













NATURAL HISTORY MUSEUM



NATURAL HISTORY MUSEUM













- Un chauffeur nous accompagne pendant tout le séjour ; merci de respecter ses consignes
- Répondez rapidement à l'appel de votre groupe et prenez les numéros des membres de votre groupe.
- Soyez ponctuel lors des rendez-vous
- Pendant les temps libres, restez par groupes de 2 ou 3 et repérez où vous êtes sur un plan
- Attention à vos portefeuilles (vol, perte)





- Pour appeler la France : 00+ 33 + numéro ligne fixe ou portable (ne pas composer le 0 initial)
- Numéro URGENCE: 06 13 66 82 78 ou 06 33 51 45 87

En famillen famille

- Evitez de parler français
- Soyez polis et ouverts aux nouveautés culinaires et culturelles
- En cas de problème, nous en faire part le lendemain.
- Les sorties sont interdites

Taux de changTaux de change

1 EUR = 0,880288 GBP 1 GBP = 1,13604 EUR



Programme in short

Sunday 17/03

- Departure / ferry at 5.45
- Arrival in London at 9.00Monday 18/03
- Morning: Walk in London
- London Eye :Imperial war Museum
- meeting with the families around8.45pm

Tuesday 19/03: Cambridge

- Guided tour of the city and colleges
- Free time

Wednesday 20/03: London

- Natural History/Science Museums
- Harrod's

Thursday 21/03

- Oxford street
- British Museum
- Free time(Covent Garden etc...)

Friday 22/03

- Breakfast
- Arrival in Saumur around 12.30m



Shopping: What size are you?

Correspondance taille pantalon UK







France

Vêtements femme

UK (anglaise)



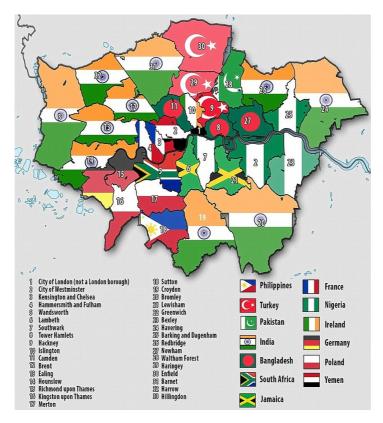
Pantalon homme				
France	UK	Universelle		
34	24	XS		
35	25			
36	26			
37	27	S		
38	28			
39	29			
40	30	M		
41	31			
42	32			
43	33	L		
44	34			
45	35			
46	36	XL		



Longueur du pied	Pointure FR	Pointure UK
23 cm	36	3,5
23,6 cm	37	4
24, 3 cm	38	5
25 cm	39	5,5
25, 6 cm	40	6,5
26, 3 cm	41	7,5
27 cm	42	8
27,6 cm	43	9
28,3 cm	44	9,5
29 cm	45	10,5
29,6 cm	46	11
30,3 cm	47	12
31 cm	48	13

GROUPS

M BILLAUD	MME GITTON	Mme GUIHENEUX	M SIROP
1.CHEVALLIER Wesley	1.CHAVANON GABRIEL	1.JANNEAU Florian	1.REVEILLERE Anne-
2.COURANT Louis	2.CONQUEUR RONAN	2.GUIGUET Maxime	Laure
3.DAVY Florian	3.DE ABREU VALENTIN	3.LANDRY Antonin	2.ROLAND Pierre
4.FOURAULT Antonin	4.FOURMOND AXEL	4,ESNAULT Clément	3.MORIN Garance
5.GABARD Geoffray	5.CHAILLOU JOSHUA	5.MALINGE-	4.MARTIN AGATHE
6.GAUTIER Alex	6.POITEVIN DAMIEN	LECOMPTE Théo	5.VENANT Quentin
7.HOMO Matthis	7.ROGER TITOUAN		6.ZHANG Marc
8.HOUSSARD	8.TRAVERS NICOLAS	Pierre-Louis	7.BAZILLE FLORIAN
Guillaume		7.ROLLAND Gwendal	8.BLANC BENJAMIN
9.ILDISS-TETERYCZ Tomas		8.PEZET Jérémy 9.PICHONNEAU	9.BRETON ERWAN 10.RAVAUD Enzo
10.JACQUES Corentin		Thomas	10.NAVAOD EIIZO
10.JACQOLS COTEIRIN		10.TEBBAKH Alexis	
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Google A201	\$ Case 16	Galerie d'art O Galerie Carte Galery	erie d'art o are Britain



LONDON: THE NEW EUROPEAN MELTING POT

London has always been a cosmopolitan city, home to wave after wave of immigrants who in time have become Londoners, providing the mix that arguably makes London the most cosmopolitan city in the world.

But today here is over 250 language spoken in the city, that make it the most linguistically diverse city, There is also the highest non-white population in the country (58%). In some boroughs there is a majority of ethnic minority as Brent (Black and Asian), Newham (Indian and African) Tower Hamlet (Bengladashi) more recently. The more important community is the Bengladi community they settled massively in Brick lane in East London which is also called Benglatown. This led to an increase of cultural and religious activities in these areas, particulary in food, music, art, literature, drama and now festivals in East London as the Baishaki Mela organised every year.

However, this cultural diversity leads to an economical disparity. In fact, that's in the boroughs where there is a majority of ethnic diversity that there are economical difficulties, that's where there are the most numerous pupils registered for free school meals*.

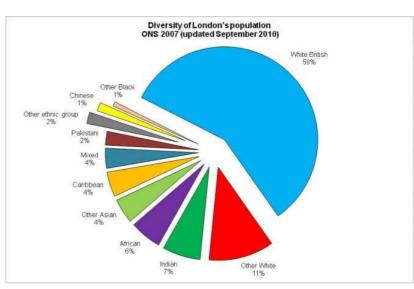
*Free school meals : cantine gratuite

LONDON, MORE THAN JUST A CITY: AN ICON OF DIVERSITY

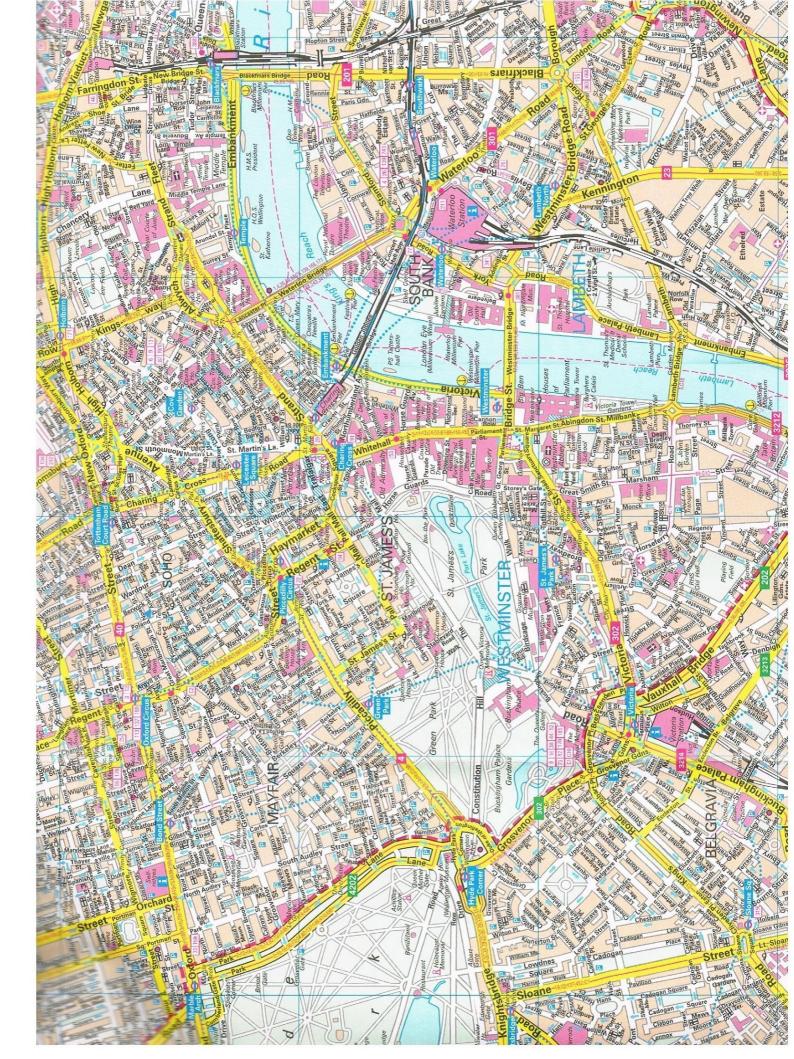
More than 5,7 million foreigners live in London and the foreign-born population was 8,7 million in 2015 when they were 2 million and 3,8 million in 1993. So the foreign population has doubled in 22 years.

The current Mayor is Sadiq Khan, who took up office on 9 May 2016, he is of Pakistani and is the first Muslim mayor of a major European city.

Most Londoners are white but the other ethnic groups have increased since 1991. London's inhabitants speak English as a main language at 78%, but 3,5 % don't speak English well and 0.6% don't speak English at all.



articles by TS



Day 1

MORNING

Trafalgar Square

One of the most famous squares in London, site of demonstration. At its center, Nelson's column guarded by four lion statues. Its name commemorates the **Battle of Trafalgar** in 1805, a British naval victory against the combined fleets of the French and Spanish Navies during the Napoleonic Wars. The British navy was led by Admiral Nelson who was deadly wounded during the fight.



Westminster
Big Ben
The Parliament
10 Downing Street



- Westminster: The Palace of Westminster is the meeting place of the House of Commons and the House of Lords, the two houses of the Parliament. Westminster Abbey is one of the United Kingdom's most notable religious buildings and the traditional place of coronation and burial site for English and, later, British monarchs. There have been at least 16 royal weddings at the abbey since 1100 including Harry and Kate's.
- Palace of Westminster. The tower's official name is Elizabeth Tower, renamed to celebrate the Diamond Jubilee of Elizabeth II in 2012.
- 10 Downing Street: colloquially known in the United Kingdom as Number 10, is the headquarters of Government of the United Kingdom and the official residence and office of the Prime Minister.
- Tate Modern: based in the former Bankside Power Station, in the Bankside area of the London Borough of Southwark, Tate holds the national collection of British art from 1900 to the present day and international modern and contemporary art (see next page).
- The Millenium Bridge: a steel suspension bridge for pedestrians crossing the River Thames. Its construction began in 1998, and it opened in June 2000.
- The Globe Theatre: modern reconstruction of the Globe, named "Shakespeare's Globe", opened in 1997 approximately 750 feet (230 m) from the site of the original theatre built in 1599 by Shakespeare's playing company, the Lord Chamberlain's Men.

LONDON EYE DAY 1



Who?

- Architects David Marks and Julia Barfield conceived and executed the construction of the London Eye
- British Airways and the Tussauds Group were the initial commercial partners to the architects. .

So far, The Eye has had four names as follows:

- Millennium Wheel (pre-2000 launch)
- British Airways London Eye (Launch in 2000 to 2008)
- Merlin Entertainments London Eve (2008 to 2011)
- EDF Energy London Eye (2011 onwards)
- Coca Cola London Eye (2015 onwards)

What?

- 135 metres (443 feet) high
- 32 capsules each carrying up to 25 passengers, making a capacity of 800 people.
- 1700 tonnes of steel makes up the Eye.
- The wheel moves at half a mile an hour, taking thirty minutes to complete a full rotation.

When?

- The London Eye was officially opened on 31 December 1999 by then Prime Minister Tony Blair.

Where?

- The London Eye sits on the south bank of the River Thames in Jubilee Gardens, a few minutes from Waterlo station.

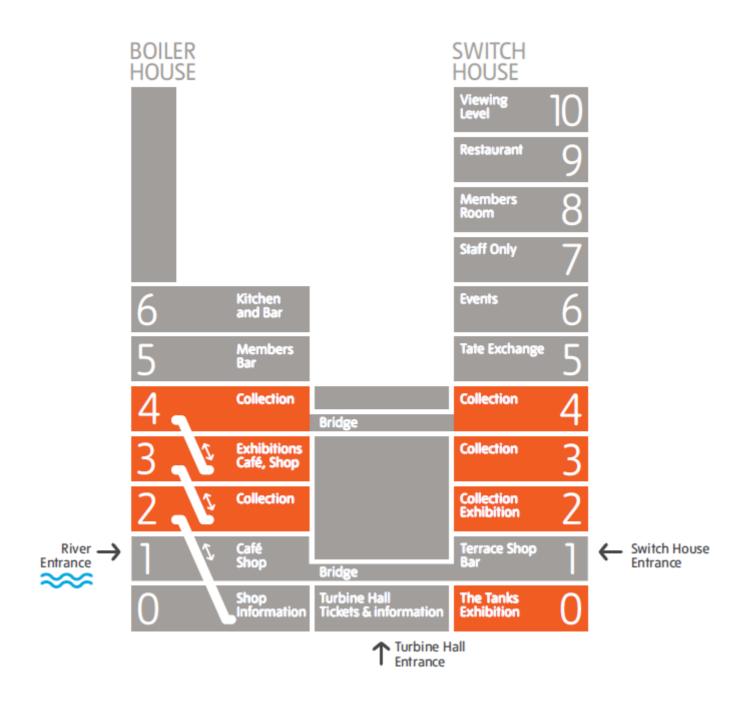
Why?

- To celebrate the turning of the new millennium in 2000. It was one of a number of projects to commemorate the coming of the third millennium, including the ill-fated Millennium Dome (now the O2), Greenwich.

How?

- Sections of the London Eye were floated down the River Thames on pontoons. They were then carefully raised by a series of very slow cranes.

TATE MODERN DAY 1



What to see and do:

- Turbine Hall: SUPERFLEX, One Two,, Three Swing
- Switch House: viewing level (10)
- Boiler House: level 2 3 4; Dali, Picasso, Bacon, Mondrian and many more

Explore! Keep an open mind!

WHAT TO SEE AT **IWM LONDON**

IWM was founded in the midst of the First World War with a mission to preserve and tell the stories of all kinds of people, not only from Britain but from the countries of its empire. And we continue to do this work right up to present day conflict, covering 100 years of experience throughout the Commonwealth.

As well as our permanent displays, we have a dynamic programme of temporary exhibitions, events and educational activities to help our visitors to get close to the lives of those affected by war and to develop a deeper understanding of its effect on the world.



PERMANENT DISPLAY

Curiosities of War



Peace and Security: 1945 - 2015



Turning Points: 1934 - 1945







Witnesses to War

IWM London



The Holocaust Exhibition

IWM London



Lord Ashcroft Gallery: Extraordinary

IWM London





©IWM_IWM London_First World War Galleries

PERMANENT DISPLAY

First World War Galleries

IWM London Permanent

18/03 NIGHT in GRAVESEND



The amazing destiny of a Disney character: Pocahontas

Everyone knows the famous Native American Disney character named Pocahontas. But what people do not know is the Disney story is based on a real historical story. The problem is that Disney changed some details from the real story. Indeed, comparing with archives we can see several differences between the two stories. Firstly, the real name of the character is "Matoaka", Pocahontas is only a nickname which describes her personality. Then, the romance between John Smith and Pocahontas has been invented by Disney: when Smith meets Pocahontas in 1607, she was only 11or 12 years old while he was 27 years old. According to John Smith archives, they were kind of friends and Pocahontas played the role of ambassador. If in the Disney story, she rejected the warrior Kocoum, in reality she was married with him and had a child. But two years later, she was kidnaped by the settlers to be traded for English prisoners, Kocoum was assassinated and their child abandoned to other family members. Some information is uncertain but it seems that she was raped and forced to adopt the English culture: she even was christened and renamed Rebecca. Then, she was probably forced to marry John Rolf in 1614 who took her to England. She had her second child in 1615: Thomas Rolf. She fell sick in a journey on a ship a few years later and died of pneumonia or tuberculosis on 21 March 1617 in the parish of St. Lucas in Gravesend. A few monuments are erected in the memory of Pocahontas like a statue in the St Georges church in Gravesend (where she is said to be buried), a second statue in Jamestown Island made by William Ordway Partridge or also a painting by John Gadsby Chapman in 1840 named "Baptism of Pocahontas ».

*Native Americans: Amérindiens

*Christened: Baptisé



How much do you know about British politics?

The regime in the United Kingdom is a parliamentary democracy. In the parliament, there are two "houses": the House of Commons and the House of Lords. Their job is to verify the work of the government, they make laws and they debate about current problems.

The House of Commons is elected every four years (since 2011) but the Prime Minister can call elections when he wants to "check" his majority. The government is constituted by the political party which lists the most votes.

The House of Lords has about 800 members and they are named by the Queen for life. Their powers are limited but their role is about the same as the House of Commons. This allows a distribution of power.



Today, the main political parties are the Conservative Party (a centre-right party), the New Labour Party (a centre-left party). Currently, it's the Conservative Party which governs, and it's directed by Theresa May.



Theresa May, leader of the Conservative Party

Jeremy Corbyn, leader of the Labour Party

The UK Courts of Law is the most powerful judicial body in the country. It has been effective since 2009 and must judge the most serious and important crimes, which was done previously by the House of Lords. It's the last resort*.

*The last resort: le dernier recours

What is the political system of one the oldest monarchy of the world? The constitutional monarchy of the United Kingdom: Her Majesty's government.

Established on march 24th 1603 by King James I, the British monarchy is a government based on the system of Westminster(1) in which a monarch is the sovereign of the United Kingdom. Nowadays the ruler of the country(2) is none other than Elizabeth II, the Queen of England. She is head of the armies, the head of the Church of England and especially(3) an iconic figure of her country, loved and respected.

But the United Kingdom is also ruled by a constitution. As in France, there are different political parties. The most importants are: The Labour Party which counts at present 262 members in the House of Commons(4) and The Conservative Party which holds the majority with 316 members of parliament



Furthermore, the current Prime Minister elected on july 11th 2016 is Theresa May, head of the Conservative Party. Generally, Prime Ministers are elected for 5 years and the House of Commons too. Last elections were made on june 8th 2017. From a current point of view of British policy, Theresa May during her first big speech of general policy, made a commitment(5) to fight against tax evasion, to attack those who prefer to hire abroad rather than in the Britain.

- (1)Westminster is a palace in London which name is used to indicate a parliamentary system.
- (2) the ruler of the country = the sovereign of the country
- (3)Especially = particulièrement
- (4)Houses of Commons is an assembly of elected members of the English parliament situated in the palace of Westminster
- (5)makes a commitment = s'engage



Day 2 : CAMBRIDGE



MORNING

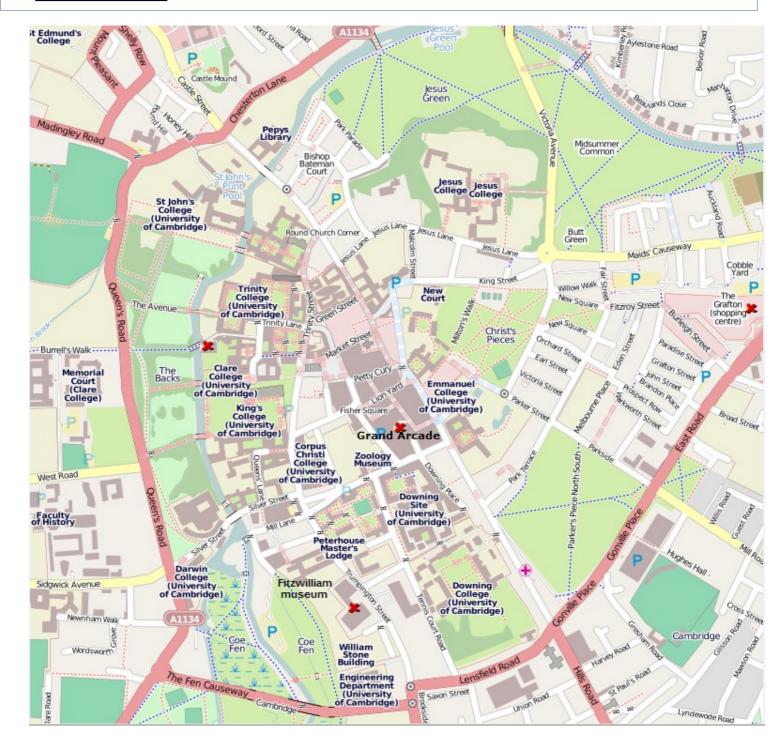
Guided tour of the city and colleges

AFTERNOON

Free visit and shopping

THINGS TO DO:

- Fitzwilliam museum (Antiquities; Applied Arts; Coins and Medals; Manuscripts and Printed Books; and Paintings, Drawings and Prints. From Ancient Egypt, Sudan, Greece and Rome, Roman and Romano-Egyptian Art, Western Asia and Cypriot Art, English and European pottery and glass, furniture, clocks, fans, armour, Chinese, Japanese and Korean art.
- Bookshops, Marks and Spencer (quality supermarket)...
- Grand Arcade (shopping center), The Grafton (shopping center)
- Walks in the Backs



DAY 2 University of Cambridge: So prestigious but why?

Cambridge University was created in 1209 by academics(1) who left Oxford because they had some problems with the local leaders. It's the second oldest British university and the seventh oldest university in the world. In 2016, there were 21,656 students in this university. The price for one year for the students who live in Britain is approximately 9,250 £ and about 1,387 £ for foreign students. Cambridge University is divided between the university which concerns the administration and colleges. There are 31 different colleges (three were only reserved for girls) which choose their teaching. Colleges are places where students have classes, have clubs, live and where they eat, etc. The oldest college is called "Peterhouse" and it was created in 1284 by Hugh de Balsham.



In this university, teaching methods are not the same as in France. There are three trimesters composed of eight weeks of school. Which is very short that's why the work is supported and the weeks are composed from 42 to 46 hours of work at school and at home. There are four kinds of teaching: conferences, practices, seminars and courses, and supervisions which is composed of small groups of students and one teacher by group which allows better work and frequent control of the homework of the students. It is so prestigious because it is in the top five in the academic ranking (2) of world universities and it is one of the five universities most often targeted by the best employers from Great Britain. Cambridge University is considered as the best university in the world of science, physics, chemistry (3) and biology. This university has formed many mathematicians, physicists, writers and actors known around the world like Stephen Hawking or Isaac Newton.

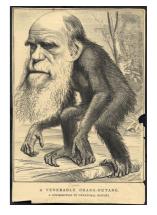
- (1) Universitaires
- (2) Classement académique
- (3) Chimie

Those Cambridge figures who made a difference

When I talk to you about the 2^{nd} oldest university of the United Kingdom which is also the 4th oldest university in the world, founded in 1209? You know what I am talking about. That's Cambridge University for sure .

This University has trained througout time many students who have subsequently chose diverse and varied paths. It is attributed an incredible number of Nobel prizes; over 80 (83 exactly) including Francis Crick and James Dewey Watson, two biologist, one a Cambridge alumnus*, who got the Nobel Prize in 1962 with their work on the structure of DNA, that was a revolution and today we can find diseases from the DNA.

One of the most mythical figures to be graduated* from Cambridge was Charles Darwin, made famous by his theory of evolution. Today, the name of this theoretician is given to a prize named the Darwin Awards which rewards the most stupid deaths of the year. also a reward showing the evolution of the stupidity of humans.



But former Cambridge students are not just scientists they are also men of letters like Daniel Ellsberg known as the first whistleblower* in the history of the United States, it was he who, in 1971, provided the New York Times with the famous « Pentagon Papers », secret documents concerning the Vietnam War and the US Government's actions during this war.

It is thanks to these alumni that Cambridge is and will remain one of the most famous universities in the world, these people who contribute to the prestige of this English symbol.

*alumnus/alumni: ancien(s) élève(s)

Graduated: diplômé

Whistleblower: lanceur d'alerte

articles by TS

DAY 3 London: Where does the power lie¹?

In London four places represent the different aspects of power. The power is divided in three parts: The royal power, the political power and the financal power.

The royal power is differentfrom the political power, the Prime Minister and her government has the executive power but does not have the military power unlike the queen who is Commander-in-chief of the British Armed Forces. The legislative power is held by the parliament.

The Prime Minister works and lives at 10 Downing Street and practices her power with the Queen and the Parliament of England who gathers in Westminster Palace situated in a borough in the center of London along the river Thames.

The Queen of England is the ruler of the country and the pride² of England. The Queen lives in one of the most popular building of England **Buckingham Palace**.

The building representing the financial power is **London Stock Exchange**³ located in New Gate Street in *the City of London* (business area). London Stock Exchange is an organized market for the purchase and sale of industrial and financial security⁴. There are currently 2,600 companies from over 60 countries listed on the London Stock Exchange. It is the 3RD largest stock exchange in the world and one of the oldest.

lie: se trouver
 pride : fierté

3. stock exchange: la bourse

4. security: valeur



Queen of England: a powerful position?

Queen Elisabeth II officially rules over the United Kingdom and the countries of the Commonwealth* like Canada, Australia. This represent 130M of subjects. Moreover, Elisabeth is the leader of the army and leader of the Church of England. She can accept or refuse laws proposed by the parliament. Besides, the Queen sees the Prime Minister once a week to deal with the problems of the United Kingdom or of the problemes concerning the world.

Elizabeth II is the most knowledgeable* person after the Pope. She wants to keep a neutral position, so she advises the Prime Minister with her experience. The Prime Minister David Cameron loved talking with the Queen because she « [didn't) want to take [his] place » and her political vision was forged by Winston Churchill. In fact, Queen Elisabeth II embodies more a symbol of power than a strong political position. However, she is very appreciated by the population of the United Kingdom and her power has never been contested.

The powers of the monarch are to: appoint and dismiss the Prime Minister and other ministers, summon* and dissolve Parliament, give or refuse royal assent* to bills*, appoint officers of the Armed Forces, command the Armed Forces and deploy overseas, appoint members of the Privy Council, issue passports, grant pardon, award honors, create societies by Royal Charter, ratify and making treaties, declare war and peace, recognize States and The Queen is formally a part of the United Kingdom Parliament, but her role is limited to granting Royal Assent to passed bills

*Commonwealth: Intergovernmental Organization blend of 52 states lead by Queen Elizabeth II

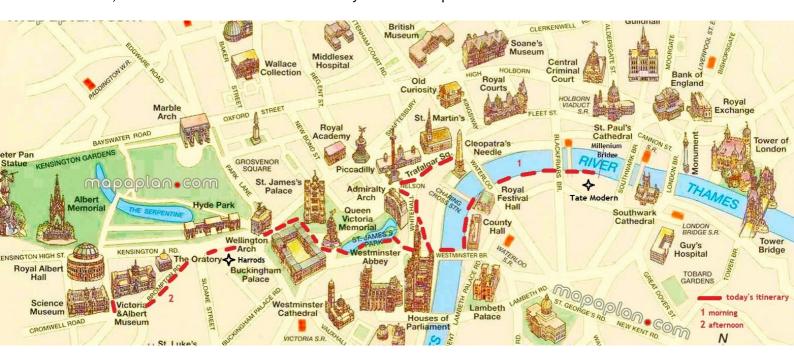
Knowledgeable: instruit/savant

Summon: convoquer Royal assent: accord royal A bill: un projet de loi

articles by TS

DAY 3 Exhibition Road

- Buckingham Palace: London residence and administrative headquarters of the reigning monarch of the United Kingdom since the accession of Queen Victoria in 1837. it has a large and park-like garden which covers 40 acres (16 ha), and includes a helicopter landing area, a lake, and a tennis court. There, the Queen hosts her annual garden parties each summer, and also holds large functions to celebrate royal milestones, such as jubilees. If you see that flag: it means the Queen is present. Prince Harry and his wife live in Kensington Palace.
- Knightsbridge: A quarter part of the City of Westminster famous for its luxury retail shops and department stores like Harrods. It's also renowned as the area of embassies among which the embassy of Ecuador who grants asylum to Julian Assange founder of WikiLeaks.
- Kensington: Kensington is a district within the Royal Borough of Kensington and Chelsea in West London. The north east is taken up by Kensington Gardens. The area is also home to many of London's European embassies. Kensington possesses many indicators of connections with France, including the Lycée Français Charles de Gaulle, French Consulate and French Embassy's Cultural Department.



The luxury store has 330 departments covering one million square feet (90,000 m2) of retail space. The Harrods motto is Omnia Omnibus Ubique, which is Latin for "all things for all people, everywhere". Several of its departments, including the **food halls**, are well known.





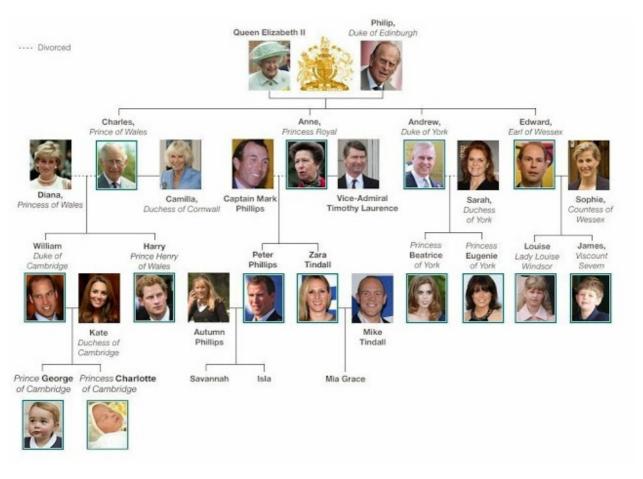
80 million items in botany, entomology, mineralogy, paleontology and zoology. The museum is a world-renowned centre of research specialising in taxonomy, identification and conservation. Many of the collections have great historical as well as scientific value, such as specimens collected by Charles Darwin. (see map)

300,000 items, including such famous items as Stephenson's Rocket, Puffing Billy, the first jet engine, a reconstruction of Francis Crick and James Watson's model of DNA, some of the earliest remaining steam engines, a working example of Charles Babbage's Difference engine, the first prototype of the 10,000-year Clock of the Long Now,. It also contains hundreds of interactive exhibits. A recent addition is the IMAX 3D Cinema showing science and nature documentaries, most of them in 3-D, and the Wellcome Wing which focuses on digital technology (see map)





The Victoria and Albert Museum (often abbreviated as the V&A) is the world's largest museum of decorative arts and design, housing a permanent collection of over 4.5 million objects. Beautiful tearooms decorated by famous 19th-century designers.

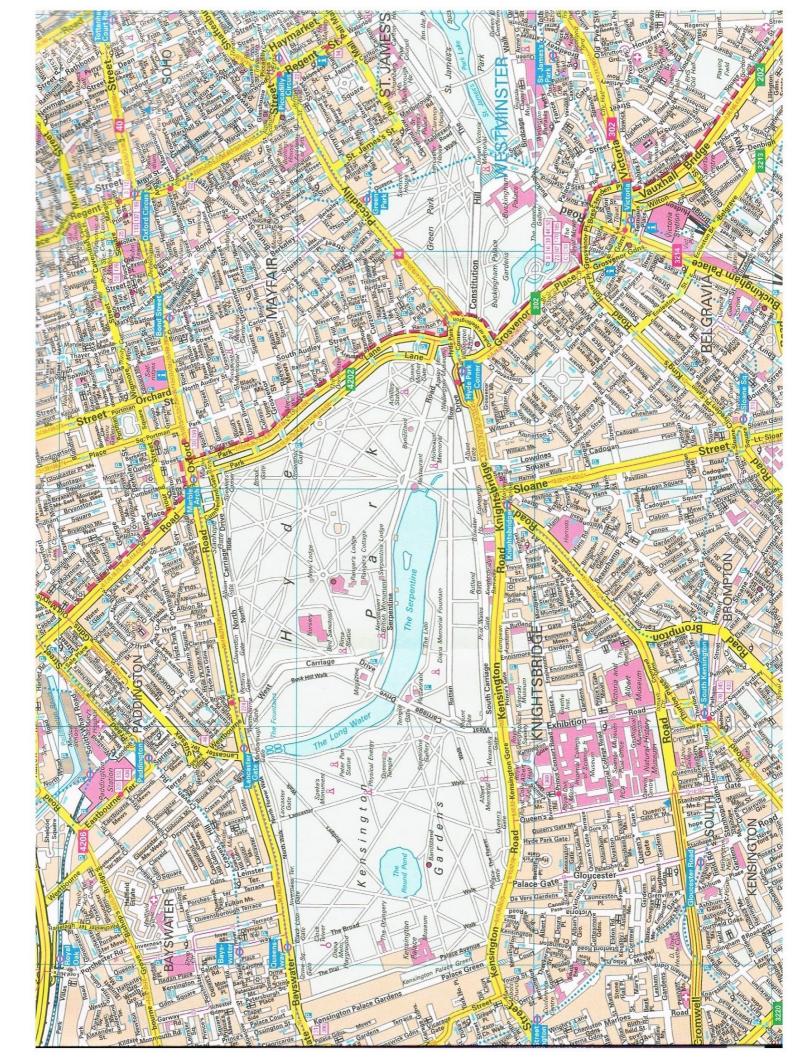


HOW DOES LONDON DEAL WITH TRAFFIC AND POLLUTION?

For many years, in London, pollution has been growing up very fast, so the capital has taken initiatives. The British Government created two new charges. The first oneis the "T-Charge", this tax is called "Toxicity Charge", it taxes more polluting vehicles. People who possess old vehicles must pay 10£ each day. The other charge is the "Congestion Charge", people who want to drive in the city-center have to pay 11.50£ to enter this zone with their vehicles. This charge applies from Monday to Friday, and from 07:00 to 18:00. It was created in 2003. More and more people have stopped driving their car. The London Transport System expanding, so it's better for all the city.

A new concept was created in London, in 2010, people can rent bikes (Santander Bikes or "Boris Bikes") if they want to cycle around the city. In London, there are more than 700 docking stations, each station is situated near the others. There are 10,000 bikes available for the Londoners. They must pay only 2£ for 24 hours. If you don't return your bike you have to pay 300£. Every docking station disposes of 12 different languages, it's better because, in the capital, there are many foreigners.

Before all these initiatives, in 1952, The Great Smog (a severe air-pollution event) killed 12,000 Brisith. People could only see a few meters in front of them. So, the British capital was very polluted, but through time, the situation has evolved thanks to initiatives taken by the government.



Oxbridge



Cambridge, pépinière de talents mathématiques

À Cambridge, université créée en 1209 par des transfuges d'Oxford, on enseigne les mathématiques depuis Robert Recorde, vers 1550. Mais c'est à Newton que Cambridge doit sa



réputation d'université scientifique. Étudiant à partir de 1660 au Trinity College de cette université puis chercheur, le fondateur de l'analyse mathématique moderne reprend la chaire de mathématiques en 1669. Il va se rendre célèbre à travers toute l'Europe par ses travaux sur la lumière, amplifiant du même coup la renommée de Cambridge. Cette époque va voir, comme à Oxford, la création de deux d'enseignement mathématiques : la Lucasian Chair of Mathematics, créée par Henry Lucas qui lègue à cette occasion sa

bibliothèque de quatre mille volumes, et la Sadleirian Chair of Pure Mathematics, fondée par Lady

Au XXème siècle, 40 millions de règles à calcul furent produites à travers le monde. Au vu du rôle crucial que l'outil joua depuis la révolution industrielle jusqu'aux temps modernes, un bulletin de l'Oughtred Society souligne: «Pendant plus de trois siècles, la règle à calcul a servi à effectuer les calculs des principaux édifices construits sur terre».

Au <u>Musée de la Science</u> de Londres, plusieurs règles à calcul sont présentées avec des indications permettant d'en comprendre le fonctionnement.





Il envisagea aussi de créer un ordinateur aux fonctions plus générales, la machine analytique, qui pourrait être programmée à l'alide de cartes perforées et possédait des emplacements distincts pour le stockage des nombres et le calcul. Une machine analytique capable de stocker 1 000 nombres de 50 chiffres serait longue de plus de 30 mètres. Sa machine ne sera construite qu'en 1991 et sera fonctionnelle. Actuellement: exposée au <u>Musée de la Science</u> à Londres, elle est composée de 8 000 pièces, mesure trois matères de la socience à traiter par le serait de la socience de la socience



Des exemplaires sont exposés au <u>British Museum</u> dans les sections Asie et Préhistoire & Europe ainsi qu'au <u>Musée de la Science</u> à Londres.

7



bord. Il est impossible de colorier un côté du ruban de Môbius en rouge et l'autre en vert puisque le ruban ne possède qu'un seul côté.

Des années après la mort de Mőbíus, la popularíté et les applications du ruban ne cessèrent de grandir et il est devenu une partie intégrante des mathématiques, de la magle, de la science, de l'art, de l'ingénierie et de la musíque. Le ruban de Móblus est un symbole omníprésent dans le recyclage où il représente la transformation des déchets en ressources utíles. Aujourd'huí, le ruban de Môbius se retrouve partout, depuis les molécules et les sculptures métalliques

jusqu'aux structures architecturales, et modélise la totalité de l'univers.

Le ruban de Móbius est la première surface à un seul côté inventée et analysée par l'être humain. Il s'agit surtout de la première et la seule initiation d'un vaste public à l'étude de la topologie: la science des formes géométriques et de leurs relations. C'est pourquoi il trouve toute sa place dans le Musée de la Science, de Londres à côté de la bouteille de Klein.

Imaginez votre frustration si vous essayez de peindre juste l'extérieur d'une bouteille de Klein. Vous commencez par peindre our ce qui semble être la surface « extérieure » bombée et poursuivez le long du col. L'objet en quatre dimensions ne possède pas d'auto-intersection, ce qui vous permet de continuer en peignant le col, qui est maintenant « à l'intérieur » de la bouteille. Tandis que le col s'ouvre pour rejoindre la ourface bombée, vous découvrez que vous êtes maintenant en train de peindre l'intérieur de la bouteille. Si notre univers avait la forme d'une bouteille de Klein, nous pourrions trouver



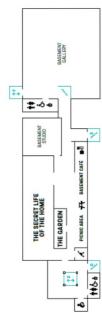
des itinéraires qui feraient que nos corps s'inversent lorsque nous revenons d'un voyage, de telle sorte que, par exemple, notre cœur se trouverait à droite.

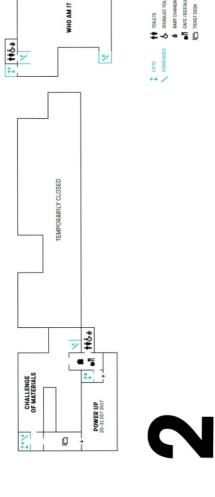
Initialement, la bouteille de Klein s'appelait surface de Klein, "Kleinsche Häche" en allemand. Une eveux d'un traducteur l'a fait connaître sous le nom de bouteille de Klein, "Kleinsche Flasche". C'est cette terminologie qui s'est imposée, même en Allemaane!

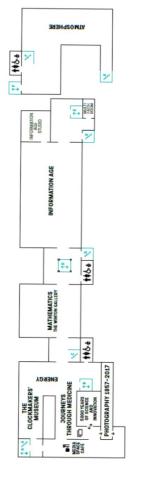
La bouteille de Klein possède donc un col flexible qui s'enroule dans la bouteille pour créer une forme sans intérieur et extérieur distincts. Il vous sera plus aisé de bien l'observer en allant l'examiner au <u>Musée de la Science</u> de Londres.











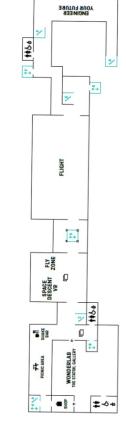
CASE / PESTALIRANT

CLOAK ROOM

TICKET DESK

SHOP

↓ LIFTS



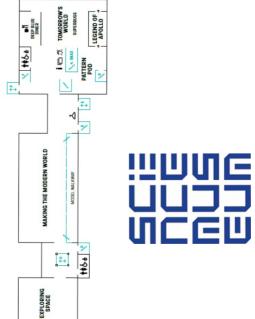
CAFÉ / PESTALIRANT

FR PICNIC ABEA

TICKET DESK

SHOP

LIFTS
 ✓ STAIRCASES



ENERGY LECTURE
CAFE THEATRE 92

JAMES WATT AND OUR WORLD ENERGY HALL .¢







Ground Floor Map We suggest you visit the coloured zones in the following order: Upper floors are accessed via lifts, stairs and escalators **Galleries** Shops and Cafes Human Evolution Cranbourne Boutique Lasting Impressions The Kitchen © Earth's Treasury paint ■ The Coffee House From the Beginning (Now to) لا Volcanoes & Earthquakes الم Restless Surface (Row 2) Green Zone Upper floors are accessed via lifts and stairs opposite Creepy Crawlies Shops and Cafes Investigate Centre Museum Shop glower Ground Room Snack Bar (Lown Googd Floor) T. rex Grill * Wildlife Photographer Central Cafe of the Year post roving Fossil Marine Reptiles 🛠 Creepy Crawlies Minerals numb The Vault Flort 🐻 Giant Segucia என்ற Blue Zone Shops and Cafes **Galleries** Ding Shop Human Biology Mammals playing Shop Fishes, Amphibians & Reptiles Mammals Images of Nature T Dinosours Orange Z **Galleries** Shops and Cafes Darwin Centre Cafe Coccoon Attenbaraugh Studio Zoology spirit building

Restaurants

School Reception

Members' Room

Pop-up Conservation Studio

Centre for UK Biodiversity

Faith Room

Cafes

Information and tickets

Accessible toilets

Baby care room

Cloakroom

Picnic Area

Lifts

Shops

↑ ⊕ Gloucester Road

(Circle, District and Piccadilly lines) 5 minutes walking distance



Day 4

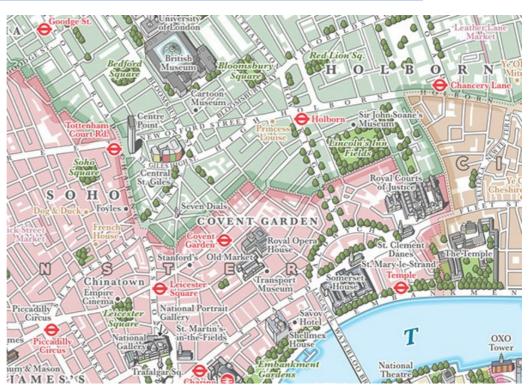
MORNING

- Oxford Street (see map)
- The British Museum



AFTERNOON

- Soho, Chinatown
- Covent Garden
- Piccadilly



The British Museum is dedicated to human history, art and culture. It houses the world's largest and most comprehensive collection of Egyptian antiquities and from the Classical world (Greece and Rome) as well as Mesopotamian antiquities and collections of Ethnographic material from Africa, Oceania and the Americas (see list of galleries, next page).

Curiosities and experiences

On Oxford Street :

- Look at Selfridge, second largest shop (after Harrods), it opened in 1909
- After Selfridge's, on the left, take Gee's Ct, arrive on St Christopher's place, nice and quiet!
- On Argyll Street, very special victorian-style pub, « the Argyll Arms »
- On Berwick Street, Gosh! (comics shop)

Near the British Museum :

• Denmark Street, associated with British popular music (recording studios and music shops). The Rolling Stones recorded at Regent Sound Studio at No. 4. Elton John wrote songs at offices on the street through the 1960s, while the Sex Pistols lived above No. 6, and recorded their first demos there. Other artists like David Bowie were regulars on the street shops and cafés.

Around Covent Garden:

- London Transport Museum, Covent Garden Piazza. Heritage of London and its transport systems over the last 200 years. (free entrance for under 18)
- Neal's yard, small alley between Shorts Gardens and Monmouth Street which opens into a courtyard.
- Forbidden Planet, cult entertainment Megastore (comic books, graphic novels, manga, DVDs, video games, and a wide variety of toys, clothing and other collectible merchandise)
- Chinatown, Gerrard Street.
- M&Ms World, Swiss Court, Leicester Square.

On Piccadily:

- Waterstone, 206 Picadilly, Europe's largest bookshop on 5 floors (cosy tearoom and sofas)
- Fortnum and Mason, 181 Picadilly, upmarket department store (luxury goods, carpeted floors, staff in tailcoat)
- **Burlington Arcade**, in front of Fortnum and Mason, pedestrian luxury arcade patrolled by *beadles* in traditional uniforms including top hats and frockcoats.

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The British Museum

Africa

The Sainsbury Galleries Room 25

Americas

North America >

Room 26

Mexico >

Room 27

Ancient Egypt

Egyptian sculpture > Room 4 Egyptian life and death: the tomb-chapel of Nebamun >

The Michael Cohen Gallery

Room 61

Egyptian death and afterlife: mummies > The Roxie Walker Galleries

The Raymond and Beverly Sackler Gallery Early Egypt >

Room 62-63

The Raymond and Beverly Sackler Gallery Sudan, Egypt and Nubia > Room 64

Ethiopia and Coptic Egypt > Room 66

Room 65

Ancient Greece and Rome Greece: Cycladic Islands >

Room 11

The Arthur I Fleischman Gallery Greece: Minoans >

The Arthur I Fleischman Gallery Greece: Mycenaeans > Room 12a

Room 12b

Greece 1050-520 BC > Room 13

Athens and Lycia > Greek vases > Room 14

Greece: Bassai sculptures Room 15

Nereid Monument > Room 16

Greece: Parthenon > Room 18 Room 17

Greece: Athens > Room 19 Greeks and Lycians 400-325 BC > Mausoleum of Halikarnassos > Room 20

The world of Alexander >

Greek and Roman sculpture >

Room 23

Greek and Roman life > Room 69

The Wolfson Gallery Roman Empire > Room 70

Etruscan world >

Room 71

The A G Leventis Gallery Ancient Cyprus > Room 72

Greeks in Italy > Room 73 Sreek and Roman architecture >

Classical inscriptions 300m 77

The Wolfson Gallery Early Ephesus >

Room 78

The Wolfson Galleries Roman sculpture > Room 82

The Wolfson Gallery Roman portraits > Room 83-84 Room 85

China, South Asia and Southeast Asia >

Asia

The Joseph E Hotung Gallery Room 33

4maravati >

The Asahi Shimbun Gallery Room 33a

Chinese jade >

The Selwyn and Ellie Alleyne Gallery Room 33b

The Korea Foundation Gallery

Room 67

The Mitsubishi Corporation Galleries Room 92-94 Japan >

Chinese ceramics – Sir Percival David Collection >

The Sir Joseph Hotung Centre for Ceramic 300m 95

Europe

The Sir Harry and Lady Djanogly Gallery Clocks and watches > Room 38-39

The Sir Paul and Lady Ruddock Gallery Medieval Europe 1050-1500 > Room 40

Sutton Hoo and Europe AD 300-1100 > The Sir Paul and Lady Ruddock Gallen Room 41

Europe 1400-1800 >

Europe 1800-1900 > Room 47 Europe 1900 to the present > Room 48

The Weston Gallery Roman Britain > Room 49 Britain and Europe 800 BC-AD 43 >

Europe and Middle East 10,000-800 BC >

Middle East

Assyrian sculpture and Balawat Gates >

Assyria: Nineveh > Assyria: Nimrud > Room 7-8

Assyria: Lion hunts > Room 10a Assyria: Siege of Lachish > Assyria Khorsabad > Room 10b

Islamic world > The John Addis Gallery Room 34

The Rahim Irvani Gallery Ancient Iran >

Ancient South Arabia > Room 52

The Raymond and Beverly Sackler Gallery Room 53

The Raymond and Beverly Sackler Gallery Anatolia and Urartu 7000-300 BC >

The Raymond and Beverly Sackler Gallery Mesopotamia 1500-539 BC >

The Raymond and Beverly Sackler Gallery Mesopotamia 6000-1500 BC >

Ancient Levant >

The Raymond and Beverly Sackler Galleries Room 57-59

Themes

Enlightenment >

Collecting the world > Room 1

Room 2

The Waddesdon Bequest > Room 2a

Living and Dying >

The Wellcome Trust Gallery The Citi Money Gallery Room 24 Money >

Room 68

Great Court >









At your return you will be asked to hand out a report file containing :

- An 80-word text presenting the exhibit you prefered (Science M/NHM/British Museum /Imperial war /Tate Modern) mentionning a brief description, a photo and the reason why you chose that piece.
- A 100-text presenting your host family, their house, what surprised you...
- An 80-word text about the day you prefered and explaining why.
- An UNUSUAL photo & a few comments







 	
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