Maths at Sheringham High

Mrs Fiona Hill – Head of Mathematics

Our Ethos

At Sheringham we aim to inspire a love of Mathematics whilst equipping our students to deal with both the rigours of examinations and real life.

Our Curriculum

* We encourage students to recognise a 5 year programme of study to GCSE. Meaning that foundations they build now will underpin their understanding at GCSE and A Level
* We have included a greater element of *problem solving* and *reasoning* to reflect the changes in the GCSE curriculum.

Opportunities at Sheringham

* We compete in the UKMT Maths Challenges, previously our students have progressed through to National level – last year we received awards for over half of our junior Maths Challenge entries
* We also have put a numeracy program of study into tutortime where students are introduced to key financial information.
* The opportunity to join STEM club
* The opportunity to take further Mathematical studies at GCSE in Level 2 further Maths.
* The opportunity for peer mentoring whereby students who require additional intervention can be paired with a 6th former who will give them 1 –1 support.

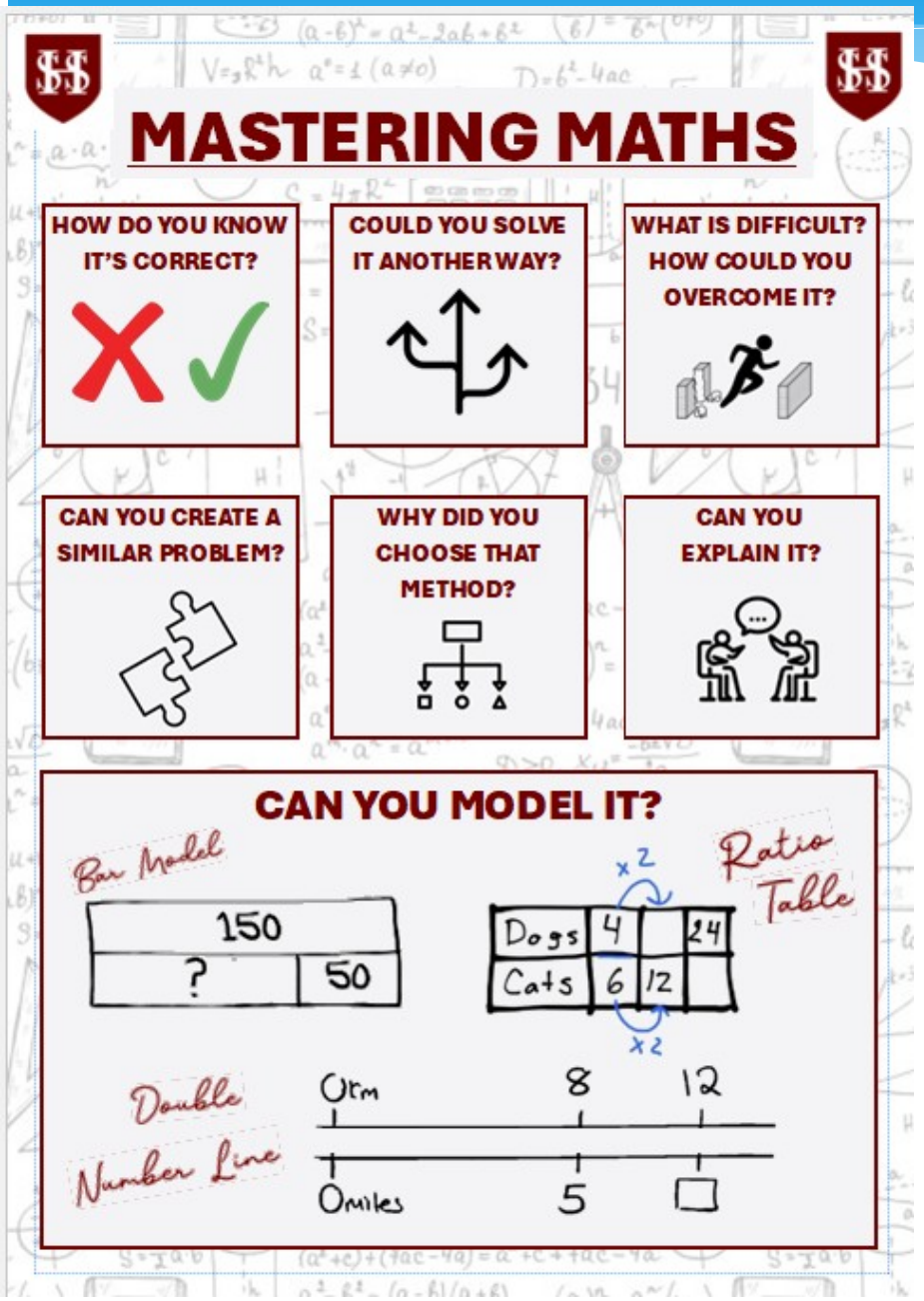
How our Students are set

* Students are initially set using their results from Key Stage 2.
* We undertake continual assessment for learning so that we can better gauge the strength profiles of our students and improve areas for development.

Mastery

* Mastering maths means pupils of all ages acquiring a deep, long-term, secure and adaptable understanding of the subject. The phrase ‘teaching for mastery’ describes the elements of classroom practice and school organisation that combine to give pupils the best chances of mastering maths. Achieving mastery means acquiring a solid enough understanding of the maths that’s been taught to enable pupils to move on to more advanced material. (NCETM)

* SHS has been working with the *Angles Maths Hub* to embed Mastery at the core of our approach to teaching mathematics. Our scheme of work has been written to reflect this and teachers will make continuous assessments about the most suitable next steps for each individual class. This will result in each class following a bespoke curriculum, with variations to the objectives covered as well as the time taken. This therefore means that some deviation from the published SOW is to be expected.



This poster is displayed in each teaching room and we will draw attention to it especially in problem solving lessons

It highlights some of the ways that students might be able to break problems down when they are finding things tricky.

They will also find that in lessons, there is less time pressure than required for the maths papers at Key Stage 2.

How can I help my child?

- Encourage them to remain positive about Maths!
- Use examples from Corbett maths / BBC Bitesize etc
- Ask open questions e.g
  - What can you tell me that might be useful?
  - What can you work out?
  - Can you show me how you worked out a similar problem?

We hold a drop in session once a week at lunch for students to get help from us in addition to lessons. These are Tuesday in Rm 4

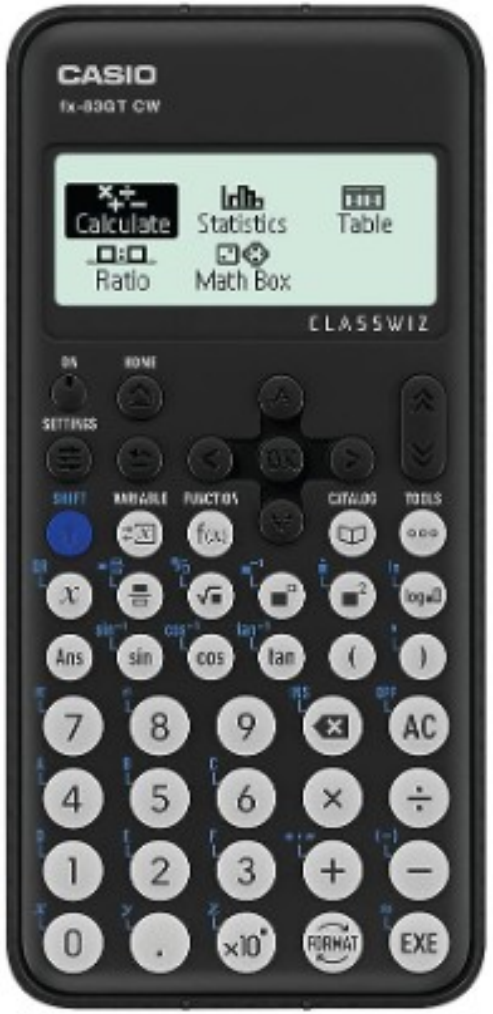
Calculations Policy

"The essence of mathematics lies in its freedom"

Georg Cantor

In mathematics, as with real-world problems, the solution is rarely only reached by a pre-prescribed method. We teach the following methods as standard, as the progression towards the algorithm (method) can be clearly mapped and understood. This policy has been written in conjunction with Sheringham and Holt Primary Schools to promote a continuity of study.

Calculators



* Calculators with a two line function are a real advantage
* Students should bring their calculator to every lesson to gain familiarity with it

FX 83GT CW is recommended.

Learning Journeys

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Autumn Term	Sequences		Understand & Use Algebraic Notation		Equality and Equivalence		Place Value & Ordering Integers & Decimals			Fraction, Decimal & Percentage Equivalence		
Spring Term	Problem Solving		Fractions & Percentages of Amounts	Operations & Equations with Directed Number		Addition & Subtraction of Fractions			Sets & Probability			
Summer Term	Constructing, Measuring & Using Geometric Notation			Geometric Reasoning			Developing Number Sense		Prime Numbers & Proof			

Enjoy Maths!

Mathematics, rightly viewed, possesses not only truth, but supreme beauty -- a beauty cold and austere, like that of sculpture, without appeal to any part of our weaker nature, without the gorgeous trappings of painting or music, yet sublimely pure, and capable of a stern perfection such as only the greatest art can show.

* Bertrand Russell (1872-1970), *The Study of Mathematics*