South Wirral Digest





STEM ACTIVITIES AT **SOUTH WIRRAL**

A SMALL SELECTION OF THE TYPES OF STEM ACTIVITIES THAT TAKE PLACE AT OUR SCHOOL



ON MONDAY 4TH DECEMBER WE HOSTED THE FIRST PRIMARY STEM MORNING FOR HEYGARTH PRIMARY SCHOOL.

he event was comprised of three independent workshops that integrated the Science, Maths and Technology departments and showcased how wonderfully these subjects work with each other.

The students were able to enjoy making and testing cakes and creating boxes, solving a forensic murder mystery and building a mechanical hand.

At the end of the day the students had a chance to comment on their

experience. Here is what a few had to say:

- I enjoyed learning how to use a hot glue gun and having fun"
- Thank you for letting me and my class enter your school. I would hope to come back for more fun. I enjoyed making cakes and problem solving."
- I enjoyed the powder testing because I got to use a Bunsen Burner".

We look forward to continuing the Primary STEM workshops in the Spring!









DURING AN USUALLY SUNNY DAY IN JULY(!), MR TAM AND MRS WIGFALL TOOK A GROUP OF YEAR 8 MATHEMATICIANS TO THE APPLE STORE IN LIVERPOOL.

heir team of educators set up a workshop for us in the store, with an impressive state-of-the-art 7K screen as our backdrop.

During the 80 minute session, our Year 8s learnt how to control a Sphero robot using touchscreen controls on an iPad, before learning how to instruct it to move in a sequence using block coding commands. The challenge was then to guide the robot around a maze that contained obstacles and ramps. The more able students were then given a detailed insight into Swift programming, identifying the link between block coding and text commands.

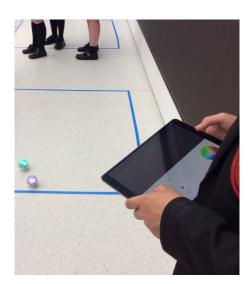
For me, the session was a good opportunity to reinforce how Maths links in with Science, Technology and Engineering. For our students, it was inspiring to see how basic Maths could then progress into the programming of simple, yet popular video games such as Crossy Road. Finishing the session with a Crossy Road competition was a nice touch by the educators. Well done to Hollie W for getting the highest score!" says Mr Tam.

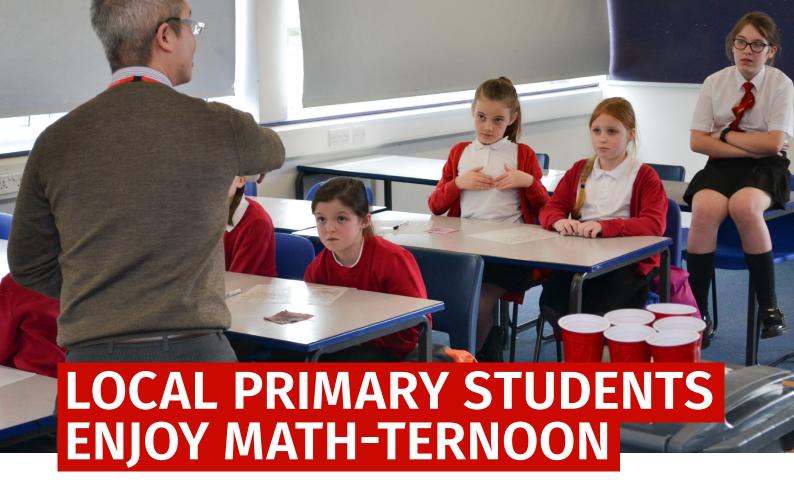
I was delighted to see how many of our girls were enthusiastic in joining in with the coding and the Maze Challenge. This is an extremely positive start in ending the hugely uneven mix of boys and girls going into STEM-related careers," says Mrs Wigfall.



"We learnt how
to code using Sphero,
programming a robot
around a maze. We had to
use angles so we could show
what degrees the turn was.
I enjoyed trying out what
the different Apple products
could do"

- Ruby





uring March, our Maths
Department hosted two
"Math-ternoons" for our
Year 5 and 6 visitors from Mendell
Primary.

Our sessions involved solving number problems in a worded context and solving puzzles that required logic and lateral thinking.

Guided by Mr Tam and Mr Girow, our Year 7's - Candy, Maggie, Tom and Adam - confidently assisted with the activities and eventually led the discussions with our guests.

For me, the Math-ternoon was a good opportunity to reinforce good reasoning skills at both primary and secondary level Maths. For our guests, it was inspiring to see how our Year 7s, some of whom were ex-Mendell students, have developed into confident

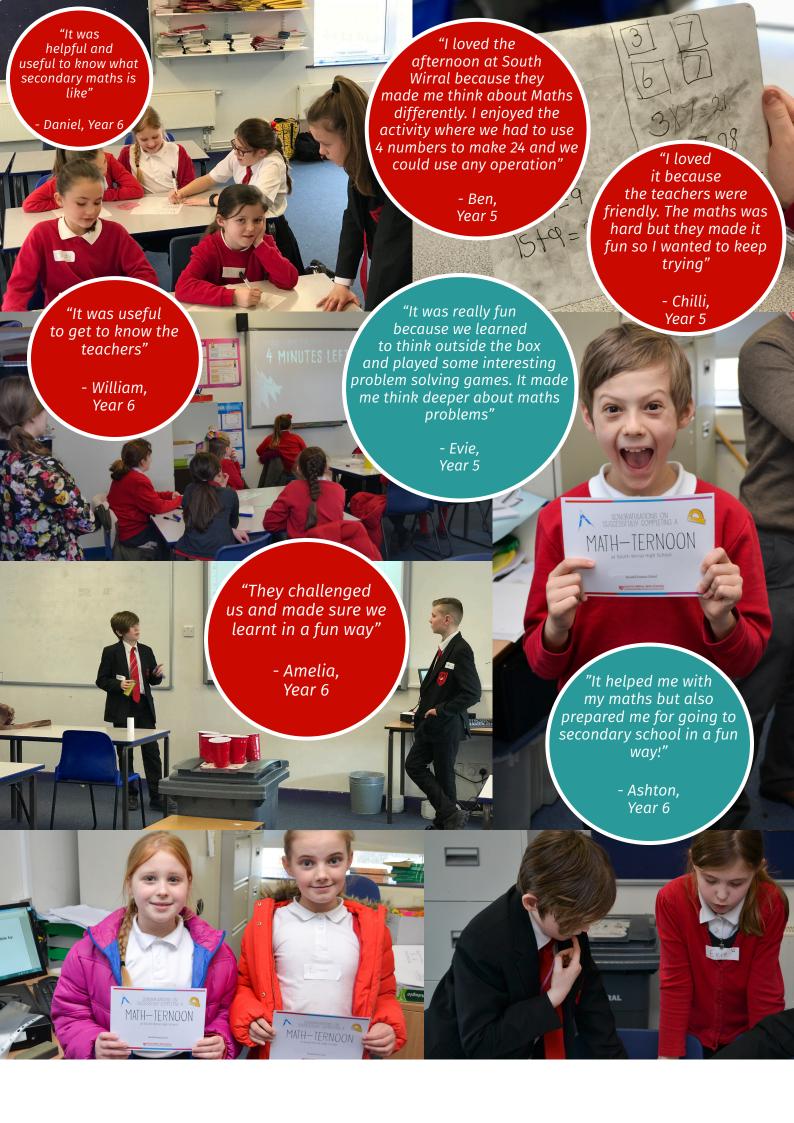
leaders," - Mr Tam.

I enjoyed seeing our Year
5 and 6 guests learn that
teamwork is an important skill
in Maths. Whilst sometimes the
answer isn't immediately obvious,
we wanted to show our guests the
need to be resilient at Maths,"
- Mr Girow.

Our Mendell guests also agreed that the Math-ternoon was an afternoon well spent!









SIX STUDENTS FROM SOUTH WIRRAL HIGH SCHOOL WERE RECOGNISED AS SOME OF THE BRIGHTEST IN THE COUNTRY AFTER BEING AWARDED CERTIFICATES FOR THEIR SUCCESS IN THE UKMT MATHS CHALLENGE IN APRIL.

total of 31 students represented South Wirral this year, competing against over 3,500 other schools in the UK and Europe. All these students attempted 25 maths reasoning questions where they rewarded marks for correct answers and deducted marks for incorrect answers.

In Year 7 Tom Stockford gained the highest mark in the year group and was within the 19% of all the students competing this year, earning himself a silver certificate. Keeley Cavell and Sam Barr, also both from year 7, were awarded

bronze certificates meaning that their scores put them in the top 40% of all students competing.

In Year 8 Aaron McGowan gained the highest mark in the school and was one question away from being in the top 6% of all students who competed this year. He gained a Silver, Best in Year and Best in School certificates for his efforts. Duncan Doyle and Joshua Gerrard were the two other success stories coming from year 8 who both were awarded bronze certificates for their efforts.

This experience has been hugely rewarding and proves something that all teachers at SWHS know; that we are teaching some of the brightest minds in the country. We look forward to competing next year and gaining even more awards in the future.















30 OF OUR YEAR TENS WERE PRIVILEGED TO BE INVOLVED IN DIGITAL DAY 2017 ON NOVEMBER 14TH FOR THE SECOND YEAR RUNNING. DIGITAL DAY IS A NATIONAL INITIATIVE TO RECOGNISE CAREERS IN THE DIGITAL MEDIA INDUSTRY, COMBINED WITH CHALLENGES FOR THE STUDENTS TO COMPLETE DURING THE DAY.

he day started out with a presentation from our partner for the second year a Digital media company called Reckless based in Chester. We were very honoured that Emily Strickland and her colleagues took time out of their busy working lives to join us for the whole day. The students were shown the huge opportunities that exist in the area and most were shocked at how many disciplines were available. After a very inspiring presentation they were introduced to 3 challenges and asked to choose 1 to work on. The challenges were to use different digital media to help promote 3 very different concepts:

Create an innovative digital product or service for LV= pet insurance customers that could help pet owners: keep their pets healthy; make pet ownership more social; or take some of the hassle out of owning a pet.

Imagine a way that digital advancements such as these could be used to improve one of the following aspects of school life: 1. This week is Anti Bullying Week. Imagine a way that technology could be used to reduce bullying in school and online or encourage others to stand up to bullying. 2. Classrooms of the future. How could digital technologies improve your school or your learning experience? Let your imagination run free and don't be constrained by what's possible "right now".

We want you to create a piece of wearable technology that would solve a problem that you, your family or friends face in everyday life. Don't be afraid to think big and be creative.

Our students then planned their chosen task in groups, with expert opinions from our guests to help them develop their ideas. Most popular was the wearable tech challenge, with one team creating an app for pet owners. Later in the afternoon they presented in 'Dragons Den' style. We had 2 winning teams whose ideas have been put forward to the national competition.

Well done to them and to everyone, our guests were very impressed with your ideas and standard of maturity!







ON FRIDAY 9TH FEBRUARY WE HOSTED THE SECOND PRIMARY STEM MORNING FOR BROOKHURST PRIMARY SCHOOL.

he event was comprised of three independent workshops that integrated the Science, Maths and Technology departments and showcased how wonderfully these subjects work with each other.

The students were able to enjoy making and testing cakes and creating boxes, solving a forensic murder mystery and building a mechanical hand.

At the end of the day the students had a chance to comment on their experience. Here is what a few had to say:

"I enjoyed baking and eating healthier cakes."

"I enjoyed the chemicals reacting with soil. This was cool. Thank you!"

"I enjoyed making the robot hand".

We look forward to continuing the Primary STEM workshops later this year!

