

Secondary and post-16
Spring issue 2009

What's on



What's new



Wallace & Gromit present... A World of Cracking Ideas

NEW 3

Techno-trousers, the Tellyscope and the Shopper 13 – Wallace is famous for his wacky contraptions! Visit our cracking new interactive exhibition and let Wallace and Gromit guide your students through the world of well-known inventions to discover how simple ideas can transform into life-changing devices. Book the interactive show where Wallace will inspire your students to develop their own ideas for the next big thing.

A Science Museum experience in collaboration with Aardman and supported by  INTELLECTUAL PROPERTY OFFICE

	Exhibition	Workshop	Both
Students	£4 each	£3 each	£5.50 each
Essential adults (1:10 ratio required)	Free	Free	Free
Additional adults	£6 each	Free	£6 each

Booking terms apply (see website)

How to book a visit

Complete a booking request form at www.sciencemuseum.org.uk/educators or call us on **020 7942 4777**. Please have the following information ready:

- Date and time of visit with alternative options
- School contact details
- Number and age of students
- Number of adults (please ensure you have correct ratios)
- Events and IMAX films required
- Hands-on galleries required

Bookings will be confirmed in writing within 10 working days.

Information to help you write your visit risk assessment can be found on our website.

Adult supervision and code of conduct

Students must be accompanied at all times by an adult. Please ensure your students respect other visitors, Museum objects and Museum staff.

Contact us

Education Booking Office

Science Museum
Exhibition Road
London SW7 2DD

Tel. **020 7942 4777**
(Lines open 08.45–17.00 Monday to Thursday
and 08.45–15.00 on Fridays)

Fax **020 7942 4779**

E-mail edbookings@sciencemuseum.org.uk

www.sciencemuseum.org.uk/educators

Monthly updates

To receive monthly updates about new events, courses and exhibitions, sign up for our free Educators' E-news at: www.sciencemuseum.org.uk/educators

What's on

Find out what's on offer for your group at the Science Museum and in your school.

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Key **3** Key Stage 3 **4** Key Stage 4 **16+** Key Stage 16

We support the Learning Outside the Classroom Manifesto.

Download a copy or find out more at:

www.teachernet.gov.uk/learningoutsidetheclassroom

Events

Our curriculum-based events will boost your students' learning through memorable live demonstrations and interactions.



Excellent! Packed with inspiration and fun.

Year 8 teacher

Science Theatre Shows

11.00, 12.15 and 13.30, lasts 45 mins

We're the experts at science shows that all include amazing demos and lots of audience participation.

The Supercool Show 3

This action-packed show uses liquid nitrogen and Plasticine Pete to look at heat and temperature, melting and boiling points, changes of state and the transfer of energy.

19-20 January, 9-10 February, 5-6 and 31 March, 30 April, 1 and 20-22 May, 17-19 June, 7-8 July

It Takes Guts 3

Follow food through your digestive system and find out why poo is brown in this entertainingly gross show.

26-28 January, 26-27 February, 16-17 March, 1-3 April, 11-12 May, 8-10 and 25-26 June, 9-10 July

Prices	Drama/Storytelling/Science Theatre Shows
Students	£3 each
Essential adults (1:15 ratio required)	Free
Additional adults	Free
Booking terms apply (see website)	

Drama

11.45, 12.30 and 13.30, lasts 30 mins

Our drama characters quite literally bring science to life. You can meet one of the following:

Wednesday 3 4

Astronaut and last man on the Moon **Gene Cernan** relates his adventurous journeys into space.

Thursday 3 4

Meet **Michael Faraday**, who made all electrical gadgets possible; quiz **Sir Isaac Newton** about his laws of motion; talk to **Mary Seacole**, pioneering nurse in the Crimean War; or question **Marie Curie** about her struggle to become one of the great names in science.

Friday 3 4

The world's first **Pregnant Man** tells his story. Or **Gene Cernan** (see Wednesday).

Outreach

Let the Science Museum come to you! We can bring a wide range of interactive curriculum-linked shows and workshops into your school, community group or science club, catering for all sizes of audience.



Workshops

60 mins, 30 places per session

A Load of Rubbish 3

Learn about the three Rs, what happens to waste and its effect on the environment. Work as fictional boroughs to take care of waste management.

Take a Seat 4

Make a chair strong enough to hold the weight of a person using only cardboard. No string, no glue, no tape. Cardboard is the only material available.

The Water Transporter 4

Can you build a structure capable of moving water across a two-metre gap using an array of materials from bamboo to plastic guttering?

Classroom activities NEW 3

Try the exciting free downloadable activities developed by our Outreach Team:
www.sciencemuseum.org.uk/outreachresources

Science Shows

45 mins, 300 places per session

All our shows include amazing demonstrations and plenty of audience participation!

The Supercool Show 3

Explore heat and temperature in this action-packed show that includes the astounding banana hammer, the amazing bottle trick and Plasticine Pete jumping into liquid nitrogen.

It Takes Guts 3

Take a journey through the human body's digestive system - if you dare. See videos of our insides and find out why poo is brown.

Danger, High Voltage! 3

Hair-raising high-voltage demonstrations make this show about electricity and magnetism an electrifying experience. **Contact us to check availability.**

Booking and further information

We will be taking bookings for the **summer** term from 5 January 2009 onwards. Demand is increasing, so please contact us early. Prices are very competitive, starting at just £375 for a whole day in your school.

For more information and to book, please call **020 7942 4707**, e-mail outreach@sciencemuseum.org.uk or visit: www.sciencemuseum.org.uk/outreach

The show would have been graded outstanding by Ofsted.

Year 9 teacher

Hands-on galleries

There's always a buzz of excitement in our hands-on galleries and our friendly Explainers help students find out more.



BOOKING INFORMATION

Hands-on galleries are free, but must be pre-booked. Unfortunately, we cannot book groups into the galleries at weekends and during holidays.

Energy – fuelling the future 3

Adult/student ratio 1:15

Explore how energy powers every aspect of our lives, and discover and question how we will meet our planet's growing energy demands. The innovative hands-on exhibits are enhanced by a multimedia briefing.

For energy-related classroom activities, teaching tips, fun quizzes and games, visit:

www.sciencemuseum.org.uk/energy

Energy – fuelling the future is supported by:

Principal Sponsor



Major Funder



Associate Sponsor

BASF

SEN Days in Launchpad 3 4 16+

45 mins, 45 places per session

Students with Special Educational Needs are welcome at any time, but on particular days *Launchpad* is reserved for SEN groups, providing a calmer opportunity to engage with the hands-on exhibits and your own Explainer to accompany students around the gallery. You can also request the Bubbles Bubbles Bubbles Science Show.

Check the calendar opposite for dates.

I really enjoyed all of it. All the things you could touch, all the things you could try, all the things you could see. It was brilliant!

Year 7 student



Book now 020 7942 4777



Launchpad 3

Adult/student ratio 1:8

Launchpad is packed with interactive exhibits and lively demos.

Capture your shadow, launch a rocket, spin like a skater and control a magnetic cloud in this hands-on, brains-on gallery. Inspiring you to explore and question the world around you, *Launchpad* covers key curriculum themes of sound, light, forces and motion, electricity and magnetism, energy transfer and materials.

Check the calendar below for suitable dates for your age group.

Find great *Launchpad*-related resources at: www.sciencemuseum.org.uk/educatorsresources

Play our interactive whiteboard game at: www.sciencemuseum.org.uk/launchpad/launchball

Launchpad Science Shows 3

20 mins, 80 places per session

Book an action-packed Science Show as part of your *Launchpad* visit and one of these will be scheduled for you:

Danger, High Voltage! (electricity) or The Rocket Show (forces and space).

Principal Sponsor: Shell



Major Sponsor



Major Funder

The Garfield Weston Foundation

With additional support from

The Zochonis Charitable Trust

Launchpad days

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MAR							1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
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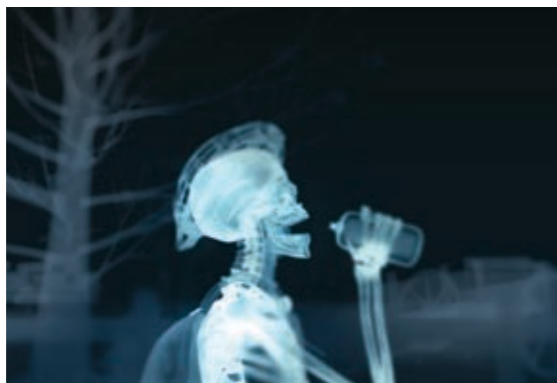
KEY Not available for KS3 KS3 SEN days

www.sciencemuseum.org.uk/educators

Spring issue 2009 **05**

IMAX Cinema – films

Fly into space, walk with dinosaurs or see inside the human body in one of our IMAX films. The experience is so realistic that you'll feel you are part of the action.



PREVIEW FILMS FOR FREE!

Teachers can watch films for free to assess suitability (please bring proof of teacher status). Free seats may not be available at weekends and holidays.

FILM TIMES
10.40, 11.55 – Teachers' request (minimum group size of 40 may be required)
13.05, 14.20, 15.35, 16.45 – Scheduled screenings

The Human Body 2D ^(PG)

Take a trip around the human body with Professor Robert Winston, who narrates stunning photography of the body's inner workings and outward appearance.

Dinosaurs Alive 3D ^(PG)

Travel back to when dinosaurs ruled the Earth as palaeontologists uncover evidence that dino-descendants still live among us.

Deep Sea 3D ^(PG)

Immerse yourself in the fish-eat-fish world of our amazing oceans and meet the giant Pacific octopus.

Sharks 3D ^(U)

Experience sharks as they really are: not wicked, man-eating creatures, but fascinating endangered animals.

Forces of Nature 2D ^(U)

Get close to earthquakes, volcanoes and tornadoes in this dramatic film about the Earth, how it was formed and natural disasters.

Fly Me to the Moon 3D ^(U)

NEW 3

Three intrepid flies sneak aboard Apollo 11 in this fun animated journey to the Moon and back.

Space Station 3D ^(U)

Find out how astronauts eat, shower and shave in reduced gravity and float with them as they help build the International Space Station.

Bugs! 3D ^(U)

See the rainforest as never before – through the life cycles of a praying mantis and a beautiful butterfly – in this live-action drama.

Sea Monsters 3D ^(PG)

Follow 'Dolly', a curious underwater dinosaur, as she travels through dangerous oceans.

Prices	IMAX film
Students	£4 each
Essential adults (1:10 ratio required)	Free
Additional adults	£6 each
Booking terms apply (see website)	

IMAX® is the registered trademark of Imax Corporation

I thought the film was amazing and a wonderful experience.

Year 10 student

IMAX Cinema – theme days

Take your IMAX visit into a new dimension through our dynamic and engaging theme days. But book early, as these days are extremely popular.



Space days

3

See *Space Station 3D* and request to meet Gene Cernan, our Apollo astronaut drama character who talks about his adventurous missions.

2 February, 2 March, 6 July

Human Body day

3 4

Watch *The Human Body 2D* and request to meet our Pregnant Man drama character.
13 July

Prices	Theme day
Students	£5 each
Essential adults (1:10 ratio required)	Free
Additional adults	£6 each
Booking terms apply (see website)	



Teachers' courses and events

We develop and deliver a range of courses and events for educators as part of our partnership with the Science Learning Centre London.



Learning in museums 3 4

This is a practical and hands-on day for whole-faculty staff. Using the Science Museum as an example, you will work with our trainers to develop ideas for your next museum visit, and share good practice for extending the experience into the curriculum back at school.

Course code LNC08104

Two dates per month – please enquire for details

Cost £65 per participant (discounts for 10 teachers or more)

Learning outside the classroom NEW 3 4

This course will enable you to maximise learning during school visits, and allow you to develop strategies for teaching in informal settings by exploring current learning theory. It's an excellent complement to the Learning in museums day above.

Course code LNC08036

10 February



Talk Science: tools and techniques to deliver contemporary science 3 4

This popular hands-on course focuses on how to run classroom discussions around contemporary science issues. Sessions link to 'How Science Works' and you will try innovative formats to inspire and facilitate discussion.

Course code LNC08105

6 March, 1 May

Talk Science is also available in a region near you free of charge as part of BP's Enterprising Science programme: www.enterprisingscience.com



Science newswise for teachers 4

Through this activity-based workshop you will explore how to encourage your students to engage with science in the news and equip them to evaluate and discuss topical science stories critically.

Course code LNC08028

9 June

Booking and further information

These courses are delivered by our experienced Learning Team on site at the Museum, to make the most of our unique facilities and resources. Courses cost £125 per person unless otherwise stated, including refreshments, lunch and an exclusive Science Museum teachers' goody bag.

To book places call **020 7612 6325** and quote the course code or visit: www.sciencelearningcentres.org.uk/london



Exciting,
inspiring,
creative and
intellectually
stretching.

Teacher

Resources

Our diverse and creative resources can be used in the classroom, for homework and with science clubs. All have been developed and tested with teachers.



Materials resources NEW 3

Five brilliant new classroom activities including setting ice on fire, and five films showing super demos ranging from dancing slime to memory metals.

www.sciencemuseum.org.uk/educatorsresources

Launchpad resources 3

Exciting classroom activities relating to the six themes covered in the *Launchpad* gallery: sound, light, forces and motion, electricity and magnetism, energy transfer and materials.

www.sciencemuseum.org.uk/educatorsresources

There's also *Launchball*, an award-winning interactive game for your whiteboard, which covers many of the same themes. Students can access the game at home: www.sciencemuseum.org.uk/launchpad/launchball

Energy resources 3

Downloadable activities, quizzes, games, teaching hints and links to help you make energy interesting in the classroom:

www.sciencemuseum.org.uk/energy

All our online resources are free to download and use. They have been developed and tested with teachers and students to be practical, safe, low in cost, and to require minimum preparation.



Do Try This at Home NEW 3

Our new book contains 28 easy experiments to do in the classroom presented in six sections: Flight and Space, Light and Sound, Forces and Gravity, Energy, Chemistry, and Electricity and Magnetism. It includes a free DVD featuring daring experiments that should not be tried at home. Buy it from the Science Museum Store.

www.sciencemuseum.org.uk/trythis

Kits for Science and Engineering Clubs NEW 3

In a brand-new initiative we are producing a kit of activities and resources for after-school Science and Engineering Clubs that will be available in September 2009.

This project is supported by BP.

These are
exactly what
I've been
looking for
– easy and
simple but
high impact
– just what
I need.

Teacher

Galleries and special exhibitions

Galleries and special exhibitions

Our galleries and changing programme of special exhibitions will give added inspiration to your visit.



We learnt a lot about space and astronauts in an interesting and amazing way.

Year 8 student

Galleries

Our galleries provide a unique and stimulating context for students to apply and develop their understanding of Science and other subject areas. Here are just a few examples:

Exploring Space looks at missions to explore our universe, uses of satellites, living and working in space and designing and launching space rockets.

Who am I? explores inheritance, cloning, the brain, emotions, language, ageing and immunology.

The Science and Art of Medicine looks at medical beliefs and practices across time and in different cultures.

Making the Modern World traces scientific and technological developments since 1750.

Find more suggestions at:

www.sciencemuseum.org.uk/educators

Meet ERNIE

ERNIE was the first machine used to randomly generate Premium Bond numbers. In 1957 ERNIE was state of the art and it was the first computer many people had ever heard of. Visit our *Computing* gallery to find out how ERNIE became so popular and why random numbers are relevant to our lives today.

4 16+



Special exhibitions

**Wallace & Gromit present...
A World of Cracking Ideas**

NEW 3 4

Coming soon, our amazing new exhibition. See inside front cover for details.

Antenna: Future Foods, an exhibition debating genetic modification

NEW 4 16+

This new exhibition explores the science and technology that could boost crop yields and ensure there is enough food for everyone. Do we need genetically modified crops in the future, or are there other options on the menu for our planet? Weigh up the benefits and the risks – then step up to the table and have your say.

This exhibition is supported by



Japan Car: Designs for the Crowded Globe

NEW 16+

A thought-provoking look at modern Japanese car design from the noted design director Kenya Hara and architect Shigeru Ban. Discover the cool and cute 'kei sector' micro-cars, a key feature of Japanese city transport, as well as 'cubic' city cars, designed to optimise space instead of speed, and the emerging hydrogen and hybrid cars, design reactions to current pollution issues.

Until 19 April 2009

Prices	Japan Car
Students	£3.40 each
Essential adults (1:15 ratio required)	Free
Additional adults	£6 each
Booking terms apply (see website)	



When you have finished with this brochure please recycle it.