

**SCIENCE  
MUSEUM**

**WONDERLAB**

THE EQUINOR GALLERY





# ZONES



## LIGHT

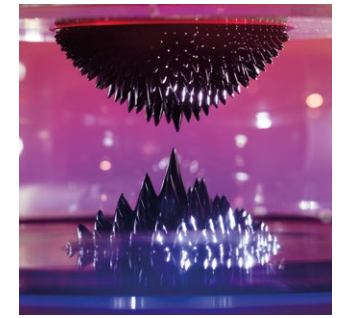
Experiment with the different properties of light to explore how it can be reflected, bent or mixed. See what our world looks like under different coloured lights in the Colour Room.

### EXHIBITS

- Colour Room
- Shadow Trap
- Infinity Boxes
- Heat Camera
- Light Lab
- Concave Mirror
- Colour Mixing

### **DON'T MISS: INFINITY BOXES**

Find out how many reflections you can see in these boxes filled with mirrors.



## MATTER

Investigate the incredible properties of different materials. Discover how gases move and flow, and watch the amazing effect of water freezing.

### EXHIBITS

- Icy Bodies
- Chemistry Bar
- Water Fall
- Water Drop Photography
- Watch Water Freeze
- Flowing Mist
- Cloud Rings
- Magnetic Liquid

### **DON'T MISS: MAGNETIC LIQUID**

Create beautiful spiky patterns by controlling our magnets.



## SOUND

Experiment with different frequencies and volumes to create electronic music. See how different wave patterns change the sound we hear, and discover how you can listen to music through your bones and teeth.

### EXHIBITS

- Visible Vibrations
- Waves
- Theremin Bollards
- Sound Bite
- Touching Sound

### DON'T MISS: SOUND BITE

Ever have a song in your head? Try this exhibit to hear music using the bones in your skull!



## SPACE

Find out what happens in space and how it affects our lives here on Earth. Investigate how gravity can change the ways objects orbit stars, create your own northern lights in a tube, or discover what colour the Moon is.

### EXHIBITS

- Bright Black Moon
- Double Gravity Well
- Orbits
- Particle Detector
- Aurora

### DON'T MISS: ORBITS

Join the Earth and the Moon on their journey around the Sun.



## MATHS

Explore how our everyday lives can be explained by maths. Experiment with different patterns to complete puzzles and challenges, or investigate the properties of 2D and 3D shapes and what you can make from them. Create beautiful tessellations, and make patterns with the curious chaotic pendulum.

### EXHIBITS

- Symmetry Mirror
- Tessellation Wall
- Pendulum Patterns
- Shape Maker
- Water Jet Challenge
- Puzzles
- Sip or Spray

### DON'T MISS: SYMMETRY MIRROR

Can you make it look like you're flying? Or, why not get all your friends and family to create a monster with lots of arms and legs?



## ELECTRICITY

See electricity travelling across the ceiling in our Explainer-led tesla coil demonstrations. Use problem-solving skills to build electric circuits, and make magnets levitate.

### EXHIBITS

- Electricity Demo Area
- Lightning Strike
- Circuits
- Floating Magnet

### DON'T MISS: LIGHTNING STRIKE

Control your very own lightning storm in a glass tube.



## FORCES

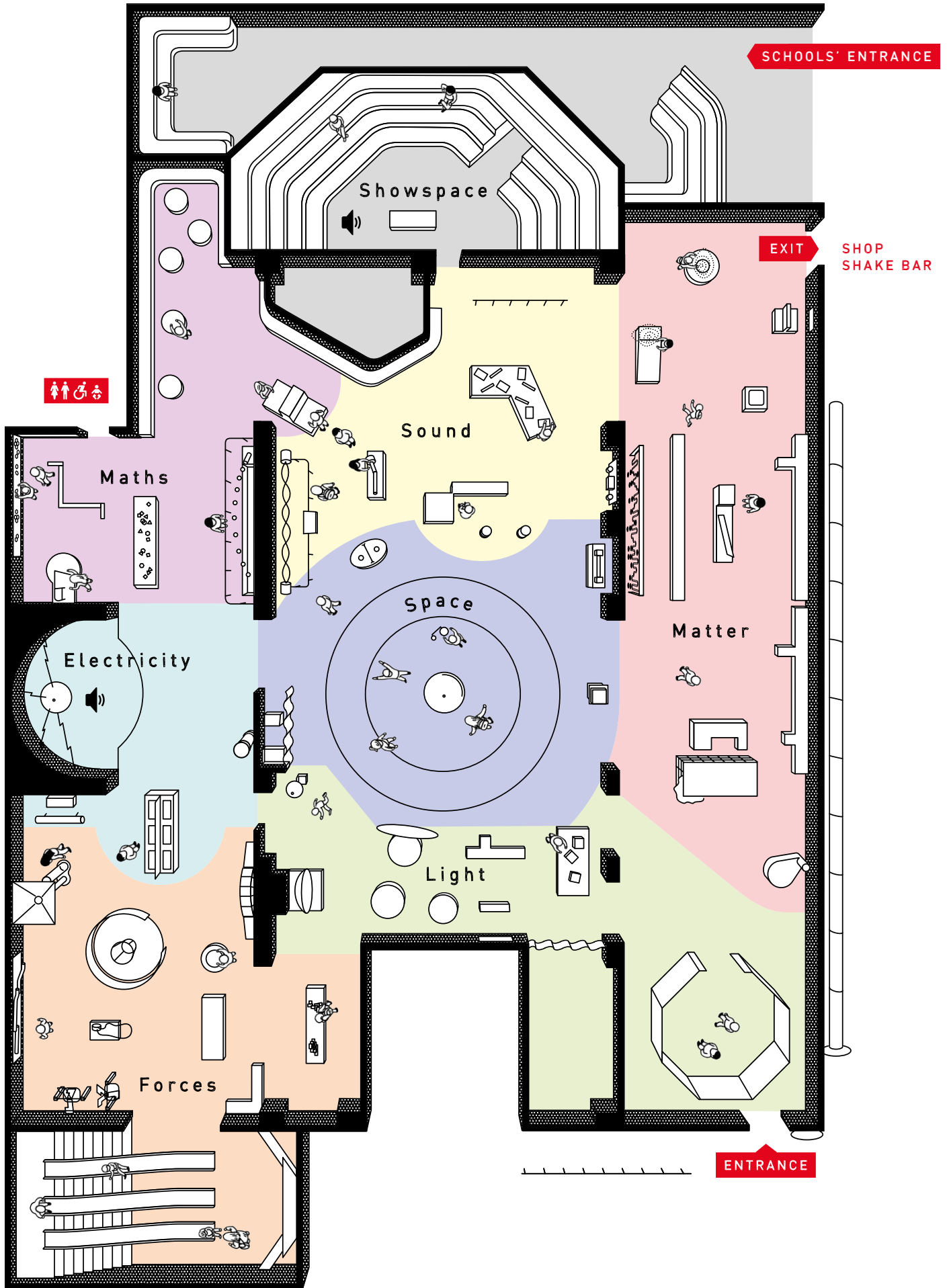
Experience how the forces we use every day let us slide, build, move and spin. Build a flying machine to experiment with air resistance, and find out who can make the strongest structures.

### EXHIBITS

- Air Cannon
- Rotation Station
- Arch Bridge
- Flight Test
- Balance Bridge
- Overhang Challenge
- Friction Slide
- Pulley Up
- Chaotic Rope
- Gravity Run

### DON'T MISS: PULLEY UP

See how high you can lift yourself.



Please note there is a 1 metre height restriction on the slides

 These zones contain loud noises

# DEMONSTRATIONS



## THE ELECTRICITY DEMO

Marvel at massive bolts of indoor lightning and learn why a balloon can make your hair stand on end. Using our very own 1-million-volt tesla coil, we'll show you how electricity works and explore some of the ways that it changes the world around us.

Make more sparks after the show with the Lightning Strike exhibit.

This demonstration contains loud noises. Please ask a member of the *Wonderlab* team if you would like more information.

## THE ORBITS DEMO

Join one of our Explainers on a journey around the Sun to explore the Solar System. Satisfy your curiosity about space and learn all about the Moon and planets in this exciting talk.

## CHEMISTRY BAR

Ignite your curiosity at the Chemistry Bar with our exciting demonstrations and experiments. From slime to bubbles, our Explainers will show you the unexpected ways that different materials behave when frozen, mixed, stretched or hit.

# LIVE SHOWS



## FLASH, BANG, WALLOP!

RECOMMENDED FOR AGES 7-12

What makes a fire? How can explosions help us in our everyday lives? What makes things go 'bang'? With the help of fire tornadoes and real explosions, we'll explain all of this and more.

This show contains loud noises.

## THE ROCKET SHOW

RECOMMENDED FOR AGES 9-14

Hundreds of rockets have been launched into space from Earth. In this show we'll launch our own, examine rocket fuel, and learn how astronauts get into space and back safely, all with the help of Newton's laws of motion.

After the show visit our *Making the Modern World* gallery to see the Apollo 10 Command Module, a real spacecraft that has orbited the Moon.

This show contains loud noises.

## PRIME TIME

RECOMMENDED FOR AGES 9-14

Maths is everywhere in the world around us – it allows us to solve problems and understand how science works. Prime Time explores how we use maths in our everyday lives, from how we design buildings to the way we can win at games.

Visit the Maths area of the gallery after the show and test out what you've learnt.

## THE WONDER SHOW

RECOMMENDED FOR AGES 7+

Our Explainers pick-and-mix their favourite subjects in a highly interactive show that will make you go 'wow'! Ignite your curiosity with exciting demonstrations inspired by *Wonderlab*, and explore the science behind some of your favourite exhibits.

# MAKE THE MOST OF YOUR VISIT



Throughout *Wonderlab: The Equinor Gallery* you will meet our friendly team of Explainers, who are there to answer your questions and help support you to make the most of your visit.

## THINK AND TALK ABOUT...

There are no right or wrong answers in *Wonderlab*, only opportunities to use observation skills and to think creatively about solving problems. As you explore the gallery think and talk about:

- What do you see/feel/notice?
- What do you think is happening? Why do you think that?
- Have you seen or experienced anything similar in your everyday life?

## ACTIVITIES BEYOND THE GALLERY

Your journey of discovery doesn't stop when you leave *Wonderlab*. Our website has loads of fun activities inspired by the exhibits that you can download and do back at home. Visit: [sciencemuseum.org.uk/wonderlab-activities](http://sciencemuseum.org.uk/wonderlab-activities)

## THIS BOOK THINKS YOU'RE A SCIENTIST

Packed full of exciting at-home experiments, this activity book will bring science to life and encourage you to take a closer look at the world around you. Available in the *Wonderlab* shop and at [sciencemuseumshop.co.uk](http://sciencemuseumshop.co.uk)

# ANNUAL PASS



If you've enjoyed your visit today and want to come back, save money by upgrading to an annual pass. For less than the price of two visits you receive unlimited access to *Wonderlab* for an entire year, and monthly emails packed with free experiments and exclusive Science Museum offers.

For more information on how to upgrade speak to a member of staff or call 03300 580 058 (open 08.30-18.00 seven days a week)

## OTHER GALLERIES TO EXPLORE FREE TO ENTER

### TECHNICIANS: THE DAVID SAINSBURY GALLERY

Experience what it's like to create visual effects on a blockbuster film set, analyse blood samples in a laboratory and more in our brand new interactive gallery unearthing the importance of technicians working behind the scenes.

### MAKING THE MODERN WORLD

Discover how science and technology have shaped our society over the past 250 years.

### THE SECRET LIFE OF THE HOME

From pop-up toasters to horse-drawn vacuum cleaners, take a closer look at the development of household appliances.

### WHO AM I?

Discover what makes you unique and explore how your genetics and upbringing might combine to create your identity.

### PATTERN POD

A captivating, interactive, multisensory area for children under 8 to identify the many types of patterns in the world around us and create their own.

## SHAKE BAR

Complete your visit to *Wonderlab* with a visit to our Shake Bar, where you can indulge in delicious made-to-order ice cream milkshakes or design your own ice cream tubs.

## WONDERLAB+

Enjoyed your trip to *Wonderlab* today? Now you can enjoy the wonder of science wherever you are! Explore hands-on activities, quizzes, videos and more free on our family-friendly website – scan the QR code to visit.



*Wonderlab+* was kindly made possible thanks to Anna McRoberts (Major Funder).

## WONDERLAB<sup>AR</sup>

Reveal the wonder of science in the world around you with our free, family-friendly AR app. Created in partnership with PRELOADED and powered by Niantic Lightship – makers of *Pokémon Go*. Scan the QR code to find out more.



## FREE WIFI

Available throughout the museum.

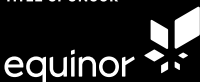
## KEEP IN TOUCH

Sign up to our email newsletters at [sciencemuseum.org.uk](http://sciencemuseum.org.uk) to be the first to hear about the museum's upcoming events and activities.

We love seeing our visitors' photos online. Share yours with us for the chance to be featured on our channels.



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