

Schools Outreach Programme

CAMBRIDGE
SCIENCE
CENTRE

Unleash curiosity and get
hands-on with science!

“Are a giant squid’s eyes
giant too?”

“Are
there
really
seas
on the
Moon?”

“What makes
a fun fair fun?”

“Why don’t
astronauts fall
to earth?”





Outreach shows and workshops

Help your students to discover the science all around them through our dynamic, interactive shows and hands-on workshops.

To enquire about a visit, please email our Schools Coordinator, schools@cambridgesciencecentre.org

Options are a half or full-day and can consist of show(s) and/or workshops(s) of your choice. All you have to do is choose from one of our great options and leave the rest to us!

Ignite your students' curiosity

Our enthusiastic and knowledgeable Science Communicators are expert at presenting science in a fun and informative way. With them, your students will explore new concepts, discover fresh ideas, share fun facts and take-up a challenge. All our shows and workshops have been carefully designed to support Key Stage curriculum and themes for specific year groups.



Or why not host a PopUpScience science centre at your school?

We travel all over the region and can bring our shows, workshops, and hands-on exhibits to your school for up to a week to create your very own science centre experience.



Sonic Science

We are constantly bombarded by different sounds, friends laughing, birds singing, and even the bleep of a text message. But what is sound? Find out with the help of ping-pong balls and smoke rings!

Main subjects: Physics, Biology.

Main topics: Sound, Anatomy of the ear. KS2 & KS3

Shows

Our Science Communicators present a range of topics through our energetic and engaging shows. Volunteers will be needed, and questions will be asked!

Lifecycles

Find out how nature recycles its resources to keep the Earth in balance in this show. Discover the impact our modern lifestyle is having on that balance and how we can help to rebalance nature.

Main subject:

Biology.

Main topics:

Environment, Water Cycle, Carbon Cycle, Recycling. KS2 - KS4



Spectrum Science

There's more to light than meets the eye! Look up at the sky and discover how we can use hidden light to find out more about our world, our Sun, and other stars.

Main subjects: Physics, Chemistry.

Main topics: Light, Space. KS1 & KS2

Stronger by Design

Find out about amazing, manufactured materials that keep us safe from heat, speed, and force. But what does custard have to do with it?

Main subjects: Physics.

Main topics: Forces-Materials, Keeping Safe. KS2 & KS3

Feel the Force

Whether you love them or hate them, fairgrounds are an excellent place to explore forces. Join us on a real-life roller-coaster ride to find out more!

Main subject: Physics.

Main topic: Forces. KS2 – KS3

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Destination Space

Find out how Isaac Newton's laws of motion help us get into space. Go on a journey into space and investigate the challenges of living and working there - how to get home safely!

Main subjects: *Physics.*

Main topics: *Space, Force, Materials. KS2 & KS3*

Balance of Biodiversity

Explore the ways living things interact with each other in a balanced ecosystem in this interactive show. Play a part in a food web and find out the consequences when one layer is removed.

Main subjects: *Biology.*

Main topics: *Biodiversity, ecology, classification. KS2 & KS3*

Change Matters

Everything is made of "stuff", in various states. Different things may mix, or they may combine to make something new. Find out more in this fun and interactive show.

Main subject: *Chemistry.*

Main topics: *States of matter, Separating mixtures, Reversible and irreversible changes. KS2 & KS3*

It's a Hard Rock Life

Students will be part of the show and dig, swim or drill their way through the Earth's layers, delving deep into the crust to discover the rocks beneath our feet, and how they were created.

Main subject: *Geology.*

Main topics: *Rocks, Fossils. KS2 & KS3*



Workshops

Ask questions, discuss answers, play games and get involved with your chosen subject more deeply through our Communicator-led activities.

Chain Reaction

Students will design and build a contraption to transfer energy through a series of mechanisms, which link together in the ultimate chain reaction in this exploratory engineering workshop promoting teamwork and creativity.

Main subjects: *Physics.*

Main topics: *Engineering, Forces (levers and pulleys), Conservation and transfer of energy. KS2 - KS5*

On the Road

An interactive workshop all about building roads! Play the role of an engineer and environmental scientist as you investigate which materials are suitable for the different layers of a road, and how to minimise the environmental impact of road building using the current A14 works as your source of information.

Main subjects: *Physics, Chemistry*

Main topics: *Engineering and environmental science KS3 & lower KS4*

Destination Space: Go Ballistic

Why don't astronauts fall to Earth? What do they have in common with a human cannonball? Find out in this enquiry-based maths workshop.

Main subject: *Physics.* **Main topics:** *Projectiles, Forces.* KS3 – KS5

Sailing Science

Combining engineering and creativity, use everyday materials to build your own mini racing land yacht. Harness the wind to power your land yacht to victory. Can you modify prototypes and re-test like a true engineer?

Main subject: *Physics.*
Main topics: *Forces, Materials.* KS1, KS2 & lower KS3

You Are What You Eat

Experience the process of digestion from the point of view of a protein. Find out how the body makes what it needs from what you eat.

Main subject: *Biology.*
Main topics: *Healthy eating, Digestion, Molecules, Protein.* KS3 & KS3

Power Up

Build and test a simple circuit, an electromagnet, and a miniature wind turbine. Understand the intrinsic link between electricity and magnets and what that means for powering our world.

Main subject: *Physics.*
Main topics: *Electricity.* KS2 & KS3

Eye on Evolution

Explore the way we think human eyes have evolved by following the development of the eye through other creatures. Make a pinhole viewer to demonstrate each stage of the process.

Main subjects: *Biology, Physics.*
Main topics: *Anatomy of the eye, Evolution.* KS2 & KS3

Destination Space: Skills for Space

It takes thousands of people with a huge range of skills to send just one astronaut into space. Investigate different space programme roles and put your skills to the test

Main subjects: *Physics, Chemistry.*
Main topics: *Space, Forces, Materials.* Upper KS2 & KS3



"Our children had an exciting visit today as part of their Space topic. They learnt all about what it is like for astronauts in space, rocket fuel, gravity – and they even got to ride on a hover board!"
St Christophers Primary School

"It was a wonderful, positive start to the week. The children were really engaged and excited, which was an absolute pleasure to see."
Coton Primary School

"Thank you so much for the excellent show on Life Cycles that your Science Communicators put on. The children really enjoyed it and learned a lot from it."
Thriplow Primary School

"Years 3 and 4 really enjoyed their Sonic Science show. The children were delighted to consolidate their understanding of sound and develop it further with some super demonstrations!"
Warboys Primary Academy

Supported by our Executive Council



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Cambridge Science Centre

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