

## Energy Zone, June 2013



This report has been compiled by the I'm a Scientist team as a summary, containing moderator observations and our web data, to provide some meaningful information on the zone.

The Energy Zone was very busy during the first week, with 12 live chats, but became quieter in the second week, with fewer new questions coming in. All of the scientists engaged well with the students throughout.

### Number of page views in the 3 weeks surrounding the event

Zone page	Page views
Total zone	17,252
ASK page	1,175
CHAT page	1,902
VOTE page	1,107
Rhodri Jenkins	844
Matt Hudson	697
Matt Carnie	724
Helen Pritchard-Smith	636
Chia-Yu Lin	688

### Key figures from I'm a Scientist June 2013 for the zone, the average of all 18 zones, and the whole event

	Zone	Zones average	Whole event
Registered students	290	372	6,697
% of active students (used ASK, CHAT, VOTE or commented)	83%	83%	-
Questions asked	897	963	17,337
Questions approved	251	309	5,558
Answers given	382	533	9,597
Comments	63	73	1,306
Votes	233	276	4,962
Live chats	15	13	240
Lines of live chat	4,328	4,735	85,225
Schools	7	8	138

## Popular topics

In the live chats questions often started out along the lines of 'why do you want to win?' 'why should we vote for you?' and 'do you work in a team?' The students were also interested to know what the scientists would do if they weren't in their current careers.

Climate change and sustainable energy sources were popular topics, with students asking which energy sources are best and what the differences are, as well as wanting explanations for how things like solar cells and biofuels work. The scientists were also asked to explain or dispel rumours and ideas, such as 'does enough sunlight hit the Earth's surface in a minute to power global energy demand for a year?' Common questions included finding out the scientists' personal opinions on sustainable energy, whether their research is helping the environment, or 'repairing the ozone layer', and when the world is going to run out of energy.

Rhod and Matt C took a number of questions on how various materials, including coffee, biscuits and donuts, could be turned into biofuels.

In the questions, very similar topics came up as in the live chats. Lots of students asked when the scientists first became interested in science, if they like science, what their favourite science is, etc. And the students were also interested to know how the scientists' work helped both people and the environment.

There were questions asking exactly what solar cells are, how they are made, and what their potential is for providing green energy. There were also a number of questions regarding what, in the scientists' opinions, is the most sustainable energy source, and which source is best poised to provide energy for the future.

Students were very interested in Matt H's work with aeroplanes, and Rhod and Matt C's apparent obsession with coffee, asking both '[Why do you drink so much coffee?](#)' and '[How would you use coffee to make fuel?](#)'

General questions included whether the scientists work with animals, and what their opinion on animal testing is and whether they work alone or within a team.

### Sample questions

[If an F1 car was to be driven on the moon, what modifications would be needed?](#)

[How much energy is required from the solar cells to heat up your coffee?](#)

[Do you think we will come up with an alternative to fossil fuels within the next 10 years or do you think much more work is needed?](#)

[What is the most useful energy? And why?](#)

[How would you use coffee to make fuel?](#)

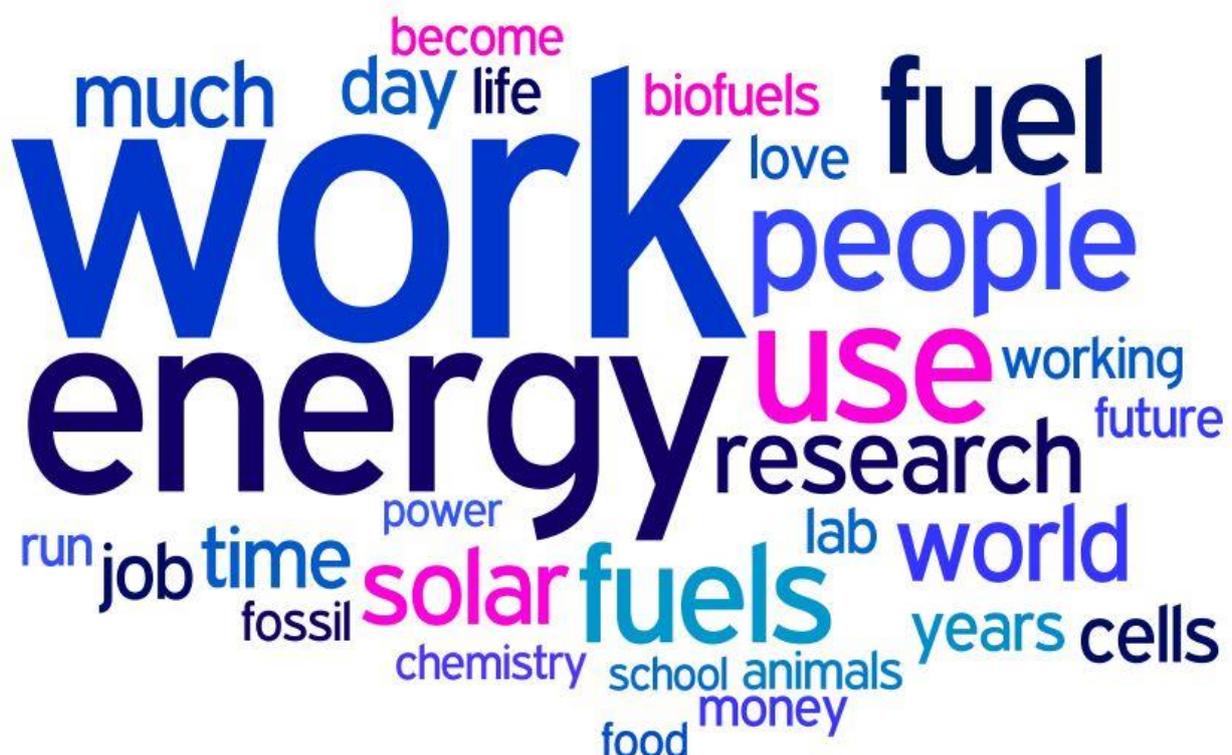
[What is energy and why do we have it, who thought that we need it and what would life be like with out it?](#)

[Do you have to be smart to be a scientist?](#)

Keywords of questions asked in the zone (the size of the word represents its popularity; the number indicates the number of times it was tagged as a keyword)

[advice](#)2 [aeroplane](#)3 [alien](#)2 [animal](#)3 [carbon dioxide](#)5 [chemistry](#)10 [coffee](#)2  
[dinosaur](#)2 [earth](#)3 [education](#)15 [electricity](#)4 [end of the world](#)4  
[energy](#)35 [environment](#)7 [experiment](#)8 [extinction](#)2 [F1](#)3 [flight](#)2 [food](#)3  
[fuel](#)10 [future](#)17 [health](#)3 [history](#)2 [how science works](#)16  
[life](#)10 [medicine](#)4 [microorganism](#)3 [music](#)3 [personal](#)63 [preference](#)25 [quirky](#)23 [renewable](#)  
[energy](#)2 [research](#)26 [routine](#)4 [society](#)5 [solar cells](#)12 [space](#)10 [technology](#)6 [transport](#)7  
[travel](#)2 [vote](#)2 [win](#)2 [work](#)36 [work-life balance](#)2

Keywords from live chats in the zone (the size of the word represents its popularity)



## Examples of good engagement

There was some good chat about creating solar cells:

**gems:** Is there something special in particular everyday objects that can be easily used to make solar cells?

**mattcarnie:** You can make a solar cell from some glass, some dye and some pencils! There are videos on youtube on how to make them from donuts!

**mattcarnie:** Solar cells from donuts: [«link»](#)

**gems:** what special thing is there in donuts that means they can be turned into solar cells?

**mattcarnie:** You can extract a chemical from the sugar called titanium dioxide, this is a semiconductor. Watch the YouTube clip. Its fun!

And interest in Matt H's travelling:

**direction1369:** do you travel all over the world?

**matthewudson:** Yes, I travel all the time! This week I went to Ohio in America to meet the airforce and next week I will go to Peru

**direction1369:** WOW! don't you ever get your ear pop when you are on the plane?

**matthewudson:** Yes, my ears pop all the time on planes, But I take about 60 flights a year, so I have to get used to it! Your ears 'pop' due to the change in air pressure. There is air inside your ears that gets sealed in, as the pressure inside the plane drops, you have to release the trapped air in your ear, that is what makes the 'pop' as it comes out

And there were some fun answers to this question: ['Do you dress your pets up for special occasions?'](#)

Matt H was in Texas, US, throughout the event. He took part in many live chats that would have been very early in the morning for him. During one chat he was in an airport waiting to catch a flight to visit the US Air force.

Scientists from other zones joined in answering some Energy questions: ['What is string theory?'](#) and ['Would you rather sky dive for a day or ride a dinosaur?'](#) And the Royal Society of Chemistry left comments on a number of questions, linking to relevant content on their website (username *chemnet*).

## Scientist winner: Rhod Jenkins

Rhod's plans for the prize money: *"I would donate the money to a charity which helps educate children who might not get the chance otherwise. Specifically I would donate to Outreach International (<http://outreach-international.org/>)."* [Read Rhod's thank you message here.](#)



## Student winner: curlybrace

For asking lots of good questions, **curlybrace** will receive a £20 WH Smith 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...

*"I enjoyed this chat very much thank you for time and your a good guy rhod hope you do well" – sciencecrazy11, student*

*"Thank you very much for all your answers. The students have actually stayed over break to continue asking you questions" – caspinall, teacher*

*"Some really insightful questions about our work and energy in general. A lot of these students are smarter than I was at their age!" – Rhod Jenkins, scientist*

*"that is amaze balls I did not know that" – storm002, student*

*"talking to you all is the best part of science" – Helen Pritchard, scientist*

*"Thanks very much for coming to the chat Rhod and Chia-Yu. The girls don't want the chat to end!" – maryerskineschool2, teacher*