



Your guide to MATHS school trips 2019-20







Organising a school trip? We're here to help.

We know it can be time consuming to plan a school trip, that's why we work hard to ease the pressure on teachers.

Choose NST for:

- The widest range of inspiring tour programmes & student events matched to the latest exam board specifications
- A tailor-made quote with no hidden costs & flexibility to hold arrangements until deposits are collected
- FREE trip launch kit & educational resource packs
- A dedicated, educational travel expert to take care of all the details & create a smooth-running daily itinerary
- My Tour Manager our award winning online trip organiser - to give teachers 24/7 access to their school trip information and help keep on track of trip admin
- Instant access to trip information whilst on tour with our award-winning travel app

- 24-hour emergency cover, audited accommodation & transport, a wide choice of assessed excursions
 & FREE preview visits to assist with risk assessment planning
- On-the-ground support from NST's representatives, guides & escorts in many of our destinations
- Reassurance for parents & teachers with NST's Locate My Trip providing live updates on a group's tour location
- Financial protection NST are fully bonded through ABTA & ATOL
- More than 50 years' experience of creating expertly planned school trips that suit the individual needs of each group

Looking for a helping hand for your next school trip? Get in touch today.

Call **0845 293 7974** Email us at **info@nstgroup.co.uk** Visit **nstgroup.co.uk** or chat online



We're the travel company of choice for over 35,000 group leaders. We've been awarded the Feefo Gold Service award, an independent seal of excellence for delivering exceptional experiences, as rated by real customers.









With you every step of the way

Taking learning beyond the classroom is widely known to help young people build strong, positive relationships and independence, as well as improving academic achievement. A school trip often brings a sense of experience and enjoyment to learning, supporting the wider character development and resilience students need to deal with life's inevitable challenges.

At NST, we passionately believe in the importance of enriching educational experiences outside the classroom. That's why you won't find a wider choice of destinations, inspiring visits, educational guided tours, and hands-on workshops anywhere else. This year, we've also introduced our LIVE! student events led by industry professionals, giving students a bridge into the world beyond the classroom as they prepare to become work-ready.

When it comes to organising a school trip, we understand just how much time and energy it can take on top of teaching. What's more, many schools are not aware that when they arrange transport, accommodation, and other services directly themselves, they'll have all the responsibilities of a travel company - both legal and financial - under the new Package Travel & Linked Travel Arrangements Regulations 2018.

That's where NST can help. We're an LOtC accredited provider, giving you peace of mind that all the elements of your trip have been carefully checked on your behalf - a view supported by the DfE's recent recommendations on selecting a travel provider.

We're the travel company of choice for over 35,000 group leaders, but we know that what counts is the help and support that you receive. That's why we're committed to doing our absolute best to provide you with the experience and support that you need to match your requirements and budget and create a school trip that your students will remember long after they return to the classroom.



Steve Craven NST Director

FREE PLACES

We offer a generous free place ratio of 1 in 10 for air travel and 1 in 8 for coach travel.

LOYALTY REWARD

START PLANNING & SAVE!

Book by the end of May 2019 & SAVE

£20pp on all long haul tours

& £10pp on all European tours.

Save £5pp from your first consecutive year of travel onwards with our loyalty reward.

INSPECTION VISITS

Free inspection visit to assist with your school tour risk assessments. 2 night complimentary stay for 2 people in your chosen destination.

Terms & Conditions: All prices and information shown in this brochure are subject to availability, can be withdrawn at any time without notice and are correct at time of going to print (March 2019). Whilst every effort is made to ensure the accuracy of information and prices at time of printing, regrettably errors and changes do occasionally occur. Flight supplements may apply. The air holidays & flights shown are ATOL Protected by the Civil Aviation Authority. ATOL 3606. Please visit www.nstgroup.co.uk for full terms and conditions. Early Booking Discount & Loyalty Reward see www.nstgroup.co.uk/offers - for full details and terms and conditions.

Contents

Inside our guide you'll discover some of the most intriguing destinations to explore and bring maths to life.

WE'RE A

STEM

AMBASSADOR

| INTRODUCTION | 2-3 |
|--------------|-------|
| LONDON | 4-5 |
| PARIS | 6-7 |
| NEW YORK | 8-9 |
| BARCELONA | 10-11 |
| | |





London

Investigate the mathematics that makes the capital city of London work! From the Wembley Stadium arch, to the Bank of England, your pupils will be surrounded by maths during a visit to the city. Have fun calculating the height of key landmarks, such as Nelson's Column, or take the opportunity to consider the mathematical challenges engineers faced whilst building the iconic London Eye. An NST tour to London is guaranteed to leave your pupils feeling excited about the maths that is all around them!

At a glance

Getting there We offer a range of options to get you to and around your destination – and back home again – with ease, including executive coach or rail.

Good to know

- Best explored on foot and by tube. NST can book tube and rail tickets for your group in advance of your departure
- NST can book West End theatre tickets in advance for your group in order to secure the best
 availability and prices
- If you are on a budget then London offers plenty of free, fun and educational museum visits which often include workshops

Eating out NST can pre-book meals at a range of restaurants making it easier for you.

What to pack Good, sturdy footwear, light layered clothes for walking around, rucksack/small or light suitcase with wheels if travelling by rail and some spending money for souvenirs!



Price includes: 1 night B&B accommodation, executive coach transport from & to school & throughout your stay, group travel insurance & 1 in 8 free place ratio. Price shown based on 40 paying passengers from selected departure points, travelling in November 2019.



Study themes

- Arithmetic & calculations
- Code breaking
- Using geometry & angles
- Investigating measures

- Estimating
- \cdot Proportion
- Problem solving & thinking mathematically
- Mathematical vocabulary



BANK OF ENGLAND MUSEUM

Groups can experience a free 60-minute presentation at the bank. Presentations are suitable for KS3 & KS4 and cover the role of the Bank of England, monetary policy, inflation and banknote security.

PRICING KEY FOR VISITS FREE Free £ Under £5pp £ £ Under £10pp £ £ £ 10pp+



MATHS MAGIC SHOWS

Run by Dr Matt Pritchard, who works for organisations such as the Royal Institution, these interactive maths magic shows will inspire and inform pupils. Shapes, symmetry, patterns, numbers and logic form the basis of the maths behind the magic. Ideal for KS3+.

Don't miss...

- THE WINTON GALLERY SCIENCE MUSEUM FREE The Winton gallery reveals how mathematics connects to every aspect of our lives.
- LONDON MATHS TRAIL FREE
 Explore London's landscape using calculations,
 shapes, problem solving and estimating.
- THORPE PARK RESORT (2) (2) (2) Learning through enjoyment; from Maths the Science of Rollercoasters.
- MATHS INSPIRATION SHOWS (E) (E) Inspiring speakers present maths in the context of exciting, real-world situations.
- BLETCHLEY PARK (2) (2) Take a guided tour of the historic site where secret British code breaking took place during
- WWII. • ST PAUL'S CATHEDRAL – LET'S BUILD A CATHEDRAL WORKSHOP (2) (3) Tour the crypt and cathedral, then build an arch, create structures and discover materials.
- THE VIEW FROM THE SHARD (6) (6) Take a mathematical journey up The View from The Shard. KS3 educational worksheet available.



BRITISH MUSEUM – MATHS CHALLENGE

A teacher-led KS2/KS3 session in which pupils use packs of materials supplied by the museum. Explore the museum's galleries, meet mathematical challenges and learn about objects and cultures. This visit now includes an activity in the recently opened Citi Money Gallery.

• ENIGMA PROJECT

Let Dr James Grime inspire your pupils with cryptography as they become codebreakers.



Maths Explorer learning resources

Our free resources are designed to bring your mathematics experience in London to life! Our range of activities encourage pupils to see the maths around them and include estimating heights of key landmarks, exploring London by numbers and investigating tessellation and symmetry.

Where you will be staying



MEININGER HOTEL LONDON HYDE PARK

In an ideal central location offering a unique blend of high quality accommodation, full meal options and a large selection of conference rooms.



YHA THAMESIDE

This youth hostel offers basic accommodation and good facilities for groups at a very reasonable price.



PREMIER INN HANGER LANE

A comfortable hotel located close to a tube station thereby offering easy access into central London.

Suggested itinerary

- Day 1 Morning departure from school. British Museum Maths Challenge followed by a ride on the Coca-Cola London Eye.
- Day 2 Maths Magic Show followed by the London Maths Trail. Depart for return journey to school.

For prices for this itinerary, please call us.

Ready to start planning your next learning experience?

Get in touch with our team of school travel experts on **0845 293 7974** and we'll create a bespoke tour to suit your exact needs. For further details about tours to London, visit **nstgroup.co.uk**



Paris

Paris provides the perfect setting to explore mathematics, from calculating how many glass panels have been used in the Louvre Pyramid, to dealing with currency conversion in a real-life setting. Here, your pupils will have fun investigating the maths behind this exciting cosmopolitan city. We'll create an itinerary for your group that covers a wide range of learning outcomes, plus we'll help you to get even more from your trip with our specially designed Paris Maths Explorer learning resources.

At a glance

Getting there

We offer a range of options to get you to and around your destination – and back home again – with ease, including executive coach via ferry or Eurotunnel, Eurostar and flights.

Eating out

NST can pre-book meals at a range of restaurants across the city making it easier for you.

When to go

Paris is a year-round destination.

GMT + 1 hr GMT

Avoid the queues

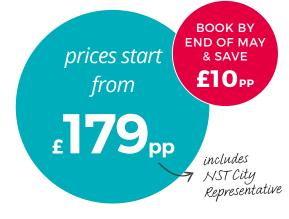
Waiting times at the Eiffel Tower can be lengthy. To make the most of your time in the city we can arrange a visit to the Montparnasse Tower instead, where you'll get a great view of the city whilst avoiding the queues!

Local currency Euro



Study themes

- Arithmetic & calculations
- Using geometry & angles
- Using percentages
- Investigating measures
- Estimating
- Currency conversions



9th March 2020

Price includes: 2 nights' B&B accommodation, executive coach transport from & to school & throughout your stay, services of an NST Paris City Representative to assist with check-in & provide 24hr assistance, extensive group travel insurance & 1 in 8 free place ratio. Price shown based on 40 paying passengers from selected departure points, travelling in November 2019.

- Using proportion & the Golden Ratio
- Symmetry
- Coordinates & bearings
- Problem solving & thinking mathematically
- Mathematical vocabulary



LOUVRE MUSEUM

Explore the Louvre's Pyramid to look at volumes and patterns, then move on to the Mona Lisa and use maths to discover why this painting is considered to be so beautiful. Then using your free learning resources, explore surface area, volume, symmetry and proportion.

Don't miss...

• DISNEYLAND[®] PARIS 666 Enjoy a fun-filled visit to Disneyland[®] Park and Walt Disney Studios[®] Park.

- EIFFEL TOWER (E) (E) Paris' best-known monument has outstanding city views, which on a clear day can stretch for 42 miles.
- SEINE RIVER BOAT CRUISE 👩
- Get a unique view of the city's landmarks by boat.



DON'T MISS MATHS LIVE! IN PARIS

Learners get the opportunity to come face to face with speakers who are specialists in their field at our Maths LIVE! Conference on the 9th March 2020 - all whilst enjoying the magic of Disneyland[®] Paris!

To find out more, visit nstgroup.co.uk/maths-live-conference

Where you will be staying



FIAP JEAN MONNET

This simple, clean accommodation comes highly recommended and has the best facilities of all the centres in Paris.

RESIDENCE INTERNATIONAL DE PARIS

A simple youth centre with experienced and accommodating staff. Good facilities available for disabled persons.

PRICING KEY FOR VISITS FREE Free & Under £5pp 6 6 Under £10pp 6 6 £ 10pp+



CITÉ DES SCIENCES (SCIENCE CITY)

The Science City is packed with exhibits exploring man's experiences with science and maths. Discover more about light, sounds, genes and movement. The museum also has a hands-on maths exhibition which covers the geometry of shapes, transformation of geometry and Euclidean geometry.

Take your pupils behind-the-scenes of France's

Enjoy the views down the Champs-Élysées from

Enjoy the street stalls, artists and a spectacular

SEE MORE

ONLINE

one of the most famous monuments in Paris.

MONTMARTRE & SACRE COEUR FREE

• LE STADE DE FRANCE 66

ARC DE TRIOMPHE FREE

premier stadium.

view of Paris.



PALAIS DE LA DÉCOUVERTE (PALACE OF DISCOVERY)

Learn by participating in experiments led by the scientists and explore scientific laws. Then explore the galleries focusing on probability & statistics, symmetry and the Pi Room.

Maths Explorer learning resources

Our free resources are designed to bring your mathematics experience in Paris to life! Our range of activities encourage pupils to see the maths around them and include investigating the coordinates of the city, estimating the height of key landmarks, using maps, looking at architectural symmetry, and much more!

Suggested itinerary

- Day 1 Morning departure from school followed by a visit to Montparnasse 56.
- Day 2 Visit to the Louvre Museum, then explore the city using your free Maths Explorer learning resources. Seine river boat cruise.
- Day 3 Cité des Sciences. Departure for return journey to school
- For prices for this itinerary, please call us.

Ready to start planning your next learning experience?

Get in touch with our team of school travel experts on **0845 293 7974** and we'll create a bespoke tour to suit your exact needs. For further details about tours to Paris, visit **nstgroup.co.uk**



New Mork

From investigating the geometric cityscape to exploring the street grid system and considering the mathematical principles behind some of the world's most iconic buildings, a visit to New York will leave your pupils feeling inspired! Home to a number of major financial institutions, an NST tour to this fascinating city will give your pupils an incomparable insight into the type of careers that are available in the world of mathematics.

At a glance

When to go

New York is a year-round destination. Each season offers visitors plenty of reasons to visit.

Good to know

- New York is best explored on foot or via subway. We can help you with subway ticket options.
- · Marathon week can be very busy. We'll advise you on the dates to avoid.
- Some visits aren't available on public holidays or weekends. We'll advise you on the best days so you don't miss out.
- Don't forget to budget for tipping. We can advise you on how much to take.

What to pack

Comfortable footwear, clothing layers, digital camera, day bag with a zip, sunscreen in summer months, USA plug adapter.

GMT - 5hrs GMT

Currency Dollar



Study themes

- Arithmetic & calculations
- Financial applications of mathematics
- Using statistical analysis
- Using geometry & angles
- Using percentages
- Investigating measures



Price includes: 5 days, 3 nights' room only accommodation, return flights from a London airport (other departure airports are available) & overseas airport transfers, extensive group travel insurance, 1 in 10 free place ratio. Price shown based on 35 paying passengers travelling in November 2019.

- Estimating
- Symmetry
- Currency conversions
- The Golden Ratio & proportion
- Mathematical vocabulary



MOMATH

Home to a range of dynamic exhibits and programmes to stimulate inquiry, spark curiosity, and reveal the wonders of maths. Pupils will discover that maths illuminates the patterns and structures all around us. Hands-on learning sessions and downloadable resources are available

Don't miss.

• MOMA Discover how maths is used to identify fake paintings at this art museum.

- · MATHEMATICA AT NEW YORK HALL OF **SCIENCE (b(c)** This interactive maths exhibition was originally designed for IBM in 1961.
- MUSEUM OF AMERICAN FINANCE Explore the American financial markets, history of money, and track the current credit crisis.
- · WALL STREET TOUR & BUSINESS PRO **PACKAGE E E E** Take an in-depth look at the history of Wall Street followed by a talk with an expert.

PRICING KEY FOR VISITS **FREE** Free **£** Under £5pp **£ £** Under £10pp **£ £ £** 10pp+



FEDERAL RESERVE BANK TOUR & WORKSHOP

Take a guided tour of this historic building. Visit the Gold Vault containing billions of dollars' worth of gold and learn about the central banking functions of the Federal Reserve System through educational multimedia, then take part in a workshop with an established professional.



GUIDED FINANCIAL DISTRICT WALKING TOUR

Take stock of the financial heart of New York Stroll down Wall Street, see the New York Stock Exchange, Federal Reserve Bank, and more. Plus, prove that you've been by posing for pictures in front of the area's iconic big bronze bull!

• TOP OF THE ROCK 66 Experience the best and most complete daytime view of New York City!

- EMPIRE STATE BUILDING 6 6 Venture skyward to take in a view of the city from above
- STATUE OF LIBERTY & ELLIS ISLAND
 E Visit one of the most universal symbols of political freedom and democracy.
- · UN BUILDING 666 Learn about the UN, its structure and history on this guided tour.



Where you will be staying



MANHATTAN AT TIMES SQUARE

Comfortable hotel offering a good standard of accommodation centrally located. Staff are on hand to ensure all guests enjoy a pleasant stay.



VANDERBILT YMCA

Youth hostel offering simple standard of accommodation but excellent value with the benefit of a central location single beds and recreational facilities



COURTYARD MIDTOWN EAST

A large hotel, centrally located in the East Midtown area of Manhattan. The hotel is modern and of an excellent standard. The rooms are spacious and bright with great views of the city.

Ready to start planning your next learning experience?

Get in touch with our team of school travel experts on 0845 293 7974 and we'll create a bespoke tour to suit your exact needs. For further details about tours to New York, visit nstgroup.co.uk

Maths Explorer learning resources

Our free resources are designed to bring your mathematics experience in New York to life! Our range of activities encourage pupils to see the maths around them and include investigating Broadway show statistics, exploring the Manhattan grid system, calculating sales tax in real-life situations, looking at volumes, and much more!

Suggested itinerary

- Day 1 Daytime flight & transfer to accommodation. Visit to the Empire State Building
- Day 2 Visit to MoMath and MoMa followed by free time in the city.
- Day 3 Guided Financial District walking tour followed by Federal Reserve Bank tour & Meet the Professional workshop followed by free time.
- Day 4 Opportunity for shopping on Fifth Avenue. Transfer to airport for overnight return flight to UK.
- Day 5 Arrive in UK.
- For prices for this itinerary, please call us.



Barcelona

Visit the vibrant cultural city of Barcelona and discover the mathematics throughout the city! From the iconic Sagrada Família to modern buildings such as the Agbar Tower, pupils can use the city's dramatic architecture, as well as a range of attractions and museums, to explore mathematical concepts. We'll create an itinerary for your group that covers a wide range of learning outcomes.

At a glance

Getting there We offer flights to Barcelona from a variety of departure airports. Flights are nationwide and daily from most major airports.

When to go Barcelona is a year-round destination however it is most popular between February - October.

Getting around When travelling on the Metro, the T10 tickets offer the best value for money and work out cheaper than purchasing individual tickets.

Travel time Flights from London - 2 hrs. Flights from Manchester - 2 hrs 25 mins.

Must-see visits

- La Sagrada Família
- Poble Espanyol
- Nou Camp Stadium

```
GMT + 1 hr GMT
```

Local currency Euro



Price includes: 3 nights' B&B accommodation, return flights from a London airport (other departure airports are available) & overseas airport transfers, services of an NST Barcelona City Representative to assist with check-in & provide 24hr assistance, extensive group travel insurance, 1 in 10 free place ratio. Price shown based on 40 paying passengers travelling in November 2019.



Study themes

- Arithmetic & calculations
- Using geometry & angles
- Using percentages
- Investigating measures
- Estimating
- Currency conversions

- \cdot Using proportion & the Golden Ratio
- Symmetry
- Coordinates & bearings
- Problem solving & thinking mathematically
- Mathematical vocabulary



BARCELONA STOCK EXCHANGE

This guided tour in English offers pupils a glimpse into the fast-paced market floor and an insight into the finance industry. Explore the latest technology, and a video wall providing real time information on market movements. Limited availability.



PRICING KEY FOR VISITS FREE Free £ Under £5pp £ £ Under £10pp £ £ £ £ 10pp+

LA SAGRADA FAMÍLIA

Gaudí's unfinished masterpiece remains a popular tourist attraction and a world renowned emblem of the city. Pupils will be amazed by its sheer size and its architectural complexity. Here you can explore parabolas, hyperboloids and ruled surfaces.



NOU CAMP STADIUM

resources

This world-famous football stadium offers pupils the opportunity to experience the awe-inspiring size of this venue whilst also learning about the heritage and history of Barcelona FC.

Maths Explorer learning

Our free resources are designed to bring

to life! Our range of activities encourage

and include estimating the height of key

landmarks, currency conversions, looking at

pupils to see the maths around them

symmetry and much more!

your mathematics experience in Barcelona

Don't miss...

- FAMOUS LANDMARKS & MONUMENTS FREE Put maths skills to the test by estimating the height of famous landmarks.
- COSMOCAIXA SCIENCE MUSEUM Explore physical, technical, geological and mathematical relations through interactive exhibitions.
- PORTAVENTURA 666 Your pupils will have a great time in the two parks at PortAventura.
- POBLE ESPANYOL (6) (6) A village filled with reconstructions of famous buildings from across Spain.

- LAS RAMBLAS FREE Explore this famous street with its shops, cafés, market stalls and street entertainers.
- MONTJUÏC FREE This historic, hilly area provides the best views of Barcelona.
- LAS COLONDRINAS BOAT TRIP (6) (6) See the main cultural sites along the Port of Barcelona by boat.
- **PORT VELL FREE** Visit the wide range of shops, eateries, an arcade games centre and cinema.



Where you will be staying



BARCELONA URBANY HOSTEL

Situated in central Barcelona, this modern hostel offers simple rooms, great facilities at a really competitive price. Popular with pupils of all ages.



SAFESTAY BARCELONA PASSEIG DE GRÀCIA

A small, simple budget youth hostel with 55 rooms, in a prime city centre location in Barcelona.



ALBERG PERE TARRES

A new, modern hostel offering a good standard of accommodation in a central location in Barcelona.

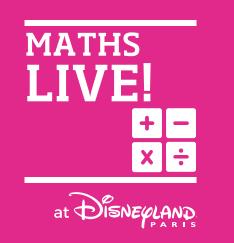
Suggested itinerary

- Day 1 Daytime flight & transfer to accommodation followed by free time on Las Ramblas.
- Day 2 Guided walking tour to introduce your group to the city, followed by a visit to Nou Camp.
- Day 3 Visit to La Sagrada Família. Explore the city's famous landmarks. Visit to CosmoCaixa Science Museum.
- Day 4 Free time to explore. Transfer to airport for return flight to UK.

For prices for this itinerary, please call us.

Ready to start planning your next learning experience?

Get in touch with our team of school travel experts on **0845 293 7974** and we'll create a bespoke tour to suit your exact needs. For further details about tours to Barcelona, visit **nstgroup.co.uk**



Maths LIVE! Disneyland® Paris Monday 9th March 2020

As part of this immersive maths event students take part in park challenges covering the fundamentals of maths at KS4 in a practical and fun way.

Our LIVE! student event combines:

Expert speaker presentations

- covering how mathematics can be used to develop models of real situations and learn that they can be more or less effective depending on the assumptions that have been made.



Q&A session

- develop their knowledge and understanding of mathematical methods and concepts.



Team park challenges

 enable students to select and apply mathematical techniques to solve problems and interpret mathematical information to reach conclusions within a unique learning environment.

Maths LIVE! is suitable for KS4 students - meeting exam board specifications for AQA, OCR, EDEXCEL, WJEC & SQA.

For more information see flyer or visit **www.nstgroup.co.uk**



call 0845 293 7974 EMAIL INFO@NSTGROUP.CO.UK VISIT NSTGROUP.CO.UK





Printed on Forestry Commission paper stock.

NST Travel Group Limited is a company registered in England and Wales at the above registered office address with company registration no: 02665024. Calls to the phone number in this brochure will cost you 3p per minute plus your company's access charge. BROCHURE19/20