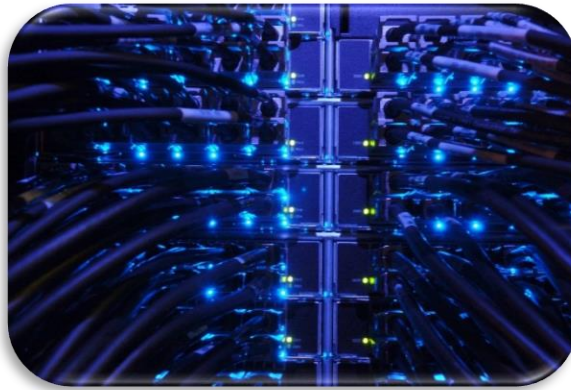


FiE

LONDON FOR SCIENTISTS - FACULTY GUIDE



STEM IN LONDON

Science Museum

The science museum has been in existence as an institution for over a century and a half. It began in the Great Exhibition of 1851 held in Hyde Park within the huge glassed building known as the Crystal Palace. Its popularity funded and gave birth to other educational establishments in the area. The first of these was the South Kensington establishment – opening in 1857 and now part of the Victoria and Albert Museum.

WHAT'S ON OFFER?

WONDERLAB: A platform to 'ignite curiosity in science and maths through more than 50 hands- on exhibits and immersive experiences'

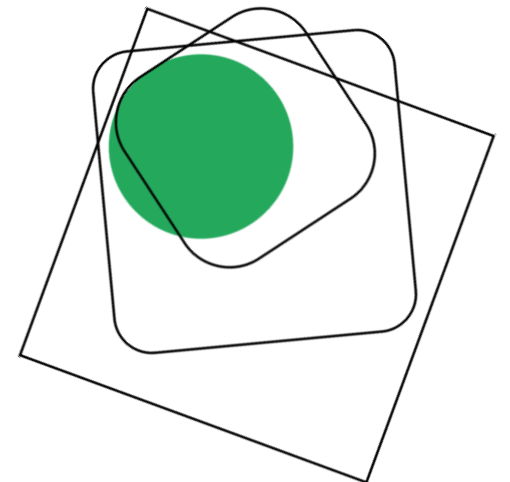
Examples: *Information Age Gallery* - illustrating the development of information over the last 200 years.

Who am I? Gallery – Packed with things to see, do and discuss, with regards to one's uniqueness in how they may think, look and act.

Mathematics: *The Winton Gallery* – Demonstrating how numbers make our lives add up, from counting money to calculating chance; from designing buildings to decoding messages.

Venue: South Kensington – approximately 10 minutes' walking distance from Foundation House.

£££ - Free Entry





Natural History Museum

The natural history museum in London first opened in 1881 but its origins stretch back to 1753. The museum was built to catalogue the world's natural riches and is a testament of the passion and love of scrupulous work undertaken by generation of scientists. Today, the museum is a world-class research facility and a monument to Earth's biodiversity. Visitors can watch scientists work in open-plan laboratories, where they study everything from the cocoa that Sloane brought back from Jamaica in the 17th century to malaria- carrying mosquitoes collected in 2008.

WHAT'S ON OFFER?

Workshops, Science shows and self-led activities

Examples: *Coccon* – An interactive gallery that inspires students to learn more about the diversity of life. The objective to help students answer questions such as: “How do scientists organise, classify and name specimens? “ or Who were the first collectors and how did their methods differ from those of modern scientists?”

The Great Debate – This workshops will discover how Darwin's theory of evolution has become the accepted explanation for the diversity of life around us. Students would be split into two teams and will engage with key arguments of Sir Richard Owen and Charles Darwin.

Venue: South Kensington – approximately 10 minutes' walking distance from Foundation House.

£££ - Free Entry

Kew Botanical Gardens

This is a global reserve for plant and fungal knowledge . Their unique combination of vast scientific databases, collections and global partnerships would provide students with access to essential plant and fungal information.

The remarkable structures, unique plant collections, and the scientific research would instigate any STEM student curiosity about the world, its plants and its people.

WHAT'S ON OFFER?

Arts & Exhibitions

Example: *Trees: Delight in the Detail* – the analysis of the intricate details of leaves, seeds and fruit in a sequence of paintings

Festivals and Events:

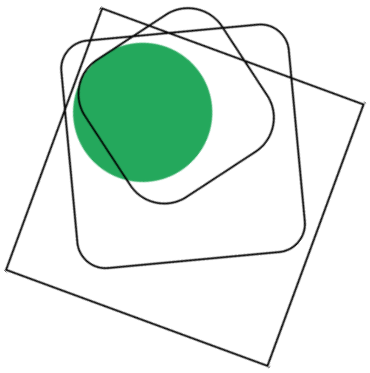
Example: *Tales and Trails: storytelling with Rachel Rose Reid* – Tales and songs of the natural world, forest life and ancient trees.

Walks and Tours:

Example: *Kew Explorer land train* – guided tour around the Gardens, illustrating Kew's flora and fauna , historic buildings and vital conservation work.

Venue: Kew Gardens – approximately 20 minutes by tube from Foundation House. £££ - Free Entry





The Anaesthesia Heritage Centre tells the remarkable story of anaesthesia, from its first public demonstration in 1846 to modern day anaesthetists working in the aftermath of wars and terrorist attacks.

The museum has a permanent and a temporary display, as well as pull-out drawers and flipbooks containing biographies and details of large anaesthetic machines. The collections give an insight into the history of anaesthesia, resuscitation and pain relief.

WHAT'S ON OFFER?

Exhibitions

Example: *The Riddle of Shock: Anaesthesia in the First World War* – This exhibition will allow students to explore the equipment and techniques developed during the First World War to treat the wounded, and how doctors coped with overwhelming numbers of casualties.

Venue: Regent's Park – Approximately 20 minutes from Gloucester Road on the tube.

£££ - Free Entry

Anaesthesia Heritage Centre



The Wellcome Collection

A museum for curious minds- the **Wellcome Collection** would provide students with a unique insight into what it means to be human. Many collections are nothing short of bizarre, from a Peruvian mummified man to a robot used in the human genome project.

WHAT'S ON OFFER?

Study Days

Example: *HIV and AIDS Study Day*- Students would use the Museum's library featuring an HIV/AIDS poster collection as a starting point to explore public health campaign techniques, the history of HIV and AIDS, and contemporary sexual health issues. After analysing historical campaigns, they would be challenged to design their own poster or create a storyboard for a short film.

Exhibitions

Example: *Medicine Now* - This exhibition presents students with a range of ideas about science and medicine since Henry Wellcome's death in 1936. It reflects the experiences and interests of scientists, doctors and patients.

Venue: Euston Square – approximately 25 minutes from Foundation House by tube.

£££ - Free Entry



Old Operating Theatre

A museum hidden in the roof of a church. The 300-year-old herb garret houses Britain's only surviving 19th-century operating theatre. Students would get an insight of what surgery was like in the pre-anaesthetics era and learn about past operating techniques and practices, at the Old Operating Theatre Museum and Herb Garret.

WHAT'S ON OFFER?

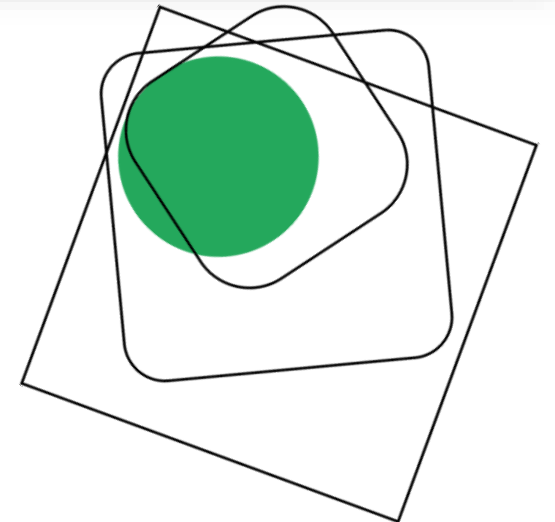
Talks

Example: *Victorian Surgery Talk*- A surgical demonstration presented within the original architecture of the old operating theatre of St. Thomas's Hospital of 1822. Before the advent of anaesthesia, an operation had to be swift. Without hand-washing or antiseptics, the chance of later infection was high. Students would be joining wonderful speakers as they take them back in time and explain how surgery was done in the Victorian Era.

Hiring of the Museum for Private Functions – The Venue could be hired for two hours for any private functions (after 5PM). This could be an excellent opportunity for an off-site lecture.

Venue: London Bridge– approximately 30 minutes' from Foundation House by tube.

£££ - £6.50 per person (Extra one-off fee for Hire of venue)



British Optical Association Museum

The College of Optometrists is the custodian of the British Optical Association Museum, the premier optical collection in the country and believed to be the oldest of its type in the world (founded 1901). The collection comprises historic spectacles and lenses, pince-nez, opera glasses, contact lenses, opticians' equipment, orthoptic devices, models of eye disease and the representation of all these subjects in art: paintings, prints and sculpture. The BOA Library has an outstanding collection of books on optics and the workings of the human eye from the sixteenth century to the present.

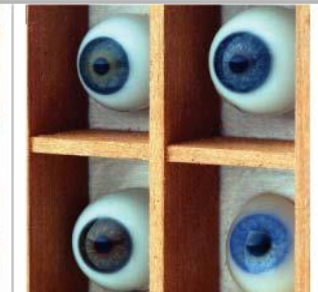
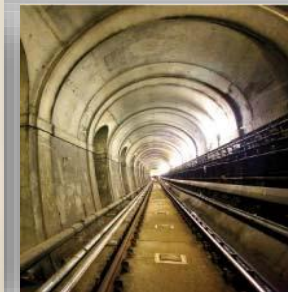
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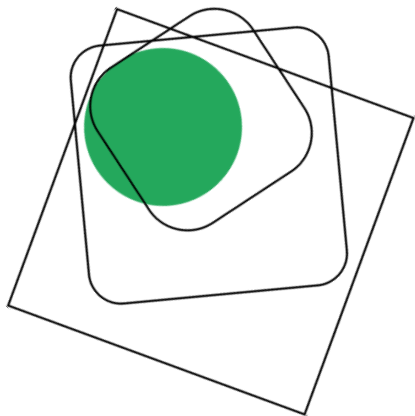
Exhibitions

Example: *The Story of Eye Make up* – Features how cosmetic products for the eyes can alter the colour of the surrounding flesh or lashes and create an illusion of shape or form.

Venue: Charring Cross approximately 30 minutes' from Foundation House by tube.

£££ - Free Entry





The Royal Institution

The Royal Institution was founded in March 1799 with the aim of introducing new technologies and teaching science to the general public. It is an independent charity governed by a Board of Trustees.

WHAT'S ON OFFER?

Public Talks

Example: *Catalysts and chemistry: Building a sustainable future.*

Students would join a talk about how chemistry is being used to create waste-powered transport and why it is so difficult to convert carbon dioxide into fuels and chemicals. This event is supported by the Embassy of the Kingdom of the Netherlands. Drinks served after reception.

Teaching Resources available online.

Venue: Charring Cross approximately 30 minutes' from Foundation House by tube. £££ - £10 - £16



Florence Nightingale Museum



The Florence Nightingale Museum celebrates the life and work of the world's most famous nurse. Located on the banks of the river Thames opposite the Houses of Parliament, attracting people from all over the world. Students would be able to examine Florence's legacy, her influence on nursing today and the continuing relevance of her work.

WHAT'S ON OFFER?

Free Public Tours

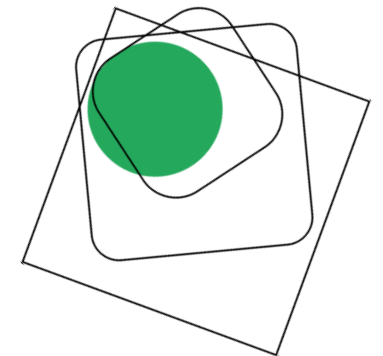
Students would take part in a tour to discover the story and achievements of Florence Nightingale. The tour focuses on highlights of the museum's collection.

Exhibitions

Example: *Spanish Flu*- Students would find out how the pandemic spread across the globe and discover how nurses, inspired by the work of Florence Nightingale - were the only thing that helped, and therefore it was typically women that bore the brunt of trying to halt this deadly killer.

Venue: Lambeth Palace Road approximately 30 minutes' from Foundation House by tube.

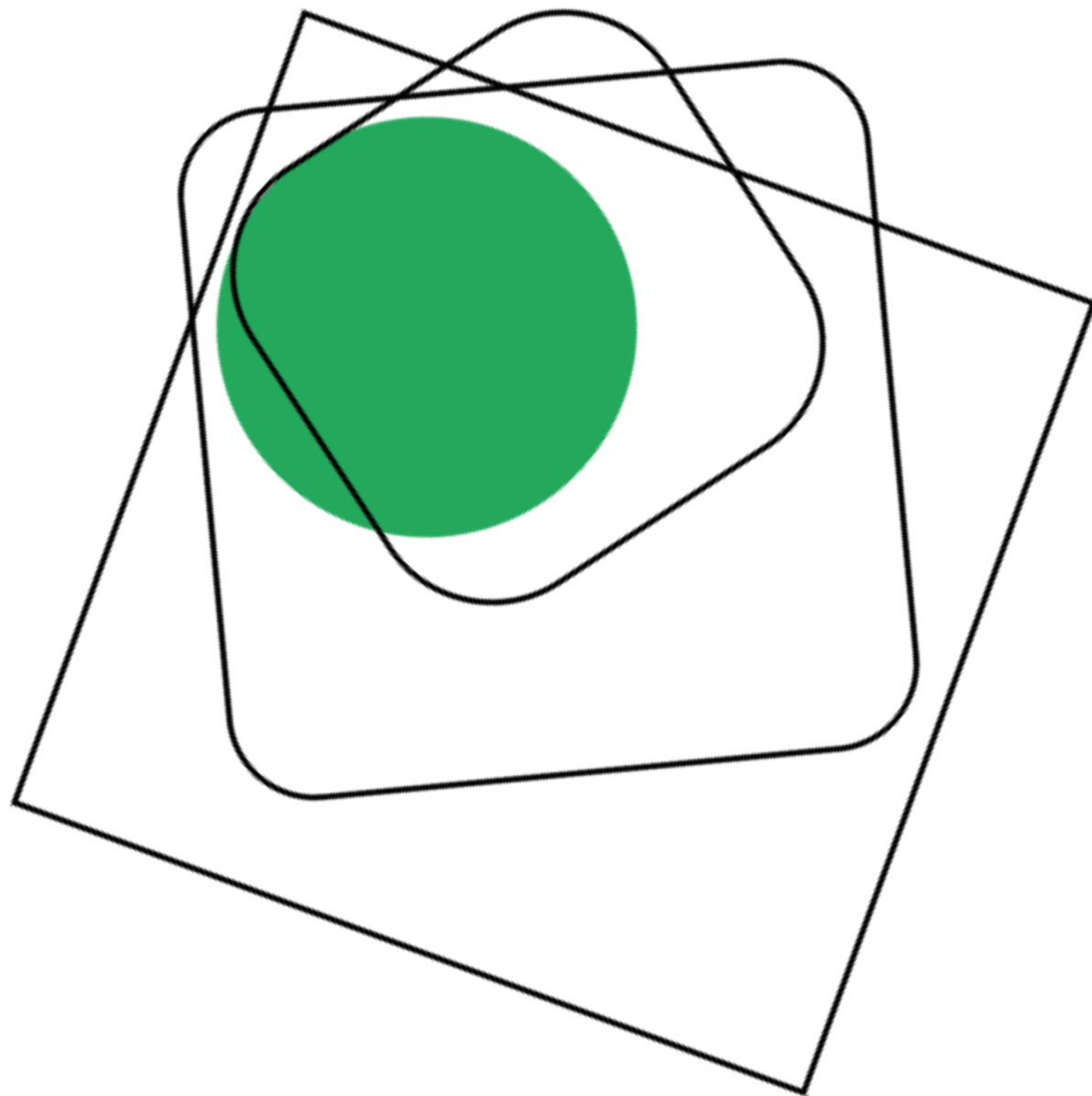
£££ - £15





British Dental Association Museum

The British Dental Museum has approximately 25,000 items that reflect the development of the dental profession in the UK. Spanning the 17th century to the present day, the highlights of the collection include dental chairs, dentures, drills, oral hygiene products, and of course Waterloo teeth.



The Royal Observatory in Greenwich

This London landmark high on a hill, would not only offer students the awesome Greenwich views, but it would bring them the wonders of time and space to light as they walk in the footsteps of astronomers, past and present.

WHAT'S ON OFFER?

Also known as *The Magnificent Wren-designed Octagon Room* 'The Great Star Room', Students will discover John Harrison's ground breaking inventions that changed the world and solved the longitude problem.

The Great Equatorial Telescope - the UK's largest historic telescope which gave astronomers new views of the universe over 100 years ago.

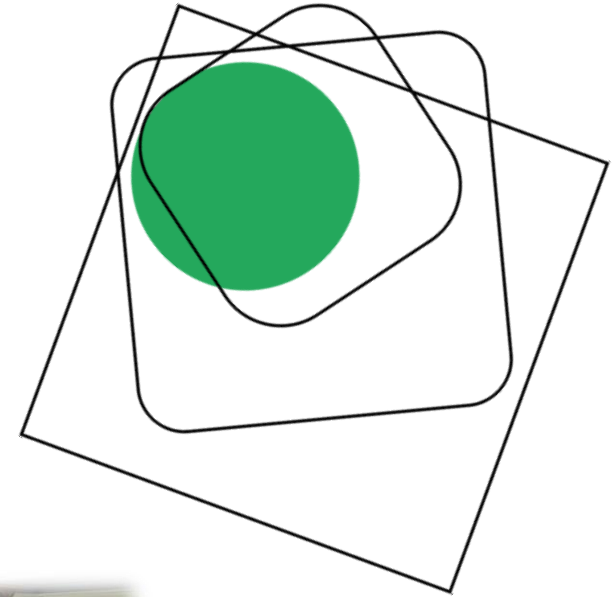
Venue: Cutty Sark approximately 60 minutes' from Foundation House by tube.

£££ - Around £15



The Gordon Museum of Pathology

King's Gordon Museum of Pathology is the largest medical museum in the UK and contains some rare and unique artefacts including Lister's antiseptic spray and the original specimens of kidneys, adrenal glands and lymph nodes which led Richard Bright, Thomas Addison and Thomas Hodgkin to describe the medical conditions that bear their names. The Museum's primary function has always been to help train medical, dental and biomedical students and professionals to diagnose disease and as such it provides a range of services and functions to The School of Medicine and to medical professionals. The Museum supports the studies of over 9,500 current healthcare students.



Grant Museum of Zoology

The Grant Museum of Zoology is one of the oldest natural history collections in the UK, and is the last remaining university natural history museum in London. Home to 68,000 zoological specimens, the collection is a unique window on the entire animal kingdom.

WHAT'S ON OFFER?

Exhibitions

Example: *Agonism/ Antagonism* – Students will be encouraged to explore the alliance that exists between males and females of a species.

Venue: Approximately 30 minutes' from Foundation House by tube.

£££ - Free Entry



The Petrie Museum of Egyptian Archaeology

The Petrie Museum houses an estimated 80,000 objects, making it one of the greatest collections of Egyptian and Sudanese archaeology in the world. It illustrates life in the Nile Valley from prehistory through the time of the pharaohs, the Ptolemaic, Roman and Coptic periods to the Islamic period.

WHAT'S ON OFFER?

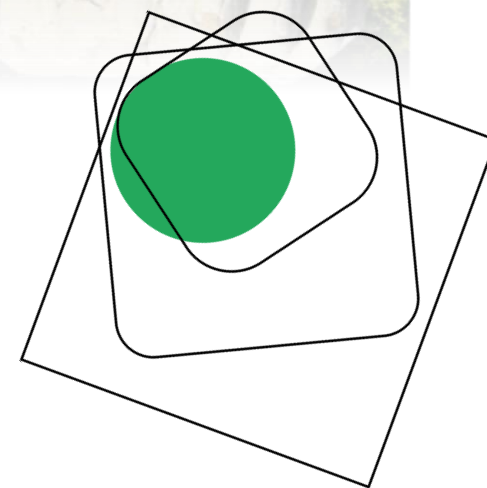
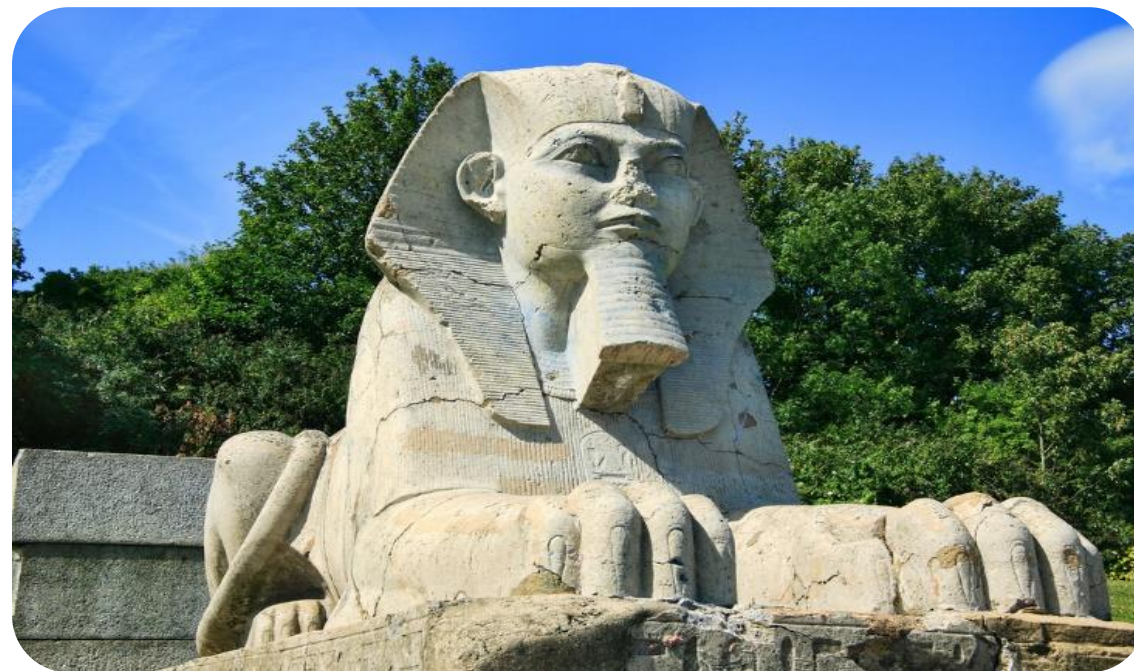
Exhibitions

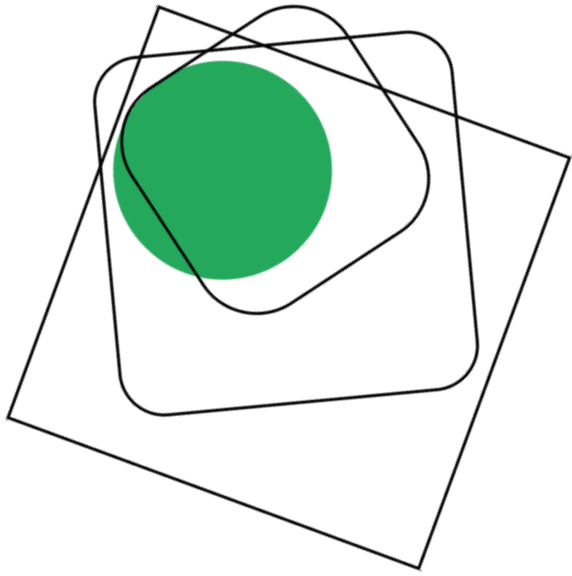
Examples: *Listen to Her!* – A photo story exhibition that will illustrate to your students the ongoing fight to disrupt Egyptian women's status- quo.

Papyrus for the People exhibition – A great opportunity for students to see over 500 species of papyrus and ancient written texts translated into English offering insights into everyday life in ancient Egypt.

Venue: 30 minutes' from Foundation House by tube.

£££ - Free Entry





A conservation charity that saves wetlands, which are essential for life itself. It is one of the world's leading science and conservation institutions in its field.

WHAT'S ON OFFER?

Wild Life Sightings & Talks

Students would be able to participate in tours around the Centre, its park and learn more about water birds from around the world by joining the Spotlight Talk.

Venue: 30 minutes' from Foundation House by tube.

£££ - Free Entry

London Wetland Centre



The Brunel Museum

The Museum is an educational charity that tells the story of one of the world's great engineering dynasties. Brunel organised the world's first underground concert party here in 1827, and the Museum celebrates and interprets music and theatre as well as engineering.

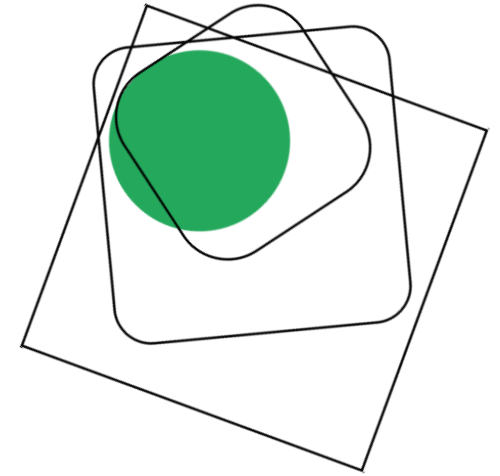
WHAT'S ON OFFER?

Walks, Boat Trips & Guided River Walks - A boat trip and a walk from Embankment to Brunel Museum featuring three Brunels' bridges and two Brunels' tunnels. Students would also benefit from seeing some of London's hotspots from the Houses of Parliament to the Tower of London.

Music, Theatre and Other Performances - Since Brunel was an impresario and a showman, as well as an engineer- The museum endeavours to continue his legacy by hosting various events, so students would benefit from an array of concerts, films, opera, theatre, dance performances and art installations.

Venue: Embankment – approximately 35 minutes' from Foundation House by tube.

£££ - £10 per person



Crystal Palace Museum

The Crystal Palace was originally created by Joseph Paxton to house the Exhibition of the Industry of all Nations that was to be staged in Hyde Park, London in 1851. The grounds of the palace contain magnificent fountains, an unrivalled collection of statuary, many fine specimens of trees and shrubs and full size models of prehistoric animals, that have become world famous.

WHAT'S ON OFFER?

Illustrated Talks

Example: *Engineering behind the palace*- Students will have the opportunity to be taken step by step through the construction of the Crystal Palace both 1851 and 1854. They will follow the methods used in the production of the materials and the techniques used to raise the structure of this unique glass and iron building and understand the major design differences between the two Crystal Palaces and the tragic consequences encountered at the height of construction.

Venue: Crystal Palace – approximately 45 minutes' from Foundation House by tube.

£££ - £5 per person



Crystal Palace Museum

Museum of London Docklands

The museum building was originally No. 1 Warehouse of the West India Docks. Opened in 1802, the West India Docks were London's first enclosed dock system, built away from the open river on the Isle of Dogs. This gallery looks at how London's historic docks and warehouses operated at the height of their success.

WHAT'S ON OFFER?

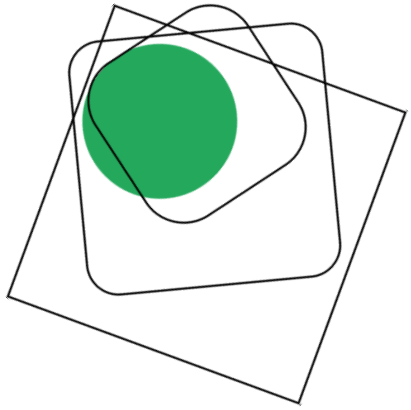
Galleries

Example: *London, Sugar & Slavery 1600 - today*. Students will have the opportunity to visit a building central to this story, as it was built at the time of the transatlantic slave trade, to store the sugar from the West Indian plantations where enslaved men, women and children worked. They will discover how the trade of enslaved Africans and sugar shaped London.

Venue: Canary Wharf– approximately 45 minutes' from Foundation House by tube.

£££ - Free Entry





Royal Pharmaceutical Society Museum

This museum was established in 1842- a unique resource for all those interested in the history of British pharmacy. Students will have access to a collections that cover all aspects of British pharmacy history, from the 1400s up to the present day.

WHAT'S ON OFFER?

Talks

Example: *The Diagnosis and Treatment of Rheumatoid Arthritis and Spondyloarthropathies* – Students will benefit from an informative evening exploring the diagnosis and treatment of Rheumatoid Arthritis and Spondyloarthropathies. At the end of the talk, students would have the opportunity to pose any questions to the expert speaker and network with like-minded individuals.

Venue: Slough– approximately 90 minutes' from Foundation House by tube. **£££ - Free Entry**

