

Nitrogen Zone Summary report – August 2013

This report has been compiled by the *I'm a Scientist, Get me out of Here, Australia* team as a summary of zone activities and outcomes. It contains moderator observations and analysis of web statistics for the August 2013 Nitrogen Zone.

Nitrogen was supported by zone sponsor DMITRE (SA) and scientist sponsor the Waite Research Institute. It was one of the busiest zones this season, with a record breaking 428 questions in the Ask section (previously held by March 2013 Disease zone with 399 questions) from 245 students, and a total of 17 Live Chats during the two-week event. With such a wide variety of science covered by our five scientists students quizzed them about a whole host of different things, from the science behind sexuality to the risk of a real zombie apocalypse.

Peter the computer software designer, Mick the explosive detecting PhD student, Mia the working dog welfare researcher, astronomical instrument scientist Kyler, and wine chemist David all did a great job at answering the questions that were put to them. Their science knowledge and typing skills were challenged, and thinking outside of the box got their brains working overtime.

Statistics

Zone page	Pageviews	
Total Zone	18,569	
Zone homepage	1,131	
ASK page	1,721	
CHAT page	1,343	
VOTE page	857	
List of questions	1,459	
Peter Perry	269	
Kyler Kuehn	248	
Michael Cronin	354	
Mia Cobb	367	
David Jeffery	219	

Table 1: Pageviews of the I'm a Scientist
Nitrogen zone Aug 19 – Sept 6 2013

Number of	Nitrogen Zone	Average (per zone)	Whole event
Registered students	245	230	691
Questions asked	428	325	976
Answers given	1,083	787	2,360
Comments	258	193	578
Votes	225	268	803
Live chats	17	20	60
Lines of live chat	6,299	6,669	20,007
Schools	9	9	25

Table 2: Key engagement statistics from the *I'm a Scientist* Nitrogen zone, compared to the average per zone and whole August 2013 event.



Graph 1: Pageviews of *the I'm a Scientist* Nitrogen zone from Aug 19 – Sept 6 2013 – including the week prior to the two-week event.



Popular topics and words

Students made the most of the opportunity to chat with scientists and ask them about their diverse specialities. Questions about astronomy "if a black hole was to swallow the universe then to explode will the world start over again", computer science and technology "How do wi-fi (or any wireless connections) connect to the modem and to the device then back again through air?", and what really happens when you get struck by lightning Is it possible for someone to get special effects when hit by lightning like something kinda like super powers? were amongst the top viewed question threads.



Diagram 1: A word cloud of the 50 most popular words used by students within the ASK section of the *I'm a Scientist* Nitrogen zone. The more prominent the word, the more frequently it was used by students.



Diagram 2: A word cloud of the 150 most popular words used by students and scientists during the Live Chats in the *I'm a Scientist* Nitrogen zone. The more prominent the word, the more frequently it was used.

More personal and deeper questions also came through with the most popular question in terms of page views being "<u>is being gay/lesbian something that has gone wrong with the brain at birth or is it a choice</u>". The Live Chats took a personal note too, with one student



(@boron) sharing his/her hopes and aspirations "I work hard but my mother tells my I'll never get there and I want to be the first person in my family to uni". Scientist @Mia responded with a supportive "Keep up the great work! I'm sure your Mum will be super proud when you get there" which was acknowledged with "thanks".

The vocabulary used by students was recorded during the event from student's questions (diagram 1) and live chats (diagram 2). The word clouds show the massive interest in dog welfare and breeding, with explosives, space, chemicals and computers all getting good coverage – a clear display of a thirst for understanding of the world we live in, and beyond.

Scientist winner: Mia Cobb

Mia is a PhD student at Monash University researching the welfare of working dogs, including how to reduce the stress they experience when moving from a family home to a training kennel. She also co-writes the blog "Do You Believe in Dog" with a fellow canine scientist. Mia describes herself as "enthusiastic, friendly, hardworking", and tells us that her Year 8 teacher had described her as a "facetious toad". Mia plans to spend her



prize money to run citizen science projects with students, including one to do with <u>Poo Power!</u>. She also plans to video-chat with schools from the Nitrogen Zone, giving them the chance to ask even more questions. We can't wait to hear how it all goes.

Student winner: misseden

Student *misseden* was nominated by the scientists in the Nitrogen zone for posing some very good questions in both the live chats and the ASK section of the *I'm a Scientist* website. *misseden's* questions included "Will it ever be possible to talk to dogs?", "Where would you use the explosive detectors that you make?", "Have you guys made any major science discoveries so far?" and "What's the most acidic chemical currently discovered?" where *misseden* asked follow-up questions in the comment thread to unpack scientist's initial answers.

Event sponsors

Thank you to our partners for supporting I'm a Scientist, Get Me Out of Here! in Australia:

- Zone supporters the Department for Manufacturing, Innovation, Trade, Resources and Energy (DMITRE) (SA) for sponsoring the August 2013 general science zone, also known as the Nitrogen Zone.
- Scientist supporters the Waite Research Institute (WRI) for sponsoring wine chemist David Jeffery in our Nitrogen Zone.

Final thanks to the scientists

The success of the *I'm a Scientist* event is thanks to the scientists who volunteer their time to chat to students online and answer their science questions. A big thanks also to the scientist's associated organisations for supporting them in taking part.

