

NEWSLETTER

"Science is not a boy's game; it's not a girl's game. It's everyone's game."

Nichelle Nichols, Actress

Week 18 2023-24

YEAR 11 GIRLS IN MATHS DAY St. John's College, Cambridge



YEAR 11 GIRLS IN MATHS DAY

On Tuesday, 30th January six of our students were invited to attend the 'Year 11 Girls in Maths Day' at St. John's College, Cambridge.

After welcoming refreshments and a mathematical cross-number puzzle, they had a talk from the Director of Studies in Applied Mathematics, Dr. Matthias Dörrzapf. They found that applied mathematics is not just 'mechanics' but can also be used in international banking, particle physics, pandemic planning and numerous other fields. They also found out about conservation laws and how they link to group theory and symmetry patterns; what most people would consider pure mathematics!

After a tour of the college and its grounds the girls enjoyed a very filling buffet lunch. Then they had another talk from the Director of Studies in Pure Mathematics, Dr. Jack Smith. There, they studied the platonic solids and 3D Geometry. Along the way they investigated different methods of mathematical proof and touched on geometry in higher dimensions. Our students managed to get a few questions in along the way.



The formal sessions rounded off with a question-and-answer session with college alumni and current students. Questions included, 'What is it like, studying at Cambridge?', 'How can students prepare for the application process?', 'What to expect from a Cambridge interview.', 'What advice would you give to your sixteen-year-old self?' and of course 'What can you actually do with a mathematics degree?' (as the panel said, "Anything you want but 'spoilers' two of us work in the City of London as traders and analysts!").

YEAR 11 GIRLS IN MATHS DAY



The day rounded with thanks, farewells and more refreshments. St. John's happens to serve excellent muffins: blueberry, chocolate and raisin flavours. Each of the six girls had a prime number of muffins. The total number of muffins they had was also prime. So, what was the smallest possible number of muffins that each girl had?



HIGHER EDUCATION – MEDICAL ETHICS



On Thursday 1 February 115 pupils, representing 13 schools and colleges from across Cambridgeshire, gathered in The Leys School to attend a Medical Ethics workshop.

The workshop was led by guest speaker, Dr Zoe Fritz, Consultant Physician and Wellcome Fellow in Society and Ethics, University of Cambridge, with the support of a team of volunteer medical students and doctors who facilitated the group case studies.

Pupils took part in group discussions, debating real medical ethical dilemmas faced in practice, which led to some lively discussions. A wide range of topics were covered including whether doctors should use AI in their decision making.

Attending a medical ethics workshop holds immense value for any students aspiring to pursue careers in medicine. Such workshops provide a crucial platform for students to grapple with ethical dilemmas inherent in healthcare, fostering critical thinking and moral reasoning abilities essential for future medical practitioners.