

Get the Reading Bug!



nuast
Nottingham University Academy
of Science and Technology

Year 7 Summer 'BIG 6' Challenge

<p>Write a postcard to Mr Wood telling him about your holidays.</p> <p>Address it to: Mr Wood, 93 Abbey Street, Nottingham NG7 2PL</p> <p>Parent signature:</p>	<p>Read a book of your own choice.</p> <p>Design a new front cover for it. Use pencils and felt tips or the computer!</p> <p>Parent signature:</p>	<p>Write a story in 500 words exactly. The title is: 'The Curious Scientist'.</p> <p>Let your imagination go!</p> <p>Parent signature:</p>
<p>Find a recipe for cupcakes. Follow it to make your own delicious treats!</p> <p>You will need an adult to help you. Make sure you take a photo before they're all eaten!</p> <p>Parent signature:</p>	<p>Interview an older family member about their childhood.</p> <p>You could ask: What was school like? What was the most embarrassing thing that ever happened to you? You could record it (check permission first)!</p> <p>Parent signature:</p>	<p>Read a newspaper.</p> <p>Talk to a family or friend about an article that you found interesting.</p> <p>Parent signature:</p>

Year 7 may remember being set the 'Big 6' Challenge over the summer. Mr Wood received lots of postcards from you from all over the world! Many Year 7s managed to complete all 6 challenges and produced some fantastic projects. The winners were:

Kamiyah Anderson
Finn Scott
Maaz Ahmed
Aisha Ahmed
Dylan Mitchell



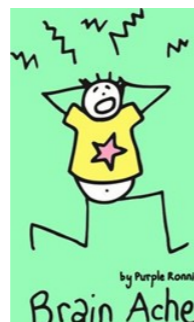
Winners will be presented with a £5 book voucher to use at Waterstone's. Well done to everyone who took part. Happy reading!

Maths Puzzle

The addition sum $XCV + XXV = CXX$ is true in Roman numerals.

In this question, however, the sum is actually the letter-sum shown alongside, in which: each letter stands for one of the digits 0 to 9, and stands for the same digit each time it occurs; different letters stand for different digits; and no number starts with a zero.

$$\begin{array}{r} XCV \\ + XXV \\ \hline CXX \end{array}$$



Find all possible solutions.

Share your solutions with your Maths teacher.



Engineering Bridges

We were privileged to have Dr Thom from The University of Nottingham to deliver a series of sessions for our sixth form students. The aim was to give understanding of the factors that go into the design of a steel truss including: material strength properties; failure modes of individual members; structural system design. Students then designed, constructed and tested the strength of a bridge pier they built using paper straws and tape. Twelve 400mm long straws were allowed. The height of the pier constructed was 390-400mm. Students had a great time testing their design and admiring the beauty of mathematics in the wider context.

Mr Lin, Head of Mathematics



NUAST News

October 2018

Message from the Principal

The Autumn Term has been busy with the arrival of students in Year 7, 10 and 12. The school has grown significantly in terms of pupil and staff numbers. We have been very fortunate to obtain the services of talented teachers who are already proving to be a real asset to NUAST. Our new students have brought a real enthusiasm for STEM education and it has been a pleasure getting to know them and seeing them settle down quickly into our working routines.

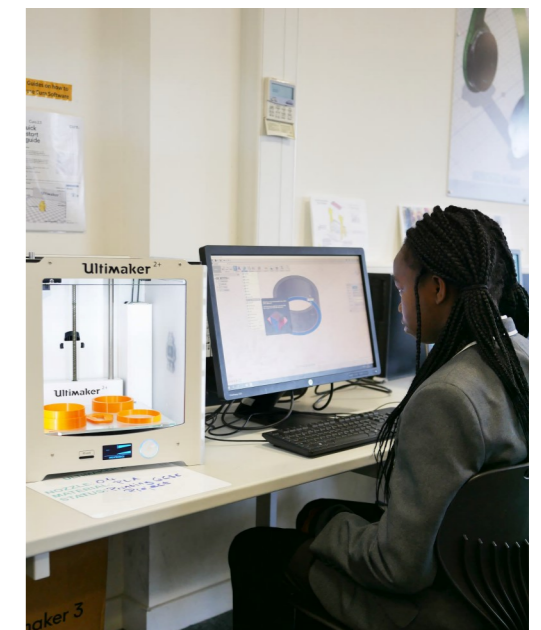
I am delighted to report that examination results for the summer were once again good with all of our Year 13 students achieving places at university or on higher apprenticeships. It was heart-warming to see our first group of students go from Year 10 through to the end of Year 13 with such promising futures ahead of them.

Mr Edwards has been extremely busy supporting those students who are completing early UCAS submissions for Medicine and Oxbridge. This takes a huge amount of effort from staff and in particular Mr Edwards, and I am sure that all the students involved are very grateful. I wish them all well.

Our Year 13 students are currently visiting our partner school in Ningbo, China, to learn about Chinese culture and education. They will act as ambassadors for NUAST and our local community. Whilst in Ningbo they will have the opportunity to visit the University of Nottingham, Ningbo Campus. This partnership is of huge benefit to our students and allows them to develop knowledge and understanding of the wider world and different cultures. We look forward to developing this partnership further through joint education projects and student friendship groups.

We currently have several PGCE and SCITT students working at NUAST organised through Nova Education Trust and the University of Nottingham. It is a pleasure to host these trainees as they begin their teaching careers. I wish them all well and hope that some of them may join us next September as full-time members of NUAST staff. Ms Sallis-Hunt joined us in September as a Teacher of Chemistry following her successful teaching practice placement during this period last year.

Mr White



Visits to the University of Nottingham



Year 11 had a trip to the University of Nottingham in order to get a feel for University life. Students were shown around by current undergraduates and had the chance to go to lectures, get involved in group projects and undertake research. It was wonderful to see them looking ahead and setting their sights on an ambitious future in higher education. I hope that students have been inspired and motivated to take a determined approach to their studies in the crucial months ahead.

Mr Cox, Head of Year 11

Year 7 visited The University of Nottingham for a day of investigation in to university life. They got the chance to walk around the main campus, take part in a number of seminars and talk with current undergraduates.

In one of the sessions, students discovered the differences between their current school life and education at University and then went on to design a University of their own. Many students knew a great deal about University life already, but many were experiencing it for the first time.

It was great to see our students start to think about what they want to do in the future. They asked so many good questions, and the undergraduates were more than pleased to share their experiences.

Mr Wood, Head of Year 7

News from Science

Synthetic Biology – Biology and Engineering Mash-Up

On Monday 8th October iGEM (international Genetically Engineered Machine) came and delivered a workshop for our Year 13 Biology students on the importance of bio-synthesis for a future sustainable world, particularly for the medical and health sector. Ethics and challenges were discussed covering topics such as biohacking/ bio security as well as the concern for increasing global inequality through biosynthetic processes. Students then took part in a practical – the first stage to trying to create a synthetic cell by isolating some DNA. Currently the human genome has 25,000 genes, whereas the synthetic one has only 473.

Finally, a tutorial was given by students researching current exploits in biosynthesis, including The University of Nottingham's study on the major hospital-acquired infection *Clostridium difficile* and their work in engineering a bacteriophage to block the toxins it produces.



Forensic Workshop

'How to Get Away with Murder'

We have been very fortunate to have Dr Roger Summers, a leading forensic expert on Grenfell Tower, Lockerbie, 2005 Tsunami and who developed bite mark forensic analysis, run a short course for us at NUASt. He is running a case-based forensic course which he has modified from an undergraduate course he designed. KS5 pupils are working independently on the Meredith Kercher case to understand both the limitations and opportunities forensic analysis offers. The work will culminate in a mock trial in December.



From the Head of Year 10...

Our Year 10 students have had a fantastic start to their journey at NUASt. I have been very impressed with their mature attitude and motivation to succeed, which shines through when visiting a variety of different lessons and tutor times.

The Year 10 tutors have worked superbly to ensure students have become quickly engaged with expectations and systems at NUASt, along with ensuring students are aware of their weekly successes and areas for improvement. In PSHE, a range of topics have been covered so far, including 'Self Image', 'Black History Month', 'Keeping out of Trouble' and weekly careers sessions on Fridays.

Our first drop-down day this year focused on Smoking, Alcohol and Drugs. Students learned about the law and risks, and heard personal accounts exploring these three issues. The sessions all led to challenging and engaging debates about the future of these substances in our society and how companies and campaigners are advertising for developments and change.

As a cohort, Year 10 has bonded well together; they are already forming wonderful friendships and showing a real sense of camaraderie.

Miss King

