

Senior Maths Challenge Success 2018

We are delighted to announce that students at St Benedict's achieved 5 golds, 12 silvers and 16 bronzes in this year's UKMT Senior Maths Challenge. Over 80,000 pupils from across the UK sat the examination with the top 10% receiving a gold certificate, the next 20% silver and the next 30% bronze. The following pupils have been presented with certificates to acknowledge their achievement!

Gold

Harriet Allum (Yr 13), Liam Gallagher (Yr 13)
Szymon Oleszko (Yr 13), Alan John (Yr 11)
Leo Saiu-Bell (Yr 11)

Silver

Benedict Ehall (Yr 13), Alex Brentnall (Yr 13)
Gilbert Jackson (Yr 13), Andrew Howie (Yr 13)
Clement Wallace (Yr 13), Will Harper-Davies (Yr 12)
Tom Bidewell (Yr 12), Theo Burnett-Wells (Yr 12)
Tay Lennox (Yr 11), Ralph Martin (Yr 11)
Blake McAdam (Yr 11), George Strugnell (Yr 11)

Bronze

Dominic Hart (Yr 13), Adam Palombo (Yr 13)
Amelia Eddy (Yr 13), Hannah Conway (Yr 12)
Alfie Dry (Yr 12), Kean Hodgson (Yr 12)
Daniel Kelleher (Yr 12), Max Cartwright (Yr 12)
Anna Germaine (Yr 12), Harry Jarman (Yr 12)
Lin Lin Ly (Yr 12), Milosz Boufal (Yr 11)
Aidan Mayall (Yr 11), Thomas Poulson (Yr 11)
Euan Dance (Yr 11), Alwin Jose (Yr 11)

The Senior Maths Challenge is run by the UK Mathematics Trust and is supported by the Institute and Faculty of Actuaries. Please see below for a sample question from this year's Senior Maths Challenge:

The positive integer 2018 is the product of two primes.

What is the sum of these two primes?

A 1001 B 1010 C 1011 D 1100 E 1101

Miss Law

FOODBANK
Bury St Edmunds
Feeding People in crisis

Christmas 2018

Thank you for your Christmas Donation. This will be distributed using our system of referral from front-line care agencies. It is very much appreciated and is a great help towards the continued distribution of free, locally balanced emergency food to local people in crisis.

The level of generosity shown by the numerous schools, churches, groups, and individuals in this area is extraordinary. Everyone knows that, economically speaking, these are tough times and they're likely to get tougher, and yet it seems that this only serves to intensify the generosity we see on a daily basis.

It is often said that voluntary work brings its own rewards. It does. Those who contribute make this happen, as well as being able to learn witness to the relief this work brings.

Thank you, once again, for supporting local people in crisis.

Yours sincerely
Amanda Bloomfield
Chief Executive



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Merry Christmas

From the staff and students of
St Benedict's Catholic School

"For God so loved
the world that
he gave his one
and only Son"



We would like to thank all of our school community - students, staff and parents - for the hard work over the Winter term and we wish you every joy and happiness for the new year that is to come. It will be a challenging year for St Benedict's as we begin the move onto a single site - a challenge we are relishing. We head into the holidays in anticipation of Christ's birth and all the celebrations that this will bring. May you have a happy and holy Christmas!

Dan Wright, Deputy Headteacher

Subject Seminars

For our Year 10 and 11 students considering A Levels Cambridge University can assist through their subject matters seminars running in January and February:

Aimed at Year 10 and 11 students and their parents/supporters, The Subject Matters events are a series of information sessions in which experienced Admissions Tutors give key advice about making informed A Level (or equivalent) subject choices. In addition, attendees will learn about student life from current undergraduate students and will have the opportunity to attend a 30-minute academic taster lecture in either the Arts and Humanities or the Sciences. Tickets are £7.50 but some students will be eligible for funded places.

To book a place: <https://www.undergraduate.study.cam.ac.uk/events/subjectmatters>

Miss Coogan



Mosquito Club

The Mosquito Club held its last meeting of the year on Friday 14th December in the Mosquito Ops Room (formerly room 9) at the USC. It was pleasing to note that this was the best attended meeting of the term with two new members joining. Mr Wallace kindly provided mince pies and drinks to add a festive spirit to the occasion.

The main event was a very well researched and presented talk by Adrian Smith-Delgado entitled 'Carburettor Failure'. RAF Spitfires, Hurricanes and, later the Mosquito,



were powered by the legendary Rolls-Royce Merlin engine. These engines used a relatively simple SU-type carburettor to control the flow of fuel into the piston chambers, much like a car engine carburettor at the time. Under normal flying conditions they performed perfectly well; however, early on in the Battle of Britain in the summer of 1940, a serious issue came to light when pilots went into a nosedive following after enemy aircraft trying to escape – the Merlin engine would splutter, lose power and sometimes cut out completely! It was due to a failure of the carburettor to provide a proper flow of fuel when under 'negative g' conditions, an issue that did not affect the RAF's main fighter adversary, the German Bf109, which had direct fuel injection to its Daimler-Benz engine.

The issue was quickly recognised, but it would take Rolls-Royce some time to redesign the carburettor, time that could not be afforded. Adrian explained that a short-term, and childishly simple, solution was introduced by a most remarkable woman – Beatrice Shilling, whom everyone knew as 'Tilly'. Remarkable for the times, she had graduated from University with degrees in Electrical and Mechanical Engineering and eventually, in 1936, was taken on by the Royal Aircraft Establishment at Farnborough (RAE) where she rose to a senior position. She solved the issue with a small, circular, metal diaphragm (see photo, left) that could easily be fitted into the carburettor fuel flow. It had a small hole in the middle calculated to properly control the flow of fuel even during 'negative g' manoeuvres. Officially known as the 'RAE Restrictor', it became more popularly known as 'Miss Shilling's orifice'!

'Tilly' Shilling was remarkable in more ways than one – she raced motorcycles. The picture (right) shows her on her beloved M30 500cc racing Norton. She was the first woman to be awarded the 'Brooklands Gold Star' for lapping the Brooklands circuit at an average speed of more than 100 mph!



Key Dates and Reminders

Monday 7th January to Friday 18th January Year 13 Mock Exams

Monday 28th January to Wed 30th January Year 11 English and Maths Second Mock Examinations.

We have had a number of complaints from the residents near the upper school, who have asked that students respect their gardens and not run over them and also can we ask parents not to park in front of the garage area on the other side of the school at the end of the school day. Thank you in advance.

Use of Phones in School

Please be reminded that students should not have their phones out at all during the school day. If you need to contact your child in an emergency please contact the main office. Phones will be confiscated if they are seen out or being used. On the first occasion they will be returned to the student at the end of the day, on the second occasion a parent will need to collect and on the third, they will either not be allowed to bring it in at all or it will need to be handed into the office on a daily basis. We thank you for your support with this.

Equipment

Please can you ensure that your child comes back to school with the correct equipment, pens, calculator etc.

Beauty and the Beast

Tickets for the Beauty and the Beast will go on sale via parentpay, be quick they sell out fast.

Poppy Appeal

Thank you to everyone who donated towards the poppy appeal we raised £86.66.

Term Dates

Spring term

Starts Monday 7 January 2019

Half term Monday 18 February 2019 to Friday 22 February 2019

Ends Friday 5 April 2019

Spring (Easter) holiday Monday 8 April 2019 to Monday 22 April 2019 (includes Bank Holidays)

PD Day 4 January 2019

Summer term

Starts Tuesday 23 April 2019

Half term Monday 27 May 2019 (May Bank Holiday) to Friday 31 May 2019

Ends Wednesday 24 July 2019

PD Day 24th July 2019

John Gregory