

# THE STEM TIMES

The Newsletter For All Things STEM At Magna Academy Poole

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### **Robotics Day**

On Friday 24th February, 30 Year 8 students had the opportunity to participate in a robotics outreach event run in conjunction with Bournemouth University. After an introduction from the University staff where students learnt about the importance of science, technology, engineering and mathematics (STEM) education and employment opportunities, it was then down to the nitty gritty! Students had various activities where they were able to write code to get the robots to perform a series of tasks. Every member of staff from both the Academy and Bournemouth University were impressed with the level of commitment and determination shown by the students to complete the challenges.

Opportunities like these are so important as it opens the eyes of young people to the importance and diversity of roles available within the STEM field. It's no overstatement to say many of the challenges we face as a species will be solved by people working in the STEM field. It was heartening to hear from students that they recognised this.

Most importantly, the students had fun whilst learning about the programming of robotics.

Starting with a blank sheet and then developing code has been fantastic and today I have realised that making small changes to code can make significant differences to the robots.

- Logan (8BHY)

It has been a real joy to spend the morning with year 8 and to see their engagement with the robotics session. They have used their knowledge and understanding of coding to enhance their experience and the academy has a really lovely feel to it. We hope it will inspire them to follow careers in STEM.

- Libbi Hammond, School Liason Officer

This has been a really fun workshop as there are lots of active learning opportunities, we are learning independently and we have also learnt about future STEM careers that involve robotics and design.

- Lucy S (8RPE) & Angelina S (8EJN)

I've been amazed how we can use code to programme a robot - it's been fantastic.

- Harry W (8EJN)







## **Maths Challenge**

We are delighted to announce that 17 students in Years 9 and 10 completed the intermediate maths challenge and received gold silver or bronze awards. Many congratulations to all those who took part. Special mention to Volodymr P who won a gold award. We are very proud of Volodymr's achievements as he has only been in the academy for a year after joining us from the Ukraine. Volodomyr has integrated well and he thoroughly enjoys learning at Magna Academy.



#### **STEM Rockets**

Before Christmas, the STEM club was involved in building rockets from household materials. It turns out all you need are a bottle, card, a cork, a football inflation valve and a pump! Students were astounded with how far you could launch an old lemonade bottle with a pump, but I think it was Mr Barrett who had the most fun. At present, the STEM club is building bridges to test so if students want to get involved, they should head to G117 on a Tuesday after school.

Left: Damian and Leo from Year 7 prepare to fire, ably assisted by Mr Barret (thankfully not pictured!) Right: Sam and Oakley from Year 9 have acquired their target and are ready to pressurise.





#### Neo S



On a cold, rainy Tuesday evening in February, staff and students alike were treated to a scientific presentation of the most stupendous magnificence. Neo S in Year 11 has been feverishly working away to produce his own tabulated versions of key scientific data as part of his higher project qualification (HPQ). As a part of his research, Neo had to present his findings to a specially selected audience of staff and students, assessed by academic director of science, Mrs Bleeze. At the end of his presentation, Neo took questions from the audience, including quite the grilling from Mx Herbet (Physics tutor and science technician) and Mr Barrett, deputy academic director of science. Neo fielded these questions skillfully and demonstrated scientific understanding beyond his years. We are all very proud of him and look forward to what he has in store for us as he moves to Sixth Form next year to study Chemistry, Physics and Maths.

## **Science Week Competition**

British Science Week, in conjunction with the British Science Association ran this year from the 10th to 19th March. A key part of the event is the national poster competition which this year has the theme of "Connections". We know that so much of Science relies on connections between atoms, organisms and people collaborating so there is a lot of scope to be creative. Students from years 7 to 9 produced posters linked to the theme of connections. Mr Barrett and Mr Ginger were overwhelmed with entries but in the end the top 3 were: 1st - Quinn R 7(ATR), 2nd - Bailey H (7MMN), 3rd - Hollie W (9CFA). All placing students will receive an Amazon voucher, £10 for top spot and £5 for second and third. A huge congratulations to all entrants.

