



Science Technology Engineering Art Math

Welcome to ATA's STEAM Newsround and to our first STEAM project rotations for this academic year!

Coming up for the Years 7,8,9 STEAM Clubs:



Year Group	Project Rotation	Teacher	Room
7	Robotic Programming	Mr Haddleton	E310
8	Mega Maths	Ms Niklekaj	E301
9	Pinhole Camera	Miss Peterson & Miss Ohene-Odame	Art room E110

Each project rotation will be for 4 weeks and you will then switch. There are lots of different project rotations to look forward to this year!

*Please see Ms Khan in Science to collect your STEAM lunch passes!*

**Robotic Programming Club** – with Mr Haddleton  
 - The Year 7 STEAMmies were eager to find out what STEAM Robotic Programming was all about. As this was the first week, Mr Haddleton explained that the students were going to “meet the robots” for the first time. After a student led discussion on what robots are and what they can do, Mr Haddleton showed the students three short videos depicting three very different types of programmable robots used in the world today - a flying robot, a driving robot and a robot with artificial intelligence (AI)! The students were amazed to see these robots in the videos and even more amazed and excited when the students discovered that they would

be able to program the actual robots shown in the videos! - Travis - the flying robot, Max - the driving robot and (new for 2018/19) Cozmo the AI robot. Next week they will learn how to use all of these robots. What will they get them to do....?



**Mega Maths Club** – with Ms Niklekaj - The Year 8 STEAMmies looked at the history of the roller coasters as their rotation warm up. They discussed the maths concepts that link to roller coasters. The STEAMmies were very engaged

### Robotic Programming



The Robots are coming! Learn how to program some fabulous robots and then use them to solve real-world problems.

Mr Haddleton

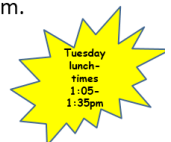


### Mega Maths



Look into the mathematics of roller coasters, their history and cost implications of building and running them.

Ms Niklekaj





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and asked so many questions! When Ms Niklekaj tested them with some challenging questions to answer, she was very impressed with their prior knowledge and ability to analyse the cost of running a London landmark such as the London Eye and a debate on whether it was worth the initial £80 million cost was enjoyed.



**Pinhole Camera Club –** with Miss Peterson and Miss Ohene-Odame - The Year 9 STEAM-mies discussed the varying approaches to photography and the

differences in process between taking a photograph with a digital camera and a film one. They then experimented with light sensitive paper to begin to confirm their initial understandings about the significance of light in producing an image with traditional (film) photography.

### Pinhole Camera



Experiment with light sensitive paper before creating your very own pinhole cameras! Take photographs with your new cameras and we'll develop them in our ATA dark room!

Miss Peterson & Miss Ohene-Odame



**STEAM Academia –** with Ms Khan, Mr Moloney & Mr Mensah – Mr Moloney provided a hands-on look at the properties of polymers. The STEAM Academics dissolved polystyrene cups with acetone, and then moulded the now soft polymer into their own shapes and designs. The



STEAM Academia - "The society concerned with the pursuit of research, education and scholarship".

A fantastic line up of STEAM guests will visit to deliver STEAM Academia workshops in Term 1!

Location: C210

Ms Khan, Mr Moloney & Mr Mensah

Week	Theme
1	Introduction & acetates experiment
2	Computer Science at the Metropolitan Police
3	Civil Engineering at Smart Grid
4	Life as a PHD student at Imperial College London
5	Primary Cell Transduction at Glaxo Smith Kline
6	Wow Science



creations were left aside to harden so that they can add to their designs by colouring them before they take them home. Next week, there will be a special STEM Ambassador guest in STEAM Academia – a Computer Scientist from the Metropolitan Police!

**6th Form STEAM Ambassadors Programme –** with Mr Sellars – In this first STEAM week, our marvellous new 6th Form STEAM Ambassadors were deployed to support with the delivery of the Years 7,8,9 STEAM Clubs / Year 10 STEAM Academia sessions and they are proving to be a valuable asset to the STEAM Enrichment Programme already, developing their leadership, collaboration and presentation skills. Next week, our 6th Form STEAM Ambassadors will have the chance to meet our special STEM Ambassador guest – a Computer Scientist from the Metropolitan Police!

Well done, STEAMmies! You've made a STEAM-azing start to STEAM 2018-2019!

Ms Khan

STEAM Coordinator – Ashcroft Technology Academy

