

THE CREATIVE SCIENCE CENTRE

SPRING /SUMMER
2021

newsletter

jphcreativescience@gmail.com



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- Scientific equipment I can build for you
- See what people are saying about my work

**FOR DETAILS OF MY LATEST
ON-LINE WORKSHOPS
PLEASE GO TO MY NEW
ZOOMSCIENCE WEBSITE
(SCREEN GRAB BELOW)**

The screenshot shows the website <https://www.zoomscience.co.uk>. The navigation menu includes 'Home', 'workshops', 'topics', 'what you say', and 'Contact & Price'. The main content area features a photo of Dr. Jonathan Hare with a science experiment and the following text:

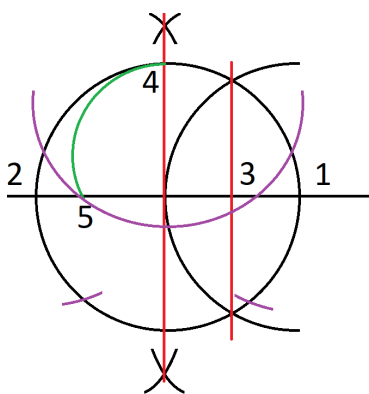
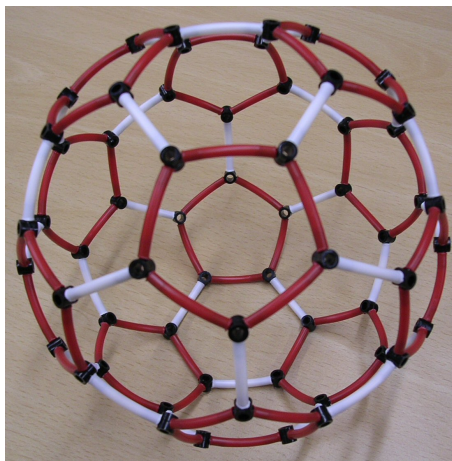
Online workshops with BBC TV presenter and scientist Dr Jonathan Hare

This web site contains details of Jonathan's online science activities for children and adults including mentoring, one-to-one and group workshops.

Click on the links at the top of the page for details.

Dr Jonathan Hare is a British physicist, science communicator and television presenter. Jonathan was on all BBC TV Rough Science and Hollywood Science series. Since 1990's he has run the Creative Science Centre originating 100's of talks and workshops for all ages locally and around the world.

* talks and workshops
* articles * projects * resources
www.zoomscience.co.uk
www.creative-science.org.uk



The Discovery of C₆₀, Buckminsterfullerene (P, S, 6F)

This is the story of the Nobel prize winning football shaped Buckyball molecule that has led to a revolution in nanotechnology. Note: C₆₀ kits will need to be posted out to arrive before the workshop.

Spectroscopy of C₆₀ and the Fullerenes (S, 6F)

C₆₀ and the Fullerenes have a wonderful set of spectroscopic features. Here we explore the mass spec, IR, UV and NMR signatures of C₆₀ and C₇₀ revealing the rich symmetry of these fascinating structures.

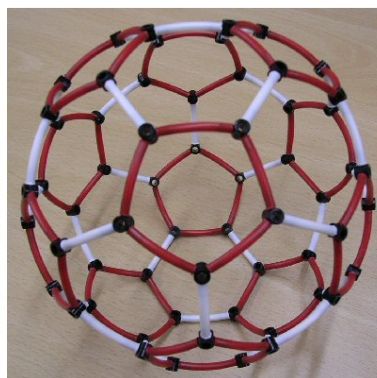
Electricity (P, S)

What is electricity? How can we make it and how can we harness natural forces to power a generator? We explore all these and also the Pelton water wheel Jonathan made in the Colorado series of the BBC Rough Science TV series.

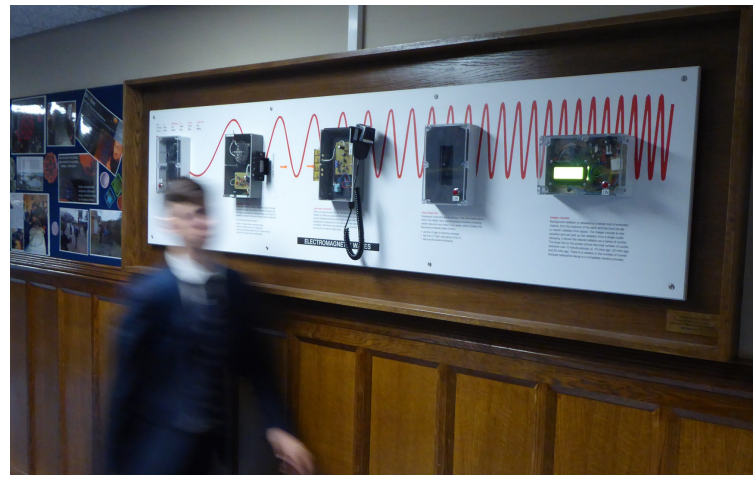
Radio (P, S, 6F)

Radio has provided world-wide communication and even facilitated space exploration, TVs, mobile phones, Wi-Fi, blue tooth, walkie-talkies and countless other applications. We will go through the basics of radio wave transmission and reception with experiments and take you right up to date by sending you a live message through a Geostationary satellite!

Visit my www.zoomscience.co.uk web sites for my on-line talks & workshops and www.creative-science.org.uk for everything else.

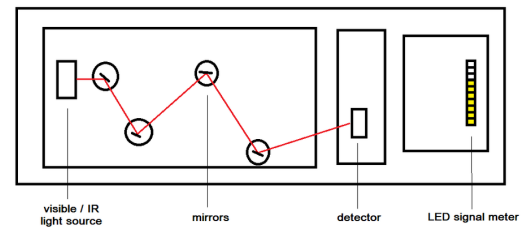


I can build scientific equipment for your laboratory, classroom, or exhibition space. Some examples:



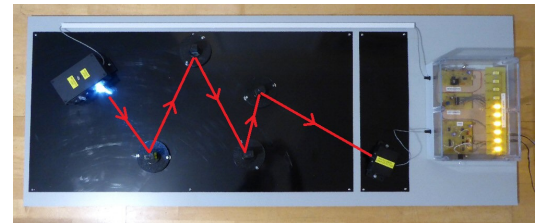
The Electromagnetic Spectrum

A permanent display at Whitgift School: Radio wave transmitter and receiver, UV fluorescence, IR heat camera, light beam communications and a logging Geiger Counter.



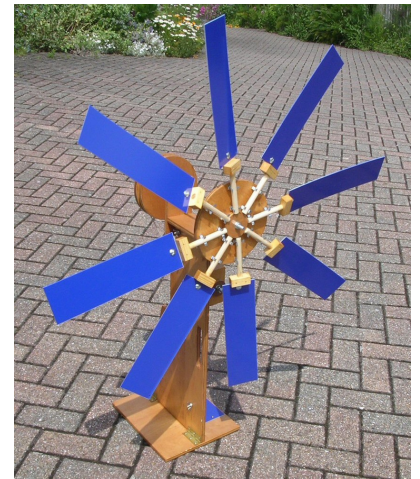
Light beam experiment

The students must skilfully direct a light beam by reflecting and refracting the beam via a set of moveable mirrors and light pipes, to get the best possible signal from the LED phase sensitive detector. It has easy (visible light) and hard (Infrared light) settings!



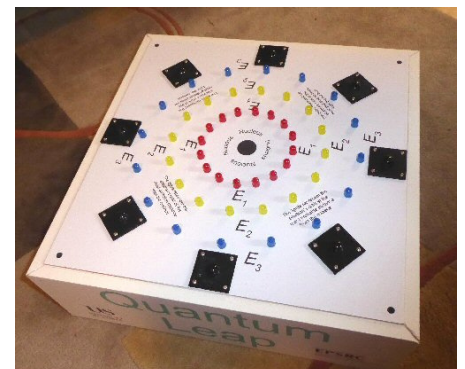
Windmills & Turbines

A set of windmills to challenging participants to power various electronic devices (calculators, LED torches, radios etc.) from the wind. The number of blades and the 'angle of attack to the wind' and be adjusted to understand how to maximise harnessing wind power.



Quantum Mechanics game

With Prof H Cox group at Sussex Uni we have developed a 'Quantum Leap' game. Up to 8 students can control the game - only when they hit the correct frequency of button pushing will the LEDs jump to the next 'quantum level'.



Here's what people say about my work

"Absolutely fantastic! Our kids were buzzing all the way back to Newbiggin. As I mentioned it's more than just Science, it's about role models and aspirations and this visit provided all three and more."

Rob, Newbiggin Middle School, Science Christmas Lectures, Durham

"I had to write to express my appreciation of your commitment to bring Nobel Prize winning science to children's education ... my little son Tommy, 5 years old, came home thrilled and truly inspired by the workshop."

Vanessa, NAGC children

"I always try to tell them Chemistry is fun and you managed to convince quite a few - so thank you. Your enthusiasm is great and you work well with the [A-level] students - so please continue your great work promoting science."

Cheryl, Esher College & FSU

"Jonathan's workshops are enlightening, thought-provoking, inspiring and a most memorable highlight of each semester !" Cheryl, High School Teacher

"Jonathan is one of the most passionate, enthusiastic and resourceful science teachers our children have had." Iryna, London

"Thank you very much for your outstanding contribution to last week's Science in Action programme for GCSE students. ... I hope you could see for yourself that you had an attentive and appreciative audience - quite an achievement when you consider that there were eight hundred 14-16 year olds ... "

Radka, Training Partnership, Institute for Education

"It has been an ENORMOUS pleasure to accompany you around Sussex [a month of Brighton Science Festival workshops], many inspiring ideas and deep truths have emerged, so naturally as a result I'm more dazed and bedazzled by the world than I ever was. So it goes. I hope you enjoyed it. I know that 1000 kids did"

Richard Robinson, Brighton Science Festival

"Thank you very much for the Chemistry in the movies lecture [Hollywood Science and Some Science of Breaking Bad talks]. I know it went down well because I tried to stop a discussion on the amount of viable oxygen in a car tyre for a good 10 minutes before moving on to inter-molecular bonding! Anyway truly appreciated, thanks!"

John Luton, Varndean College

