

# The Update



## Welcome from the Principal

Welcome to the latest Update from Thornaby Academy. We have had a very busy and exciting start to 2019. Without exception, our students never fail to impress and prove to us on a daily basis that the sky is the limit. These are just some of the activities that our student have been involved in this spring.

### **CERN is for Science**

In January, a group of students travelled all the way to Switzerland to discover and explore state of the art Scientific research at CERN, home of the Hadron Collider. Students marvelled at the institute that has brought the latest research to the world on the origins of the universe. Students also had the opportunity to visit the world-famous natural history museum to compare our past with our future.

### **Music Maestro**

This March, our students entertained parents and peers alike by performing a series of songs, both modern and traditional in an evening of pomp and ceremony. Applause was plentiful and well –deserved too. Not only did our students sing from their hearts, but they organised, arranged and managed the whole event from behind the scenes to front of house. One of the songs from 'The Greatest Showman' proved that our students performed the Greatest Show.

### **Thinking of our Future**

Year 10 students raised their aspirations this February by visiting Cambridge University to learn more about being an Oxbridge student. They were inspired by the experience and came back keen to study at one of their prestigious colleges in the future. Closer to home, every Year 9 student had the opportunity to visit Stockton Riverside College this March. Whilst some explored what was on offer at Bede Sixth Form by taking part in A Level taster lessons, others travelled to NETA to take part in hands-on activities at their Engineering provision. Students have greatly valued the opportunity to learn about future career pathways.

### **Football Fanatics**

This term, a group of Y9 students were fortunate to work on a 'Meaningful Encounters' programme led by Middlesbrough Football Club. This is an eight week programme which provides students with the opportunity to explore essential business and enterprise knowledge by delving into the business aspect of

Middlesbrough Football Club to develop ideas and solutions that will potentially impact upon the operations and success of the club. The programme culminated with a celebratory event at Middlesbrough Football Club's Riverside Stadium where students found fame on Sky News.

### **Magic Number**

In February, every student celebrated 'Number Day'. From pi to pythagoras, students learnt about the significance of number by taking part in arrange of quizzes and activities throughout the day to raise the profile of the numeracy. Students adorned a number of their own and proved once again to us, that they are our always our number one.

### **All the Fun of the Science Fair**

One of the highlights in the spring term was the Science Fair. Building on the successes of previous years, every Year 8 student took part in the project. They worked independently on an investigation into a field of their own choice and presented their work at a Science fair enjoyed by parents, pupils from local primary schools and Thornaby Mayor and Mayoress, Mr & Mrs Walmsley. The work was of such a high calibre in terms of scientific content and communication that they have been entered for a nationally recognised CREST award run by the British Science Association. We look forward to finding out the final results of this award later this term.

This year we continue to build on our successes. To support us on our journey to outstanding, we have a new addition to the Thornaby staff team, Ms Lisa Perry, teacher of Art. Ms Perry brings her expertise, experience and enthusiasm to continue to support our young people to be the best they can be.

I look forward to keeping you up-to-date on all the exciting developments at Thornaby in the year ahead. Please visit our website [www.thornabyacademy.org.uk](http://www.thornabyacademy.org.uk) to hear about our news and events and remember, you are always welcome.

**Donna Butcher, Principal of Thornaby Academy**



# Geneva Trip to CERN

At the beginning of January a group of students from years 9 and 10 went to Geneva to visit the CERN project for nuclear research. Wednesday was the trip to CERN and we spent the morning being guided to a test facility for the pipes that make up the LHC (Large Hadron Collider) and visiting the ATLAS project and experiencing the size and scope of the whole site. There was a lot of technical information, but the guides did a good job of helping us to understand how the LHC works.

Before lunch we entered the 'Universe of Particles' exhibition

which everyone agreed was phenomenal. Many of the students who went enjoy both science and art and the merging of the two disciplines here was astounding to produce both interactive installations and a 360 degree film about sub atomic particles that was utterly breath taking.

From CERN we got the tram across the city and spent a couple of hours exploring the Natural History museum and the next day we visited the 'History of Science' museum. We saw some amazing science equipment and explored a



hands on exhibition about forces. By this time we were ready for lunch and then some time shopping in Geneva's retail centre. We even found a sweet shop called 'Sweezerland'!



The next visit was to the United Nations Headquarters for a guided tour. We saw several conference rooms, learned about the work the UN does and got top tips for working for the UN (the main one being to learn a second language). All the students had a fantastic time and said they would have liked to stay longer.

# Building futures with Middlesbrough Football Club and Teesside Park



Building futures with Middlesbrough Football Club and Teesside Park.

Students from Thornaby Academy were thrilled to meet Middlesbrough Football players Britt Assombalonga and Darren Randolph, who came along to assist in the Teesside Park Retail Challenge.

Students were set the challenge to design a new 'Container Business' to be housed at Teesside Park Retail Park.

Working in groups, the year 9 students came up with a number of culinary delights including "Parmo Shack", a French Crepe eatery and an all American Burger joint. Assombalonga claimed to have "never eaten a parmo" and promised to try one there.

Students enjoyed a tour of the stadium and had talks given by high profile business people within MFC who spoke about MFC's business plans for the future.

Sky Sports News filmed the event live and interviewed both the students and the players. One student was quoted saying "this has been the best day of my life".

# Seeing MFC in Action



Having met some of the players in real life it was now time to see them in action.

Thornaby Academy students were invited to the Middlesbrough V Brentford match.

Thornaby Academy students braved the cold weather to see their heroes in action on Saturday 9th March.

Invited to the family zone, students had the opportunity to meet Roary and play Fifa with an "under 23" player.

Students waved the flags during the Pitch Parade and posed for photos with a number of influential people from both the Club and Teesside Retail Park.

Spirits were high when the first goal was scored and while the result should have been different, this didn't take away from the enjoyment of the day. For some students it was the first time they had seen a live sports event and were totally blown away by the experience!



# NSPCC Number Day at Thornaby Academy

Students and staff celebrated the NSPCC Number day for the first time on 1st Feb in 2019.

Despite the snowy weather, students and staff arrived in school enthusiastically dressed in non- uniform, wearing something relating to numbers and/or maths.

Students took part in a variety of activities across all year groups.

Y11 business studies took on the challenge to compete at designing and then organising a fund raising event. The winning team came up with an effective combination of cake sale and guess the number of sweets.

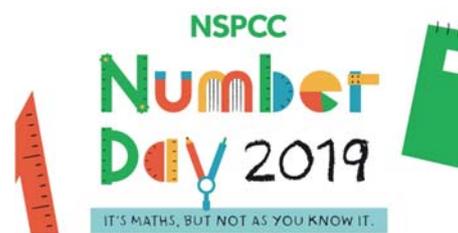
Students across the year groups took part in a number hunt, which involved identifying members of staff who were wearing cryptic clues to answers for a maths quiz.

Students further took part enthusiastically in a quiz on internet safety and and structure of the NSPCC.

During tutor time all students took part in 'Who Wants To be A Mathionaire', which proved highly competitive for teams from KS3 and KS4.

During maths lessons KS4 students completed a 'Tricky Maths Quiz', which proved a challenge and KS3 enthusiastically played and adapted Blockbuster game.

The Number day was a huge success, with students enthusiastically taking part in a wide range of maths activities. It created a real buzz across the whole school and helped students and staff to raise an amazing £386.94 in aid of the NSPCC.



## Do it with Dyson

The 15th February 2019 became Dyson day for 30 Year-8 students. They had the chance to discover all the different types of engineers employed by Dyson through video links and then step into their shoes by disassembling and reassembling a range of products supplied by Dyson. This activity allowed them to investigate the inner workings of the Dyson cleaner following step by step video instructions from Dyson engineers. They

explored the hidden components needed to make the cleaner so efficient and powerful. Following this, the students worked in groups to work as engineers to solve a variety of real-life problems ranging from, 'how to keep children safe when walking home' to 'how to prevent loneliness in old age' and 'how to minimise damage in the elderly if they fall'. The range of ideas and detail in the designs was amazing as each

group behaved as real engineers explaining their designs to the rest of the class.



## Faraday Challenge

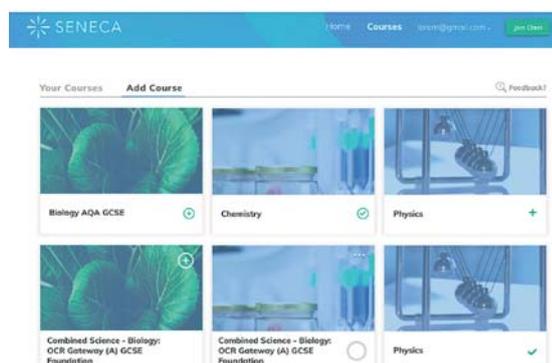
Six year-8 students represented Thornaby Academy at Teesside University as part of the Faraday Challenge run by the Institute of Engineering and Technology. The all-day challenge involved the students working as a team to solve a real-life problem. In this case, the purification of air in a room used for computer or satellite assembly. All students were a credit to the academy, working together

to solve a series of problems, build an electronic prototype and present their work to the organisers and other competitors. All came away having thoroughly enjoyed the experience having learnt a bit more about the world of engineering and the type of work it can involve.

## Seneca Learning

All students and teachers now have free access to Seneca - a revision and homework platform making studying more fun. Seneca is an interactive way to learn official course content. Their web app covers 150+ exam board specific courses condensing what students need to know for their exams. The software is able to identify gaps in learning. For instance, when you get a question wrong,

the platform will repeat the topic in different formats and their smart algorithm has proven to make students remember topics 2x faster. Seneca is totally free for students, teacher and parents. You can sign up via [senecalearning.com](https://www.senecalearning.com)



## Science Fair

In March, Thornaby Academy held their third annual Science Fair run by Year-8 students. As usual every year 8 student was given the brief of, 'find something scientific that interests or excites you and build a display to present your findings to the public'. The students didn't disappoint and presented a wide range of work to a very diverse audience. Attending the science fair were Year-5 students from Thornaby Church of England, Village and Harewood primaries. They were joined by the Mayor and Mayoress of Thornaby and the Trustees of Teesside Learning trust.

There was a wide range of topics on display ranging from volcanos to lava lamps, the inside working of a van der Graaf generator to Vantablack pigments. From the physics of ice skating to phantom limbs and from the working of rockets to the gearing on bikes and the advantages and disadvantages of friction in various aspects of our lives.

"The diversity and individuality of displays, and the enthusiasm and knowledge of students was fantastic. I had some lovely conversations, students were open to questions and answered them confidently and with a conviction that belied their age." J. Foxton CEO of TLT



## Science Live



In February, 20 year-11 students attended a Science Live! Event at Leeds Town Hall. This was a chance to listen to outstanding speakers in the world of STEM (Science, Technology, Engineering and Maths) talk about their world class research and work. Speakers included

Professor Lord Robert Winston talking about the very start of life from a single cell to embryo, Professor Alice Roberts discussing evolution, Dr Kate Lancaster explaining how work is progressing with nuclear fusion in an attempt to solve our energy problems and Professor Dave Cliff discussing how computers have reached their limits in terms of speed and how organic computing is the next step.

The students found the event to be inspiring and informative and it gave them a glimpse into the real world of science that many of them will be thinking about joining in the years ahead.

## Thornaby Academy visits Cambridge University

A group of year 10 students were invited to one of the oldest and prestigious universities in the country, Cambridge University. The day was full of exploring the different colleges that belong to the university. The main college that we were based in was St Catherine's college, this was a base for first and second year students.

The students had the opportunity to view the college in its every aspect. We visited all the facilities it had to offer, ranging from the library, student union and students halls. This really sparked interest from our students who are keen to move away when starting their university journey. We had the chance to dine



in the eating quarters in the college with Cambridge students.

In the afternoon we visited the engineering department of the university. This was extremely interesting as we were introduced

into the aspects of engineering and the job opportunities that could follow. The students were then asked to participate in an engineering a paper aeroplane, although not just an ordinary paper aeroplane! This took skill to make and guidance was provided from the lecturer.

Overall this was an enjoyable inspiring experience for the year 10 students to partake in. Cambridge University could be in reach for some of our excelling students.

**Miss Diamantidis**

## Teenage Kicks Concert

On Thursday 14th March, the Year 10 BTEC Music group organised a music concert for families and friends. The event was called 'Teenage Kicks' and reflected a mixture of musical styles presented through singing. BTEC music students gained an insight into planning and promoting a concert, from organising sound and lighting to serving refreshments, all students were able to demonstrate that they had made a positive contribution to putting on

the event. There were 18 performances from Year 7 to Year 11, many students performed for their first time on the stage. It was a great platform for the newly formed Thornaby Academy choir to showcase their first performance as a group and we look



forward to hearing more from them in the near future.