

EXPLORE! HANDS-ON TRAVELLING EXHIBITIONS

ATTRACT NEW AUDIENCES TO YOUR VENUE WITH OUR POPULAR HANDS-ON EXHIBITIONS



WHO ARE WE?

Science Projects is an educational charity based in London whose aim is to promote the public understanding of science through the medium of hands-on exhibits. We have been designing and building exhibits for over 30 years and we also run a successful science centre as well as our travelling exhibitions. Importantly, our underlying core has always been committed to the promotion of learning and discovery.

DESIGNED FOR YOU

The exhibitions are designed especially for use in public venues. They are quick and easy to set up so you can have an exhibition that is ready in less than half a day. They can attract new audiences and increase visitor numbers to your institution, providing an ideal way to present an ever-changing exhibition program.

The exhibits are highly interactive and are popular with all ages. As they are free-standing, they can be arranged in many different ways to suit your venue. Each exhibition takes up about 100sq.m. and for larger spaces, several exhibitions can be grouped together.

EXPLORE! EXHIBITIONS:

Shocking Electricity
Forces

Good Vibrations

Ancient Wisdom

The Arts of Art

Senses

Puzzles and Illusions

The Mechanicals

Medieval Machines

Optics

Life

EXPLORE!
HANDS-ON
TRAVELLING
EXHIBITIONS

SHOCKING ELECTRICITY!

Key information: 15 exhibits • requires approx
100sq metres • requires 10 plug sockets

Sparks will fly in this exhibition of weird and wonderful experiments for all ages who can Make an explosion using just water, experiment with batteries and generators, magnets and plasma globes. All the key elements for a Frankenstein laboratory and more!



Exhibits:
Human Battery
Electric Fence
Jacob's Ladder
Electric Field
Electro-magnet
TENS machine
Frog's Legs
Plasma Globe
Electrolysis
Static Domes
Transformer
Resistance
Switched on
Circuits
Wimshurst
Machine



Exhibits:
Gyro Wheel
Roller Race
Anti-Gravity Wheel
See Stress
Black Hole
Magnetic Fields
Magnetic Pendulum
Balls and Bubbles in Liquids
Air Stream
Vortex Bottles
Electricity and Magnetism
Air Cannon
Create a Fountain
Canals
Windy City
Flying Wing



**Key information: 16 exhibits • requires approx
150sq metres open floor space • requires 5 plug sockets**



FEEL THE FORCE

The forces of nature are invisible but they affect every moment of our lives. You can feel them when driving round corners, ice skating or riding a bike. And you can see their effects in smoke rings and bubbles, even the way water flows when emptying the bath. These large-scale exhibits help explain how they work.

GOOD VIBRATIONS

the science of sound

Key information: 16 exhibits • requires approx 100 sq metres of open floorspace • requires 10 plug sockets.

We're surrounded by sound and our ears are bombarded by noise but do you know how sound is made and how it travels? It's all to do with vibrations of course.

Experiment with odd musical instruments, find out how your vocal cords work, puzzle your brain with sound illusions and watch your voice on a computer screen.

Theramin - This was the first music synthesiser to be invented. Users can play a tune by simply waving their hands close to two aerials.





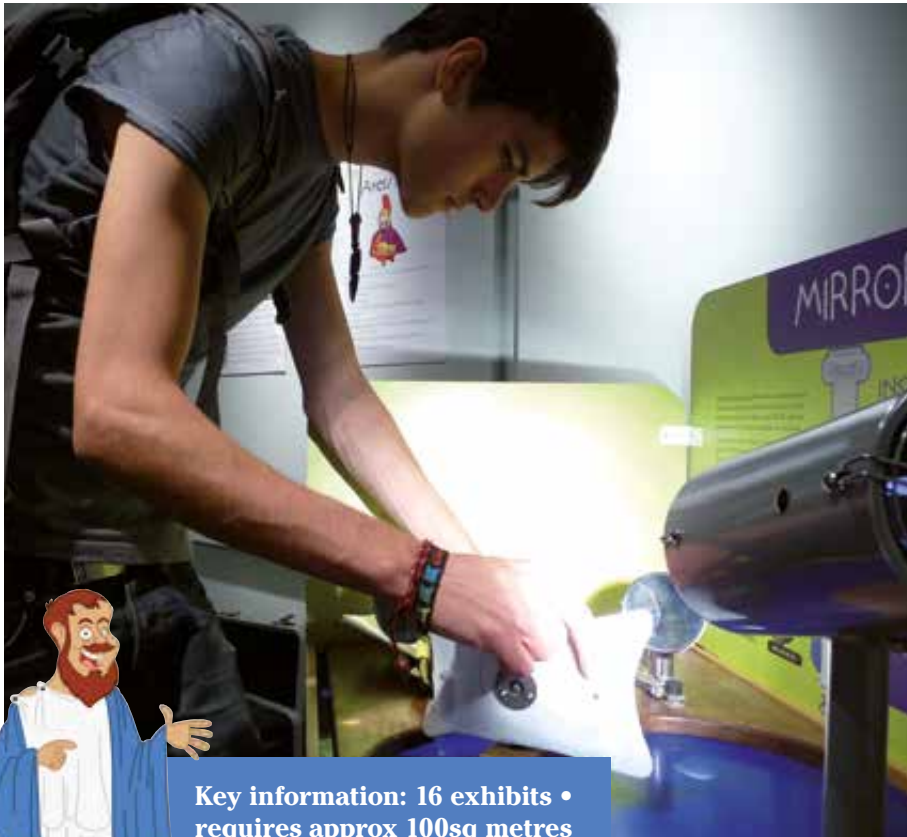
Exhibits:
Vibrating string
Vibrating Bowl
Pressure wave
Speech stretcher
Delay phone
Bucket radio
Theramin
Hearing tester
Artificial vocal cords
Ear clangers
Phone a friend
Sound or music?
Tea chest bass
Sound illusion





- Exhibits:
- Make a Mosaic
- Archimedes Screw
- Catapult
- Aqueduct
- Roman Arch
- Grinding Wheel
- Word Spinner
- South Pointing Chariot
- Signalling
- Archimedes Mirrors
- Mechanical Locks
- Musical Scales
- Hero's 5 Simple Machines

ANCIENT WISDOM



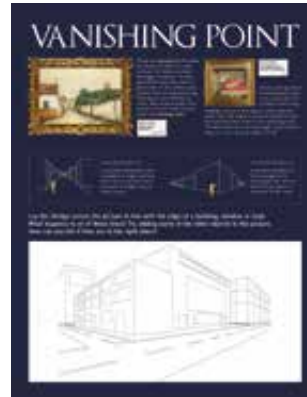
Key information: 16 exhibits •
requires approx 100sq metres
• requires 2 plug sockets • one
exhibit contains water

Kingston Museum, Surrey

Find out what the ancients did for us. Shoot down a castle wall with a Roman catapult and see how the Egyptians locked their doors. Build an aqueduct to guide water to a village and try the Greek way of using the Sun to burn the enemy's ships. There is art and music as well and you can even write your name in hieroglyphics.



Reveals the techniques, tricks and trade of the art world from perspective to lighting, to composition. It looks into some of the major developments in the art world and how they shaped what people painted, how they painted it and what they painted with.



- Exhibits:
- The art machine
 - Draftsman's grid
 - Composition
 - Materials
 - Artist's glass
 - Vitruvian man
 - Colour combinations
 - Vanishing point
 - Date the art
 - Light and dark
 - Light up the art world
 - Hidden meanings
 - Anamorphic mat
 - Mixing colours



The Observatory Science Centre, East Sussex

Key information:

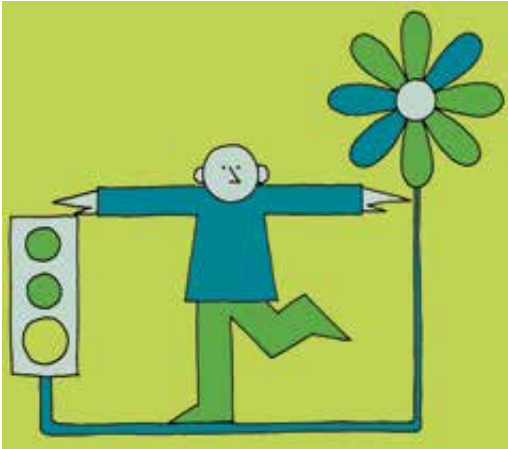
- 14 exhibits •
- requires approx 100sq metres •
- requires 5 plug sockets

The Art Machine (right), lets up to three people squirt 'paint' from giant bottles onto a canvas which they can spin to create all sorts of realistic patterns and effects. Once complete, visitors can email their masterpieces to themselves.



The Dali Experience, London

Key information: 16 exhibits • includes banneres • requires approx 100 sq metres • requires 9 plug sockets.



Exhibits:
Reaction tester
Touch test
Peripheral vision
Stereo hearing
Skulls
Smell table
Eye iris
Hearing test
Balance test
Mirror drawing
Delay phone
Hot and cold
Memory test
Colour blindness & 3D pictures
After-image / Secret message

Senses

This exhibition gives visitors the chance to find out more about their senses and compete with others to see whose senses are sharpest.



PUZZLES & ILLUSIONS

These puzzles and illusions give visitors an insight into how their brain works and are fascinating for all ages.

Phenakistoscope
Bird in a Cage
Triangles and Pyramids
Cafe Wall Illusion
Hollow Mask
String Puzzles
Moving Spirals
Colour illusions
Size illusion
Colour-banded Snake
3D Pictures
Anamorphs
Magic Writing
Graphics Illusions



*Inspire Discovery Centre,
Norwich*

Key information: 15 exhibits • includes display banners • requires approx 100sq metres • no electrical power required.



Discovery, Łódz Poland



Great Conservatory at Syon House in Brentford, London



CABARET!
Mechanical Theatre

Exhibits:
Cams
Gearing
Gears
Linkages
Drives
Ratchets
Levers
Crankes

Automata:
Capture your own U-Boat
How to Swim
The Barecats
Poisoned Milk
Camel Simulator
Sleeping Musculature
Three Physical Jerks
Sheep Shearing Man
Lion Tamer
Allegory of Love
How to Live: Spaghetti Man
The Birth of Fast Food: Pegasus

THE MECHANICALS



Key information: 8 exhibits • includes banners • 12 automata • requires approx 100 sq metres • 12 plug sockets.

The Mechanicals is an exhibition of two parts. Witty, beautifully hand-crafted automata are displayed alongside hands-on exhibits that help visitors to understand the basic mechanisms involved in making the automata work.

As well as explaining the automata mechanisms, the interactive exhibits also simplify and show the basic principles behind drives, pulleys, ratchets and levers that underpin our lives in so many ways.

The Mechanicals is a collaborative project with Cabaret Mechanical Theatre, famous for its collection of hand-made automata once occupying premises in Convent Garden but now touring the world in various exhibitions.

MEDIEVAL MACHINES



The medieval period was one of great creativity and development. Many of the basic technologies which underpinned the renaissance and later the industrial revolution were first developed while at the same time innovations from Roman times were rediscovered and refined.

By giving people a hands-on opportunity to explore these technologies first-hand, the exhibition is intended to give people an insight into the roots of modern technology and the inventiveness of our ancestors. It will also help them gain a better understanding of history and how the innovations might have affected peoples lives in the period and after.

This exhibition is particularly suitable for history-based museums, historic buildings and visitor attractions.

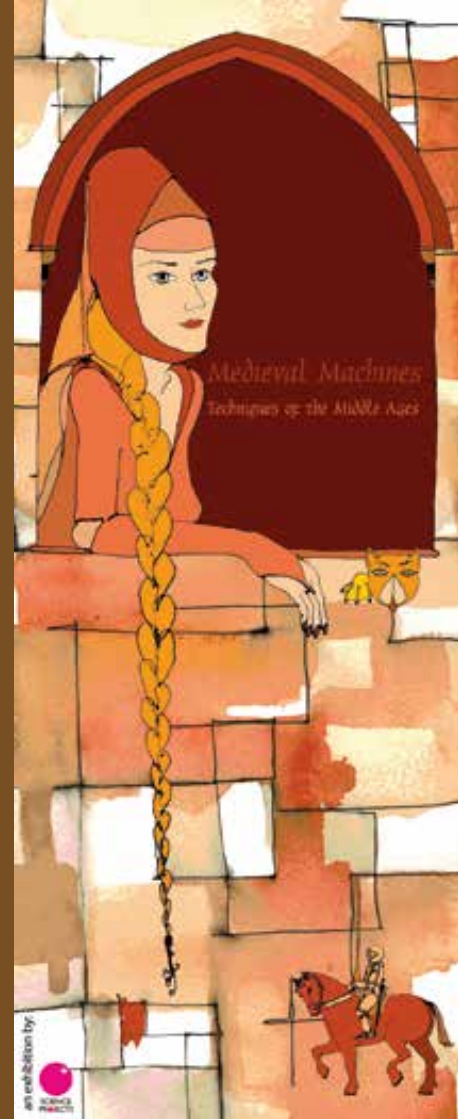
Exhibits:

Trip Hammer
Water Wheel
Windmill
Siege Engine
The Knight
Stained Glass
Arch

Flying Buttress
Wooden Bridge
The Compass
The Loom
Printing Press
Clock
Tiling

Inventions and Borrowings
(spectacles, silvered mirror,
hourglass, wheelbarrow, chain
mail and the cannon)

**Key information: 15 exhibits • requires
approx 100 sq metres • 4 plug sockets.**





Exhibits:
Adding Colours
Big Lens
Anamorph
Multiple Reflections
Glow Paper
Ghost
Illusion Discs
Light Music
Mirror Drawing
Plasma Globe
Praxinoscope
Spark Disc
See Heat
Zoetrope

*The Observatory Science Centre, East
Sussex*

Key information: 16 exhibits • requires approx 100sq metres • requires 9 plug sockets • some of these experiments work best in a darker area.

OPTICS



Experiment with lenses, lightning and luminosity and many other classic demonstrations on colour and optics. Also investigate how images merge into moving pictures in the zoetrope and praxinoscope, and how much your brain influences what you see.

Life

What are we humans made of and what makes us tick? Use the models and the microscope to find out what goes on inside our body. And identify plants and animals and see how they fit into the Earth's environment.



Exhibits:
Skeleton hand
Human torso
Digestion
Sunflower
Key
Animal visions
Animal sounds
Fossil find
Body parts
Video microscope
Reaction timer
Balance
Model eye
Mirror drawing
Model ear

Key information: 15 exhibits • requires approx 100 sq metres of open floorspace • requires 5 plug sockets.



FINANCE

The cost of the exhibition is made up of two parts: the hire fee and the delivery/collection charge. All amounts are quoted exclude VAT.

The *delivery/collection* charge includes set-up, staff training, packing up and collection. It is calculated from the driving time between our workshop in London and your venue.

ESSENTIAL INFORMATION

Each exhibition takes up about 80-100sq metres except Feel the Force, which needs about 150sq metres.

The exhibits are free-standing and can be arranged in many different ways.

Power requirements are minimal and extension leads can be provided.

Delivery is generally by a large transit type van but exhibitions for overseas may be crated and freighted.

During the set up and take down of the exhibitions we need you to provide two people able to help carry and assemble the exhibits. In addition, those staffing the exhibition will need to be available for training at this time. It is useful if some of the staff are also the helpers, so they can learn about the exhibits as they are set up.

HOW TO BOOK

For latest details of availability and cost, please contact our Outreach Co-ordinator who is based at our Science Centre in East Sussex.

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