

THE CARLTON TIMES

STEM WEEK SPECIAL EDITION: DECEMBER 2016

On the 4th November 2016, Year 5-Amethyst Class went to Fab Lab for STEM (Science, Technology, Engineering and Maths) Week.

When we got there, the children were asked to programme a robot to move through a maze. After this finished, they were then asked if they could draw triangles and circles with the robot as well. My group attempted an equilateral triangle that we had to persevere with to try and complete.

While we were doing this, small groups of children were taken out at regular intervals to have a look at a 3-D printer! 3-D printers can make things by layering paper-thin, super-heated substances, then cooling it rapidly. A range of things made from this printer were shown to us.

There was also an algae farm where they made edible algae! First they collect it, before mixing the algae for 8 hours. Then it was looked at through an electron microscope to ensure it was just green algae; if it was, then you could eat it.

STEM week and my trip to FabLab have really inspired me to become an engineer when I grow up. I'm sure that lots of children will now know that learning about STEM will help you in the future. What job will you choose?

By Jack Year 5



Year 2 students in Emerald class investigate what a physiotherapist does.

Two weeks ago, my class went to RADA, which stands for the Royal Academy of Dramatic Art—a drama school.

When we arrived, my class met some adults that were learning there for a few weeks, before then going to work at different theatres around the world. Next, we were split into three groups and my group first went to the prop-making area. I learned that many props are made out of wood, plaster and alginate. This is a material that your dentist gives you when you want braces—it normally comes in a powder.

The next station was about the theatre lighting. You can make some very powerful lights work with just the press of a button. Some of these lights were so powerful that they could make you blind! On the control panel, there were a range of buttons that made the lights do different things.

Finally we went to the sounding station. We learned that EV's are a type of speaker and a man gave us lots of information about the use of sound in theatre. When then were split into even smaller groups and performed a small play with a stage director and an actor, while a child controlled the sound. It was fun!

Did you know that there are over 250 theatres in the West End of London alone?

By Gaspard Year 4



Above: Year 1 designed their own marble runs

Below: Thea in Year 1 programmes her robot.



Last week Year 3 went on a trip to the Wellcome Trust and we learned a number of things. First we learned how to be scientific by trying to guess what was inside a box without looking using various skills and senses. Secondly, we watched a man make 2 different smoothies made out of a range of fruits and vegetables. There were plenty of other activities we did throughout the day.

By taking your children to the Wellcome Trust, this will help them to learn more about science. I would recommend telling your families and friends about it because it is really helpful for children.

By Sameerah Year 3

For STEM week, I visited Year 1 where there were some scientists teaching the children how to make their own torches. They also had the opportunity to create and play their own game, then build some structures out of LEGO!

In my role as a career champion, I helped to support the Year 1 children with their learning—it was a lot of fun as I like LEGO too.

By Alnit Year 6

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STEM (Science, Technology, Engineering and Maths) Week took place at Carlton Primary School from the 31st October to the 4th November 2016. The aim was to get more children interested in pursuing these types of careers, especially girls (who only make up a small percentage of the STEM adult work force.

We went to the Fab Lab for our STEM trip. First we met some people who were working for a company called Sales Force. They introduced themselves and gave a short description of what their job was. There were also more salesmen and some people who buy their products.

After everyone was introduced, we began to learn how to programme our Micro-bots (a little robot which was designed to listen to a code from the computer). We were split into groups with an adult to help us. There was also a maze on the table which you had to programme the Micro-bot to complete. It was measured in cm, and the children had to convert from cm to mm.

Over view of Events for the Week:

What each class did across the week:

Nursery: Visit from the Met Police, Forensic Workshop

Reception: Visit from the Met Police, Forensic Workshop

Y1: Careers Carousel

Y2: Visits from a Physiotherapist and a Pathologist

Y3-Amber: Workplace Visit to the Wellcome Trust

Y3-Tigerstone: Workplace Visit to Ruby Violet

Y4-Opal: Workplace Visit to the New Diorama Theatre

Y4-Topaz: Workplace Visit to the Royal Academy of Dramatic Art

Y5: Workplace Visit to Fab Lab

Y6-Jade: Workplace Visit to the Royal Vet College and a Future Careers workshop

Y6-Sapphire: Workplace Visit to the Grant Museum of Zoology and a Futures Careers workshop

After we finished the maze, children could put a pen on the Micro-bot and code it to draw something. One group even programmed it to draw a house!

In between lessons, some groups took turns to see the other things in Fab Lab. There was a 3-D printer which had created a boat, and there were also earrings made by a laser printer. At the end of the day we were given a special Fab Lab key ring made by a laser cutter.

This trip really made me want to learn more about engineering and coding, as these are the things that can change the world. One thing that really fascinated me was when they said they could use engineering to produce food-even through underground farms!

By Nafisa Year 5



Crystal Class begin programming their computers

As part of our STEM week activities, we made musical instruments, including a harmonica and a type of kazoo. It was surprising how much simple equipment we used to make them. For instance, we only used elastic bands and cardboard tubes to make one instrument! We also learned about how to be sound engineer, who is a person who takes out the bad bits of a song and adds in sound effects.

There were also chances to shine torches on mirrors and magnifying glasses to see if they would reflect or retract the light. This was also tried on glass triangular prisms and rainbow peepholes.

For our STEM week visit to the New Diorama Theatre we learnt about how they did the sound and lighting at the theatre. There were many different types of light and a special keyboard that was used to control the lights and change their colour. On a computer we had a chance to programme sound and then we made our own play!

I enjoyed STEM week and will be looking forward to the next one.

By Vita Year 4

In Year 6 our STEM topic was Fast-Forward, where we learned about future jobs in the Science, Technology, Engineering and Maths industries.

The first profession we learned about was zoology. In class we had the opportunity to dissect owl pellets, which is what an owl regurgitates after eating a meal. We were given various instruments and a key to use to find out what used to belong to an animal. Some children in our class were scared, but when we started it turned out to be lots of fun.

We also went to the Zoology museum, packed with over 6000 animal specimens. There was time to look around and we were given 2 activities to do. The first was to complete a list of animal body parts by finding them in the museum, while the second was matching the jaw of an animal to its head-this was easy, but you also had to guess what the animal actually was! This trip has definitely inspired me to look after animals better.

By Sammy Year 6