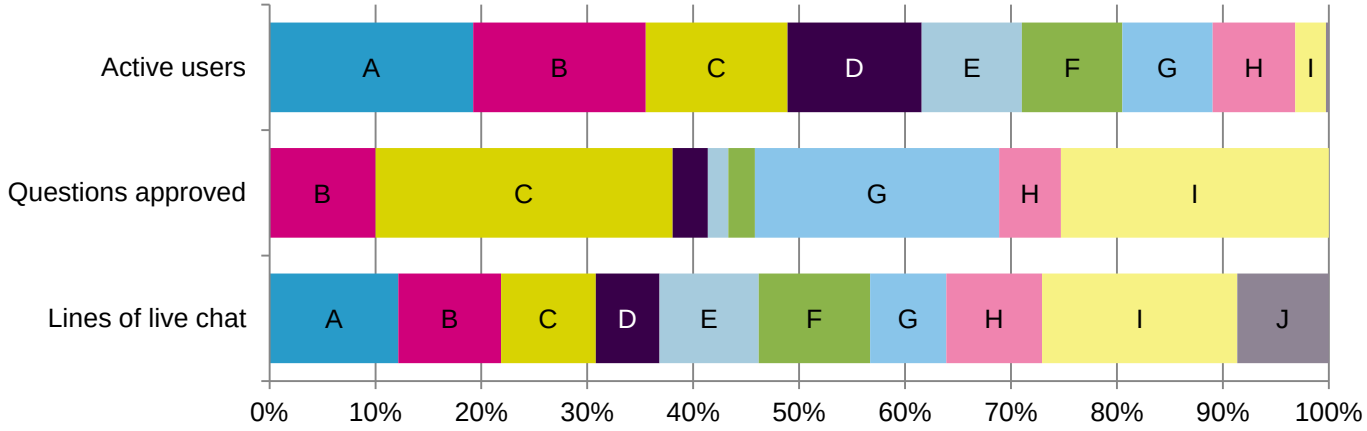
Popular topics

Students in the Plants Zone were very interested in the scientists' work, especially wanting to know how their research relates to climate change, which many students were very passionate about.

Matthew and John were asked about their work with bees and hoverflies with students interested in the negative effects our lifestyle could be having on pollination. They asked all the scientists about their research, how they design and carry out experiments, what equipment they use and what happens to experiments if they are off sick.

Students were keen to tell the scientists about the work they had done in school on this topic, for example planting flowers and experiments in science lessons, as well as about the plants they have at home in their gardens, asking how they can attract more wildlife. Students wanted to know about the scientists' favourite plants, as well as lots of other questions getting to know the scientists on a personal level in ASK and chat. There were conversations about favourite films, books, hobbies and pets.

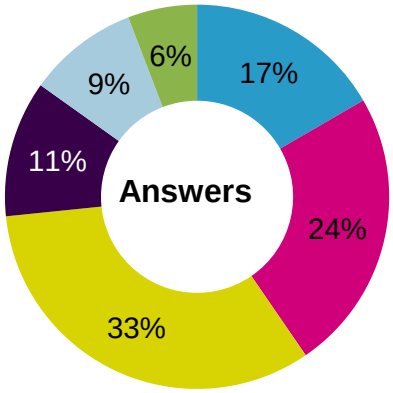
School data at a glance

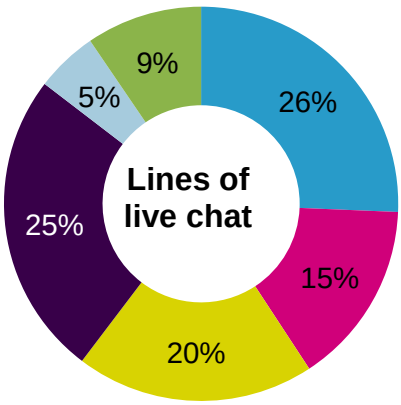


	School	Year/s	Classes
A	Lark Rise Academy, Dunstable (U)	3,4,5	3
B	All Saints Upton CE Primary School, Widnes (WP)	6	3
C	Ribble Drive Community Primary School, Manchester (WP)	5,6	2
D	St Leonard's CE Primary School, Bridgnorth (U)	3	2
E	Alexandra Park Primary School, Stockport (WP)	3,6	2
F	Barry Primary School, Northampton (U)	5	2
G	Oak Lodge School, London (WP, SEN)	7,10	3
H	St Bridget's Primary School, Glasgow City (WP)	6	2
I	Emmanuel Middle CE School, Verwood	5	1
J	St Mark's CE Primary School, Manchester	5	1

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/

Scientist Activity

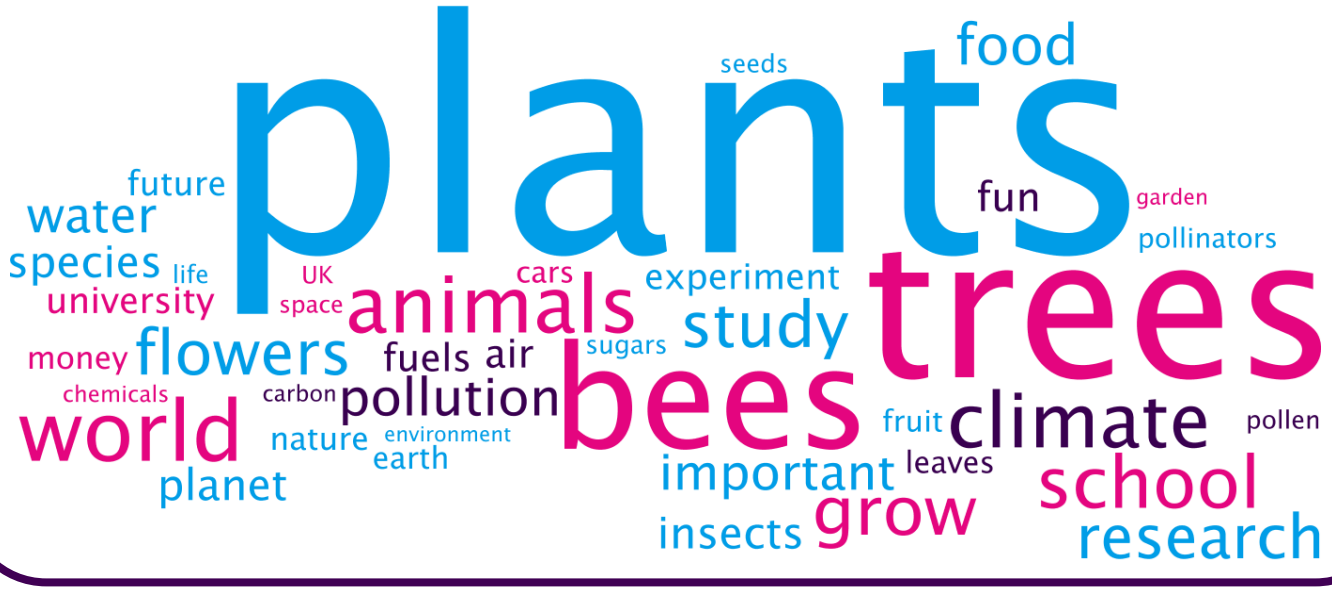




SCIENTISTS	PROFILE VIEWS	POSITION
Anna Gardner	612	Winner
John Paterson	699	2nd
Emma Markham	690	3rd
Richard Gammons	724	4th
Shannah Gates	674	5th
Matthew Alkan	550	6th

Chat

Frequent words used in live chats by students and scientists. Size of the word represents its popularity



Question themes and example questions in the Zone

Find out about how we've coded the questions at **about.imascientist.org.uk/what-do-students-ask-about/**

What are your pets called?

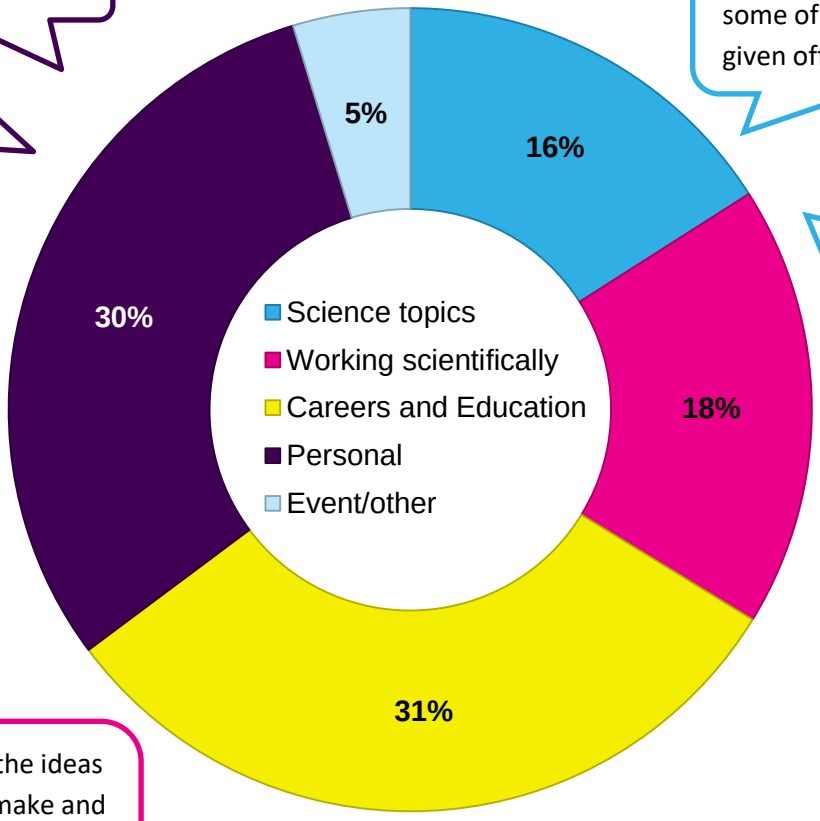
Do you like scary roller coasters?

All if you had another job opportunity would you take it?

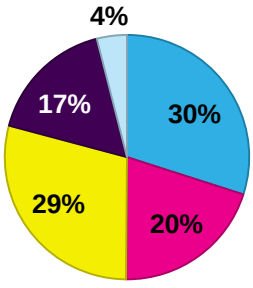
How do you think of the ideas and find diseases to make and find research off? Do you have a group that you work with to discover all of these?

Can a bee be attracted to some of the chemicals given off by pollution?

Is there a difference in the way birds react around ancient trees as per young/non-ancient trees?



Historic Per-Zone Average (Themed Zones)



MangorollaCIC 01225 326892 | michaela@mangorol.la

Plants Zone

Supported by wellcome

Examples of good engagement

There was lots of interest from students across the event about how they can help to protect the environment and grow their own plants, **including in this ASK question**. The student asked for ideas on improving their own garden, supporting the development of their science capital through the relevance of the answers to their own family and everyday life:

> *"We have just moved to a new house and we want to create a garden for wildlife. Is there anything you have researched or discovered that would help us to choose the right plants for an environmentally friendly garden that is safe for my baby brother to play near?" –* ***ehola, Student***
>
> *"It is fantastic to see that you want to help the wildlife, whilst also looking after your brother! The type of plants you want depend on the type of garden you have (sunny parts or shaded parts) in your garden but any plants will be greatly appreciated by the wildlife you have. There are lots of simple ways to make a wildlife friendly garden such as having a lawn with corners of uncut/longer grass, plant borders filled with flowering plants, trees and hedges (to provide protection for wildlife) and even having small log piles for insects. Having a bug hotel and bird feeder will also encourage wildlife and will be great fun for you and your brother to watch. You can teach him so much!" –* ***Anna, Scientist***
>
> *"OK, firstly it all depends on the direction your garden is facing, the type of soil, the acidity, how well drained it is etc. This will influence the types of plants you can grow. Obviously you will need to avoid plants which are poisonous, so no foxgloves or plants with poisonous berries…If you want more ideas for creating a wildlife friendly garden then SpringWatch on BBC2 is featuring a how to guide to make a wildlife garden: bbc.co.uk/programmes/p07bwq11*
> *I hope that helps!" –* ***Emma, Scientist***
>
> *"Thanks so much that really helps! That's funny you said all of this because we have a bird feeder, a bug hotel and fruit trees but the plants are really helpful because I don't think we have any of those, I especially like lavender because of its smell! The fruit trees that we have are: Apple tree, raspberry and BlackBerry bushes, fig tree, olive tree and a grape vine. The people who lived at our house before us connected a camera outside our lounge window and it joins in to the TV so we saw birds nesting in there. The mummy bird hatched 10 eggs and they all left the nest apart from 3. Thank you for all of the ideas, I will definitely tell my family about this to put forward the idea." –* ***ehola, Student***
>
> *"I wanted to know the answer to this question too, but when I asked it, it told me to check this one out, so I did and you two both helped me so much. We don't have any of the stuff you said so it is definitely something to look into, I love the environment so much!" –* ***Ellie, Student***

Scientist winner: Anna Gardner

Anna's plans for the prize money: "*I would like to set up a series of practical and outdoor workshops about plants, trees, birds and insects. The workshops will be called: Birds, bees and all things green. These practicals will be aimed to inspire you guys to enjoy the outdoors as much as I do. It will connect you to your green environment and include how to care for garden wildlife. The workshops will be for an hour after school or in the school holidays, they will be outside either on the school grounds or organised at a local park*."

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

Student winner: Class 12

As the student winners, Class 12 from Oaklodge School will receive a certificate and a gift voucher.

Feedback

We're still collecting feedback from teachers, students and scientists but here are a few of the comments made about June's *I'm a Scientist*…

"It appeals to children with all types of abilities and gives them the opportunity to ask questions at their own level of understanding. The enthusiasm of the scientists involved to be contagious and students get very excited when questions are answered." – **Teacher**

"I really enjoyed the variation of questions I received, from tree focus right through to the bigger, broader planetary questions. I feel that I have a better understanding of how to communicate to different audiences and really appreciate the importance of scientific communication events like this one." – **Anna, scientist**

"I've learnt that there are different scientist in jobs not just teachers" – **Student**