



Science Technology Engineering Art Math

Welcome to ATA's STEAM Newsround! This week in STEAM .....



# STEAM

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## 2018-2019

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 very excited when Mr Haddleton showed them both the Travis flying robot and Cozmo the Intelligent robot. The group were split into teams in order to get to know how to control the robots, ready to start programming them next week. Travis proved as difficult to fly as ever, but most teams were able to remotely fly him very near to his designated landing spot on the classroom floor after only a few attempts. Cozmo also proved very capable of attracting attention. He was taught to recognise the faces and speak the

names of some students and also to play some cool games with his blocks against the students! The Year 7 STEAMmies mostly won the games, but Cozmo has a brain that is getting to know them and their

tactics quickly. The Year 7 STEAMmies were then hugely excited when Mr Haddleton showed them another type of programmable robot – Max the jumping/driving robot. The group now have three very different robots to learn to control. Travis, the flying robot proved very popular again and many teams successfully landed it in the correct location. Cozmo had learned some new moves and games since last week and the STEAMmies were keen to beat him at the new games. Some teams did, but not all! Next time, with everyone able to control at least one robot themselves now, we will start the competition to find the best robot controllers in Year 7 STEAM Club!

**Mega Maths Club – with Ms Niklekaj** - The Year 8 STEAMmies learned about the Steel Dragon rollercoaster in Japan, one of the world's longest and tallest rollercoasters. The STEAMmies used a mathematical function to determine the height of the Steel Dragon as it falls from its tallest drop and created a table of values to determine how long it





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takes the Steel Dragon to reach the bottom. They then used their mathematical skills to compare the height of three roller coasters, looking at the speed of each rollercoaster.

Next time, our STEAMmies will design their own rollercoaster. Looking forward to seeing their finished designs in due course!

**Pinhole Camera Club – with Miss Peterson and Miss Ohene-Odame**

The Year 9 STEAMmies started making their pinhole cameras. They discussed the importance of their cameras being absolutely light proof and painted their cardboard boxes with opaque black paint, taping over any corners that may have let light through to the interior. They then finished making their cameras by fitting out their boxes with aluminium pin holes and took their first tour of the dark room in preparation for developing their first photos next week!



**STEAM Academia – with Ms Khan, Mr Moloney & Mr Mensah**

Two special STEAM guests visited STEAM Academia - Lisa from the Metropolitan Police, who gave the STEAM Academics an exciting glimpse at what a career in Computer Science could entail. Her expertise has led her to working in the



counter-terrorism division, having an invaluable impact on society. There was a flurry of questions from the STEAM Academics, who wanted to know more about

her work, as well as what courses she would recommend to get into such a career. A truly fascinating session indeed! Also, Chris Joly, who spoke to students about his passion for Astronomy. With a background in Civil Engineering and a career with SHELL and renewable energy, Chris showed the value of a Science degree and the many opportunities it can open for future career pathways. “What’s in a black hole?” and “Are wormholes possible?” were just some of the questions he spoke on, and he’ll be back again in November for a follow up session with some more insights on the search for intelligent life.



# Inspire a Generation

**6th Form STEAM Ambassadors Programme – with Mr Sellars**

The 6th Form STEAM Ambassadors continued working with the Years 7,8,9 STEAM Clubs, sharing their knowledge and aiding the teachers delivering Robotics and Pin Hole Camera projects. The STEAM Ambassadors attended the Year 10 STEAM Academia sessions also and met our special guests - Lisa from the Metropolitan Police, who presented about her impressive career pathway as a Computer Scientist, and Chris who is a Civil Engineer and Astronomer. In form time, they have been exploring the job market with particular focus on careers that are open to technology based students, looking at roles such as: Engineering Design Manager, Senior Electrical Technician and Lead Software Engineer. All excellent preparation for



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deciding what further education and career paths to take. Additionally, there was a real buzz in Mr Haddleton's robotics and that wasn't just the drone flying around the room! Great work from the 6th form STEAM Ambassadors: Alex, Selin, Leonardo, Kai, Arslan, Maria, Polina, Bartoz and Abdulwase who all did an excellent job with the different robot groups, which included flying drones and more grounded, land based robots. With maybe not quite the same buzzing, but all the same some brilliant creativity going on, Wajahha, Keisha, Amhmed, Alice and Hibbah were working with Miss Peterson and the year 9s to create pin hole cameras. Still in the production phase, their very own cameras will be used to take photos and the film will be developed in ATA's own dark room. It's really exciting to see such inspirational tasks being led with the help of the Ashcroft's STEAM Ambassadors!

wowed the students with her account of her fascinating work at the Large Hadron Collider. The team from Melanin Medics educated the Year 7 on the education pathways to a career in Medicine and quizzed the students on the different types of medical specialist roles that may be pursued. A thoroughly informative event, which led to several more Year 7 students inspired to apply for the Year 7 STEAM Club also! The next Year 7 STEAM event will be held on Tuesday, 9th October 2018 and will be a Maths Science Master Class event which includes a bridge building challenge, with Year 7s trying out their teamwork, design, testing and application skills in an exciting and interactive workshop event.



**Year 7 STEAM Enrichment Programme – with Ms Khan & Ms Fitzherbert** - Year 7 attended their first termly STEAM event in the Auditorium recently.

They met guest presenters from a diverse array of STEAM career pathways and learned about the amazing career opportunities that await them in the future. Neil Hatton from UK Screen Alliance and Tom Box from Blue Zoo Animation Production Studio presented about their work in visual effects and animations in the film industry, citing several big blockbuster movies as their credentials, which really impressed the students. Kathryn Cobham, a nuclear research scientist from CERN Laboratories in Switzerland



**Science trip to Brussels - 5<sup>th</sup> to 7<sup>th</sup> April 2019**

For: Years 8-9 students  
Duration: 3 days/2 nights  
All inclusive – coach, city transfers, hotel and food  
Itinerary: Brussels City Centre, Grand Place, Euro Space Centre, Planetarium, Institute of Natural Sciences, and Atomium.  
Cost: £273  
[See Ms Khan for an information letter](#)

**Exciting Trip Opportunity to Brussels for Years 8-9** - Ms Khan visited the Years 8-9 assemblies this week to inform about an exciting Science trip opportunity to Brussels in April. This trip is open to all students – STEAM and non-STEAM. Interested Years 8-9 students should see Ms Khan for a trip letter. There is a limit of 35 places currently and replies are due in by Friday, 5th October 2018.

That's another STEAM week wrapped up! Well done, STEAMmies! You're absolutely STEAM-tastic!

**Ms Khan**  
**STEAM Coordinator**  
**Ashcroft Technology Academy**