## **Famous A Level Mathematicians**



### **Mathematics A Level**

Sixth Form Open Evening



#### Why study Mathematics?

#### Leads to versatile qualifications

well-respected by employers and higher education





## Develop key employability skills

e.g. problem-solving, communication, logical reasoning and resilience

Support the study of other A levels



**Excellent preparation for university** 

## Increase knowledge and awareness

of mathematical techniques and their applications





Stimulating and challenging courses

## Post-16 Mathematics options at CCHS

AS/A level Mathematics

Extends GCSE Maths and introduces new ideas.

AS/A level Further Mathematics

An additional A level to add breadth/depth

Level 3 Core Maths Develops maths skills and knowledge to focus on applied problem solving



## Requirements for A Level Maths

#### To be able to enroll onto A level Mathematics:

- Grade 7-9 in GCSE Mathematics(Grade 6 will only be considered on an individual case by case basis)
- Followed the Higher tier
- Have a love for the subject
- Excellent work ethic

#### Desirable

- Need it for your future career
- Just enjoy doing Mathematics

#### **Content**

Year 12	Year 13
Pure Mathematics	Paper 1: Pure Mathematics 1 (2 hours)
Statistics and Mechanics	Paper 2: Pure Mathematics 2 (2 hours)
	Paper 3: Statistics and Mechanics (2 hours)

#### How is Y12 and Y13 delivered?

 All content is delivered during 5 lessons per week.

 Students will either be taught by one teacher or by two teachers on a 3:2 split.



#### **Assessment**

- Students complete end of topic tests and complete progress check assessments 3 times a year.
- Students should expect to receive homework every week from each teacher.
- Independent study is a basic expectation and students should each have their own independent study folder which is checked regularly.



#### **Important Facts**

 All papers are with a calculator. You will need a more advanced calculator.

Casio fx991-EX is the minimum requirement.

- NO COURSEWORK all exam based.
- A level Mathematics has a 2:1 ratio of pure to applied content\*.
- \*applied maths will be statistics and mechanics



## Reasons to study mathematics

"Students are often surprised at the extent of the mathematical demands of their university programmes and some struggle to cope with those demands."

'Around half of individuals in jobs where mathematical sciences qualifications are essential were found to have salaries of £29,000 or more, compared with only 19 per cent of the UK workforce overall.'

**BONUS** – on average people earn 11% more over their lifetime with A Level Mathematics.



# Why choose Core Maths?

Versatile qualification equal in size to an AS level

Supports the maths in other courses –Biology, Business, chemistry, geography, Psychology

Interesting, engaging and relevant to the world we live in



Maths of life and the workplace

**Alternative offers** 

A course that develops valuable mathematics skills

For any student with at least a GCSE Mathematics grade 4

### Main Content of Core Maths

- Financial Maths
- Statistics & Probability
- Critical Analysis
- Modelling (spreadsheets)
- Estimation







#### What is Core Maths like?

How much domestic water does the UK require every year?

A new teacher earns £23,000 per year, has no student loans, and pays 7.4% of their salary into a pension scheme.

What is the teacher's net monthly salary after tax and national insurance contributions?

A genetic disease occurs in one in every 10,000 people. A test for the disease is accurate 98% of the time. If you are tested and the result is positive, what are the chances of you actually having the disease?

The speed of cars driving down a road with a speed limit of 50mph is recorded. The mean speed was 47mph and the standard deviation of the speeds 5mph. What percentage of the cars were breaking the speed limit?

#### **To Summarise**

- Must have at least a Grade 7 at GCSE Higher Tier.
- Hard work and perseverance is necessary, but worth it in the end!
- Regular attendance at lessons is essential.
- A well thought-of A Level which leads into a variety of careers and university courses.



## Questions?

