

CHaOS SCIENCE ROADSHOW

"CRASH, BANG, SQUELCH!" 2012

A SUMMARY IN WORDS AND PICTURES

Saturday 17th March 2012,

10am - 5pm

Welcome to the summary of "Crash, Bang, Squelch!" 2012 - a day filled with lots of experiments, families and fun!

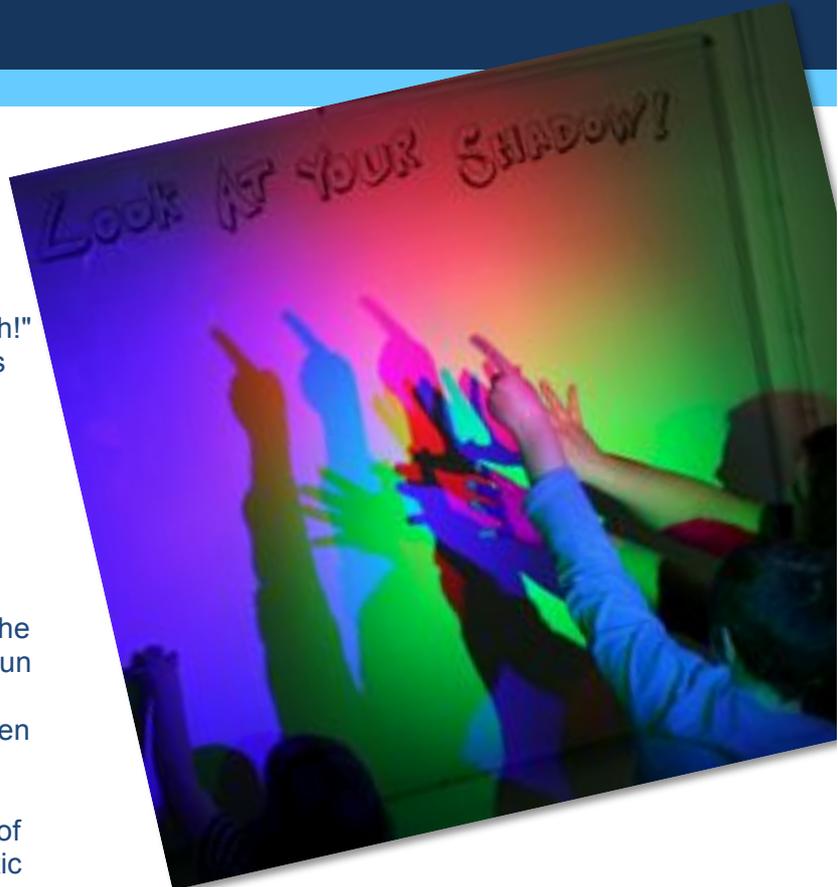
What is "Crash, Bang, Squelch!"?

"Crash, Bang, Squelch!" is a day of hands-on science experiments held in the Department of Zoology at the University of Cambridge as part of the annual Cambridge Science Festival. The event is run by student society Cambridge Hands-On Science (fondly known as CHaOS) and aims to show children and their families that science can be interactive, exciting and fun! We take over the department teaching lab and fill it with cool experiments, each of which is demonstrated by a friendly and enthusiastic student volunteer.

The first "Crash, Bang, Squelch!" was run in 1998, and since then it's become bigger every year, with 2012 being the busiest yet; we were full to capacity all day (despite the rain!). The expanded programme of 7 lectures also proved to be popular with our visitors!

What can visitors expect at "Crash, Bang, Squelch!"?

We have over 50 different experiments, covering all aspects of science; biology and the human body, chemistry and geology, and physics and engineering. Each experiment is staffed by a student volunteer who will explain the science behind the fun demonstration. We work really hard to make sure that our demonstrations and explanations are tailored to fit the child and their family, giving all our visitors a unique and interactive experience!



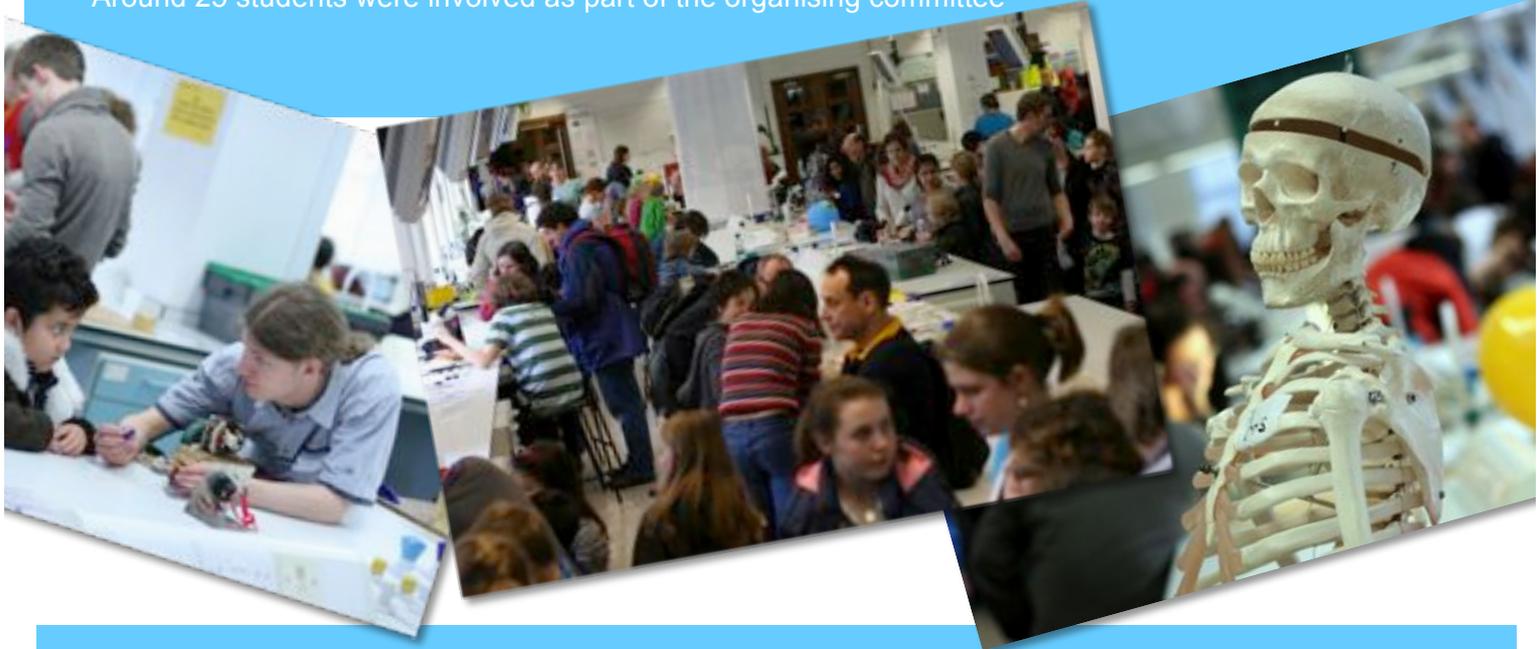
NEW FOR "CRASH, BANG, SQUELCH!" IN 2012:

- A light mixing experiment, where you can find out about how light works and what happens when you mix different colours of light together.
- Our rocks and fossils experiment, where kids can find out about explosive volcanoes, shiny crystals and the exotic animals that lived millions of years ago.
- Expansion of three experiments looking at microbes – bacteria, viruses and parasites! These demonstrations let you build your own virus, figure out just how small bacteria actually are, and find out what the things that cause illnesses really look like!

"CRASH, BANG, SQUELCH!" 2012

"CRASH, BANG, SQUELCH!" IN NUMBERS:

- Around 2,000 people (mainly families) visited the hands-on activities. That's our total capacity - we were full and unfortunately had to turn lots of people away!
- Around 700 people came to our 7 talks (see box at the bottom of this page)
- Around 120 student volunteers demonstrated over 50 different experiments
- Around 25 students were involved as part of the organising committee



CHAOS TALKS: EVEN MORE TALKS IN 2012!

We ran 7 talks in 2012 – more than in any previous year! All our talks were well-attended and involved lots of audience participation (as well as a few bangs and explosions!).

Dave Ansell, a CHaOS veteran and member of the Naked Scientists ran two talks entitled "High voltage science: sparks and more!" and "Gases: just a load of hot air?" Alex Davies, an undergraduate at Clare College, investigated what would happen if you cut off a blood supply, and Sonja Dunbar, a recent Plant Sciences graduate, took a look at colour in the natural world. "The science of the atmosphere" was given by David Bebb, a recent Chemistry graduate, and Philip Garsed, a PhD student studying Electrical Engineering, gave us a noisy overview of the science behind sounds! Finally, Lia Chappell, a PhD student in biology gave a talk taking us inside a cell to explore some of the science lurking inside!



"CRASH. BANG. SQUELCH!" 2012

WHAT DID THE VISITORS THINK?

We gathered feedback from our visitors via written questionnaires. We collected nearly 130 questionnaires throughout the day, representing the views of about 400 visitors. These questionnaires showed that:

- All our visitors found the event enjoyable, with 70% giving it our top rating category of "fantastic!"
- All our visitors learnt something as part of their visit, with 85% saying they learnt a lot
- 96% of our visitors thought the level of explanation was "about right" – an amazing achievement when their ages ranged from under 5 to 60+
- 66% of our visitors stayed for 1 hour or more, with a small number staying 3 hours or more!
- 65% of our visitors had never visited "Crash, Bang, Squelch!" before but 100% would come again – and we hope they do!

Here are some of the comments we received from visitors:

- *"The wonderful enthusiasm of all the volunteers really makes it."*
- *"Fantastic. I love how you've trained/encouraged the presenters to find out what the child already knows. Very kind/engaging/gentle presenters. Thank you very much."*
- *"Excellent experience for all."*
- *"Whatever you put on is so well done and interesting. So just keep doing what you do!"*
- *"Very informative, lovely atmosphere."*
- *How to improve the event "[please run the event] twice a year!"*



WHAT DID THE VOLUNTEERS THINK?

We collect comments from our volunteers via a feedback questionnaire – and here are some of their thoughts:

- *"Thanks for a great day!"*
- *"Really good day, thoroughly enjoyed myself."*
- *"I very much enjoyed my day."*
- *"Thanks for organising a spectacular event...I would definitely like to come back."*

"We were really pleased with how well this year's event went – despite the rain, everyone seemed to have a great time and the atmosphere in the lab was fantastic! The event requires months of planning, but the positive feedback from our visitors really makes it worthwhile. We look forward to seeing everyone in 2013 for an even bigger and better 'Crash, Bang, Squelch!'" Anna Hughes, CHaOS President 2011-12.

"CRASH, BANG, SQUELCH!" 2012



THE CHAOS COMMITTEE WOULD LIKE TO THANK:

- The University of Cambridge Department of Zoology for allowing us to use their lab and lecture theatres
- Neal Maskell, Nanna Evers, Ian Goldstone and Susie Wan in the Department of Zoology for all their help and support in the run up to and during the event
- John Route in the Genetics Dept and Harry Druiff in the Physics Dept for help with experiments
- Neil Stanford for electrical safety testing all the CHaOS kit
- The Cambridge Science Festival team for all their help with organisation and publicity
- The Science Festival stewards who helped us keep visitor numbers steady throughout the day
- All of the student volunteers who gave up their time to be part of the event
- Everyone who came as a visitor!

"CRASH, BANG, SQUELCH!" 2012 WAS KINDLY SPONSORED BY:

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