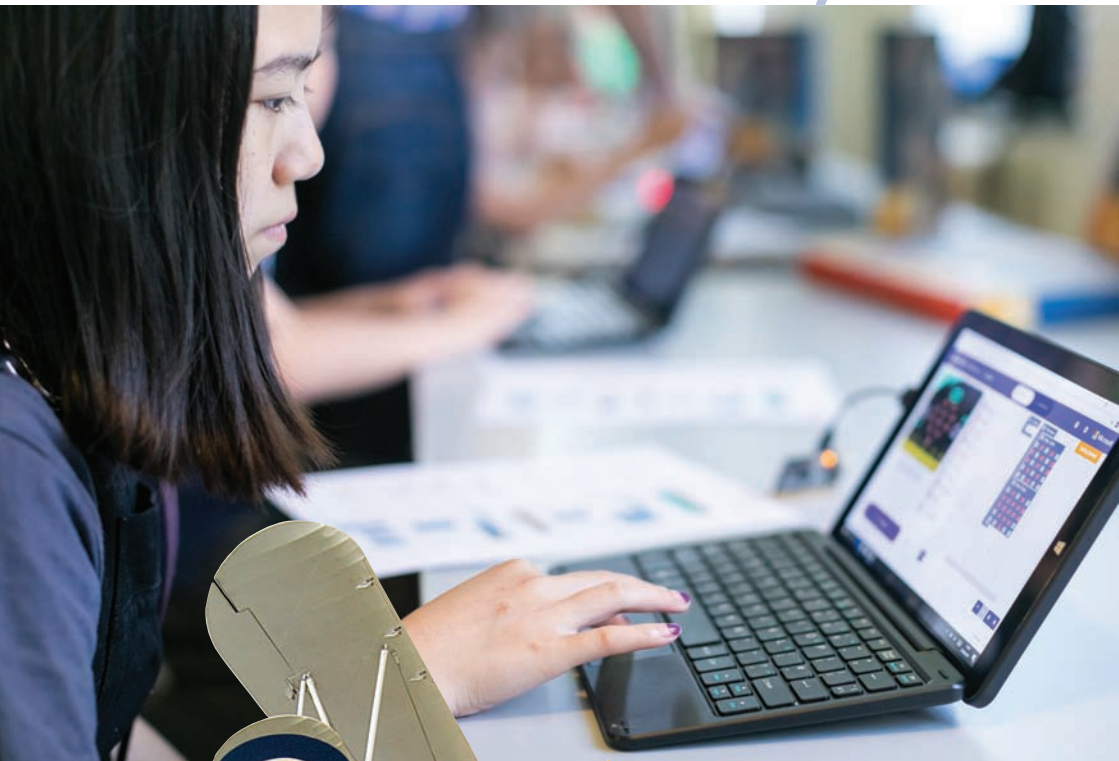


# Schools Learning Programme **Secondary** 2018/19

Key Stage 3 to Key Stage 5



Grahame Park Way, London NW9 5LL  
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# Welcome to the RAF Museum's Learning Programme 2018/19

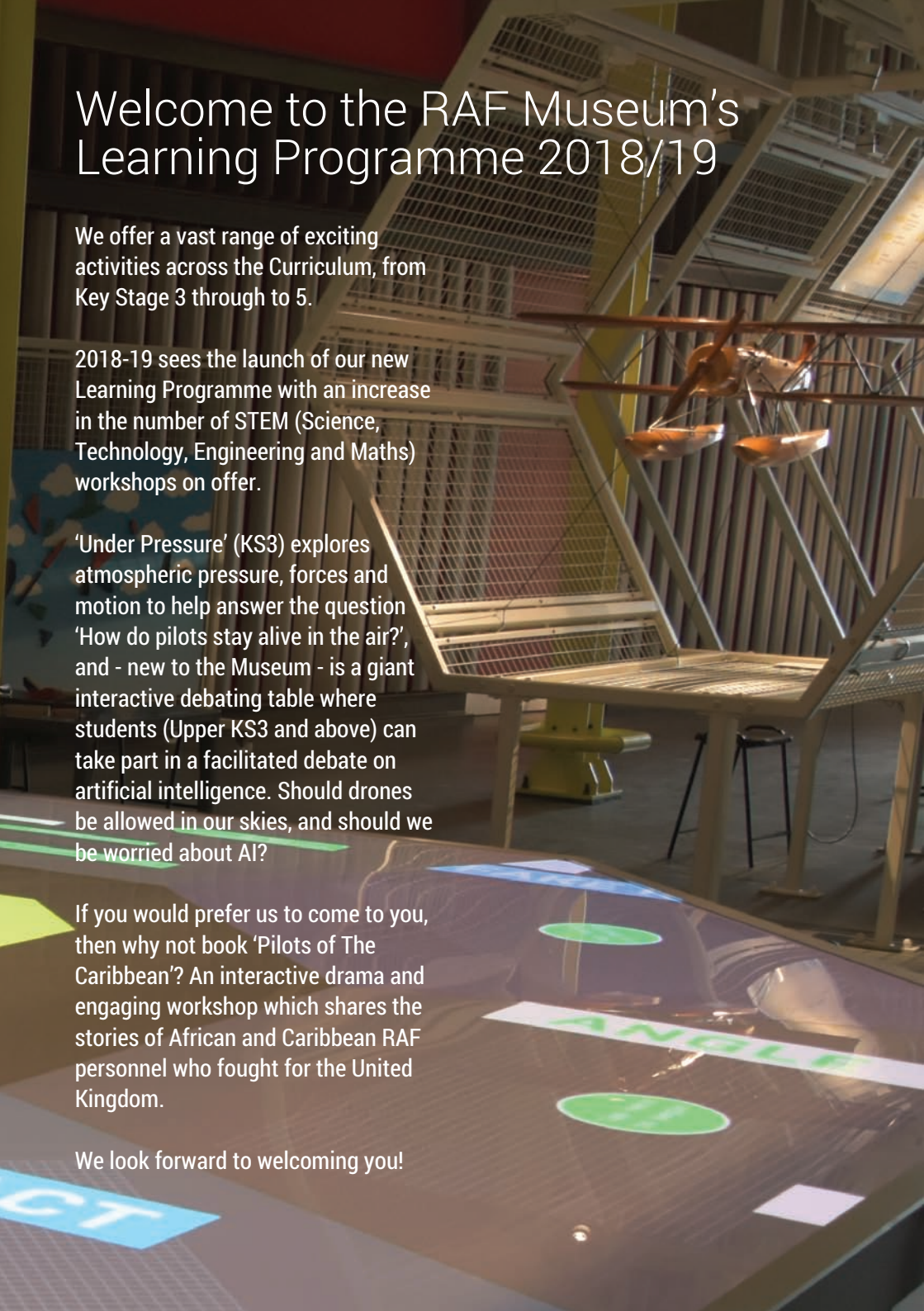
We offer a vast range of exciting activities across the Curriculum, from Key Stage 3 through to 5.

2018-19 sees the launch of our new Learning Programme with an increase in the number of STEM (Science, Technology, Engineering and Maths) workshops on offer.

'Under Pressure' (KS3) explores atmospheric pressure, forces and motion to help answer the question 'How do pilots stay alive in the air?', and - new to the Museum - is a giant interactive debating table where students (Upper KS3 and above) can take part in a facilitated debate on artificial intelligence. Should drones be allowed in our skies, and should we be worried about AI?

If you would prefer us to come to you, then why not book 'Pilots of The Caribbean'? An interactive drama and engaging workshop which shares the stories of African and Caribbean RAF personnel who fought for the United Kingdom.

We look forward to welcoming you!



# Key Stage 3 and above

## **Pilot Skills (coding) Lower KS3** **NEW**

Do your students have what it takes to be RAF Pilots? Can they navigate their way around a complicated route and do they have lightning reflexes? Find out in our exciting workshop where students use a micro:bit and coding to test their skills.

National Curriculum Links:  
Computing (coding).



## **Under Pressure KS3** **NEW**

How do pilots stay alive in the air? Through taking part in experiments and getting to grips with real flight equipment, your students will discover the potentially lethal effects of changing air pressure, examine heat transfers and their effects on flight crews and explore how pilots can train their bodies to fight high G-Forces.

National Curriculum links: Science - Atmospheric Pressure and Pressure in Liquids, Describing Forces and Motion, Heat Transfers.



## **Rockets KS3**

From Newton's third law to aerodynamics and forces, students will get the chance to investigate the science of rockets. Design, make and launch paper rockets, analyse the flight and make improvements for the next launch.

National Curriculum Links: Science - Forces and Working Scientifically.

## **Debate Space Upper KS3/4/5** **NEW**

Are robots taking over the world? Should drones be allowed in our skies and should we be worried about artificial intelligence? In our purpose-built Interactive Debate Space we will help your students find out about the advantages and disadvantages of the increasing use of artificial intelligence and drones. Machines with increasing levels of automation and autonomy could be used in combat. Examine the arguments for and against and argue for your teams point of view. When the debate is over, your students will vote on what they really think about this controversial topic.

Complement your visit with an exploration of our RAF: First to the Future exhibition which examines how the RAF use new technologies such as drones and cyber warfare.

Debate Skills, Artificial Intelligence, robotics and drones.

Free booking during September and October 2018 (subject to availability).



# Key Stage 3 and Key Stage 4

## Local History - Aviation in North London and Hertfordshire KS3

Explore the impact of aviation on your local areas. Companies such as Grahame-White, Handley Page and de Havilland were at the cutting edge of new technology and became major employers as the need for aircraft increased during the First and Second World Wars.

National Curriculum Links: History.



## Changing Technology and Warfare KS3/4

In the race to gain an advantage, war is said to speed up technological innovation. Investigate developments in the design of aircraft and tactics from the First World War to the present day and get hands-on with our collection of flight clothing. If you would like to concentrate on a specific angle or time period such as the role of women in aviation, or the tough decisions faced by Churchill at Dunkirk, please contact us.

National Curriculum Links: History and DT.

Supported by Walter Hines Page Chapter, NSDAR, London UK.



## First World War Handling Collection

### KS3/4

Only 11 years after the first powered flight, aeroplanes took to the skies in the First World War. Students will build an historical enquiry around the use of this new technology and get hands-on with (or dressed up in) period flying clothing to discover stories of the brave men and women of the air forces.

National Curriculum Links: History.



## Flight Factory KS3

Join us in our First World War aircraft factory and take on our plane building challenge. Investigate aircraft structures and work in teams to design and build your aviation creation.

National Curriculum Links: DT.





### **In-school session:**

#### **Pilots of the Caribbean KS3/4 NEW**

An interactive drama and engaging workshop sharing the stories of African and Caribbean RAF personnel who fought for the UK. Audiences discover what made these brave volunteers fight for the country that had enslaved their ancestors and what convinced those who followed to defend their country. There is also an opportunity to look deeper at the collection belonging to these inspiring heroes and sheroes.

Facilitated workshops looking at some of the issues raised in the drama can be run after the performance for groups of up to 35 students. The performance can also be booked as a stand-alone event.

Offered to schools in the Greater London area. Schools outside this area can book to attend the performance and workshop at the Museum. Available on Mondays during term-time. The performance lasts 45 minutes and is ideal for whole-year groups.

**Cost:** £150. Add on workshop 30 minutes each. Up to 4 classes per day (max 35 students per group) £50 per workshop.  
**National Curriculum Links:** History and Citizenship.

To book Pilots of the Caribbean, please email: [learning-london@rafmuseum.org](mailto:learning-london@rafmuseum.org)

#### **Challenge Day KS3 NEW**

How can the RAF deliver humanitarian aid accurately and safely? Do your students have what it takes to meet this challenge?

In a day packed with hands-on missions, stretching calculations and tests of teamworking ability, students learn what it takes to engineer a successful supply drop. They also explore the RAF's role in distributing aid after major disasters and see examples of the aircraft involved.

The day ends with students piloting a drone with their supply drop slung underneath. Have they calculated the load correctly? Are they flying at the optimum speed? Have they taken the terrain into account?

Working in small teams, students will develop skills in self-management, problem solving, research and communication.

**Activity: Design/Engineering Challenge.**  
Requires 60 students (or 2 classes) to run  
£150 for groups of up to 30 students  
£300 for groups of up to 60 students  
(optional £3 fee per student for the Crest Discovery Award - application in process)  
Whole day activity, 10.00am to 2.30pm  
Dates tbc from Spring Term 2019

To book the Challenge Day, please email: [learning-london@rafmuseum.org](mailto:learning-london@rafmuseum.org)



Looking for a Key Stage 5 workshop? Give us a call or email to discuss.

# Workshops

Workshops are available Tuesday to Friday and are suitable for classes of up to 30 students unless otherwise stated.

## Blue Workshops (up to 60 minutes)

Activity times:

A: 10.15am - 11.15am

B: 11.15am - 12.15pm

C: 12.15pm - 1.15pm

D: 1.15pm - 2.15pm

£60 per workshop.

## Red Workshops (up to 75 minutes)

Activity times:

A: 10.15am - 11.30am

B: 11.30am - 12.45pm

C: 12.45pm - 2.00pm

£90 per workshop.

## Special Educational Needs

We can deliver amended workshops, based on our school activities, for groups with Special Educational Needs. Each activity caters for a maximum of 10 pupils (with no maximum number of teachers and assistants) and runs for between 30 and 45 minutes. For activity times please see 'Blue Workshops' details above.

£30 per workshop.

# SEN Workshops

## Sensory Story

A multi-sensory story following a day in the life of a pilot. Explore a range of artefacts, including flight clothing, and try on RAF uniforms at the end.

## Hands-on with the Second World War

Immerse your students in the Second World War by exploring a range of fascinating objects, listening to 1940s music and experiencing an air raid. As a finishing touch, try on RAF uniforms for a great class photo.

## SEN Discovery Box **NEW**

Our specially created SEN handling box (complete with activity suggestions), features a range of exciting real and replica artefacts for your students to explore at school. Please contact us for more information and prices: [learning-london@rafmuseum.org](mailto:learning-london@rafmuseum.org)





# Information

## **Bookings**

Please complete our online booking form:  
<https://www.rafmuseum.org.uk/london/schools/school-visit-booking.aspx>

## **Self-Guided Visits**

You can also bring your group to the Museum on a self-guided visit. For more information visit: <https://www.rafmuseum.org.uk/london/schools/self-guided-visits.aspx>

## **Lunch Space**

The Museum has indoor and outdoor lunch areas.

## **Parking**

The Museum car park is free for school coaches but a charge applies for regular car parking.

## **Cancellation Policy**

If you need to cancel your booking but give less than two weeks (10 working days) notice, you will be charged in full. Likewise, if your school fails to arrive on the booked date of your activity, you will also be charged in full.

## **Free Entry**

There is no charge for entry to the Museum.

# Schools Learning Programme **Secondary** 2018/19

Key Stage 3 to Key Stage 5

"Thank you for having us. I found all your staff very helpful and welcoming which made for an excellent visit."

**Aylesbury Grammar School, Year 11 teacher**

"The facilitator was outstanding. She was so sensitive to the nature of our students and the fact that they are special needs but also teenagers. The students really enjoyed dressing up and she was able to engage them for the whole session."

**Year 9 teacher**

"Excellent talk - many thanks. Extremely detailed and interesting plus pitched at right level (lots of detail which the boys really enjoyed)."

**Year 11 teacher**

"A huge and unreserved thank you for what has been a superb visit to the RAF Museum. Both students and adults enjoyed it immensely. Your presenters were in a word SUPERB. They were knowledgeable, articulate, good voice projection, engaging, bubbly and full of enthusiasm...They're born educators!"

**Montclair High School, mixed KS4 and KS5**



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## Opening times

March - October: 10.00am - 6.00pm  
(last admission 5.30pm)

November - February: 10.00am - 5.00pm  
(last admission 4.30pm)