ROOKS HEATH SCHOOL

Strive to be your best

Maths Newsletter

Dear Parents and Students,

Welcome to our Termly Maths Newsletter!

This term has been filled with exciting learning opportunities, and we are proud of our students' hard work and progress.

Here's a look at what we've been up to and what's coming next!

ROOKS HEATH SCHOOL
Strive to be your best

Outstanding Achievements in the Junior Maths Challenge 2025:

We are proud to share the excellent results achieved by our Year 7 and 8 students in this year's Junior Mathematical Challenge, held on **1st May 2025.**

Congratulations to:

- **Sophie** – Year 7
- **Thushan** – Year 8
- **Jay** – Year 7

Their exceptional scores have secured them a place in the prestigious **Junior Kangaroo 2025** follow-on round.

Well done to all students for their hard work and mathematical talent!

Junior Math Challenge

Student Firstname	Certificate
Year 7	
Bethany	Bronze
Raqib	Bronze
Jay	Gold
Samabishek	Silver
Aiden	Gold
Anosh	Bronze
Caroline	Bronze
Priam	Silver
Achchuthan	Bronze
Sulaiman	Gold
Sophie	GoldBiS
Loshika	Bronze
Year 8	
Unikshan	Bronze
Hirishan	Bronze
Thushan	GoldBiY

ROOKS HEATH SCHOOL
Strive to be your best

STEM trip to Brunel University 2025

On Wednesday 21st May, 40 Year 9 students visited Brunel University London for an exciting STEM trip organised by Mrs Grewal.

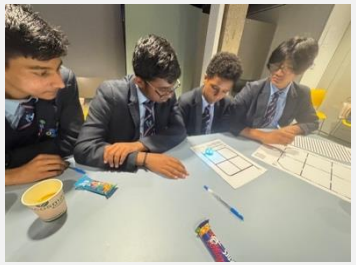
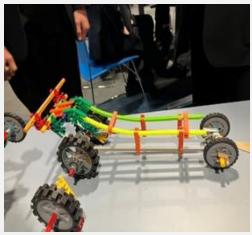
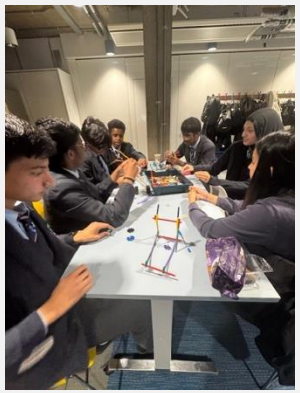
They took part in hands-on workshops exploring Science, Technology, Engineering, and Maths, gaining insight into real-world applications and careers.

It was a fantastic opportunity to inspire curiosity and boost confidence in STEM subjects.










ROOKS HEATH SCHOOL
Strive to be your best

Homework Expectations

Homework is assigned twice a week as follows:

Online Homework: Assigned-Every Monday / Due - Every Thursday.

Written Homework: Assigned-Every Thursday / Due - Every Monday.

Homework Club:

Do you find it difficult to complete homework at home for any reason? Our dedicated Maths Department teachers are here to help!


When: Every Thursday after school


Where: Maths Department

No need to book — just pop in!

ROOKS HEATH SCHOOL
Strive to be your best

Maths Clubs

Take advantage of the following maths support and enrichment opportunities available this term.

All sessions run **every Thursday, 3:15pm – 4:10pm**.

Everyone is welcome – come along and boost your skills, confidence, and enjoy some maths

What	When	Where
Maths Homework Club (for ALL Year groups)	Every Thursday 3:15pm – 4:10pm	EF3
KS4 Maths Masterclass (Higher) Years 10	Every Thursday 3:15pm – 4:10pm	EF2
KS4 Maths Masterclass (Foundation) Year 10	Every Thursday 3:15pm – 4:10pm	EF6
UKMT Maths Challenge Club	Every Thursday 3:15pm – 4:10pm	EG7

ROOKS HEATH SCHOOL
Strive to be your best

Assessments Dates

All students will sit their End of Year Test on the following dates:

Year 7: Tuesday 24th June – Non-Calculator

Year 8: Tuesday 24th June – Calculator

Year 9:

Tuesday 24th June – Calculator

Thursday 26th June – Non-Calculator

Year 10:

Monday 30th June – Non-Calculator

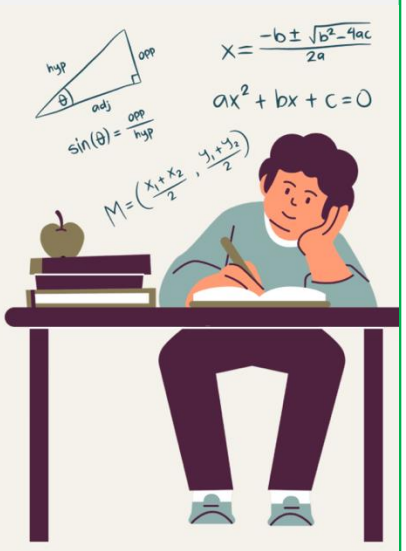
Thursday 3rd June – Calculator

LOOK OUT FOR INFORMATION IN 'BROMCOM, 2 WEEKS BEFORE THE ASSESSMENT

ROOKS HEATH SCHOOL
Strive to be your best

Top Maths Revision Tips

1. **START EARLY** – Little and often beats last-minute cramming.
2. **PRACTICE QUESTIONS** – The more you do, the better you get.
3. **FOCUS ON WEAK TOPICS** – Tackle the tricky stuff first.
4. **USE RESOURCES** – Try BBC Bitesize and your class notes.
5. **WRITE IT DOWN** – Show your working and jot down methods.
6. **STAY ORGANISED** – Use a revision plan to keep on track.
7. **ASK FOR HELP** – Don't stay stuck—talk to your teacher.



ROOKS HEATH SCHOOL
Strive to be your best

Summer Term Overview – Year 7

This term, Year 7 students will be focusing on three key areas:

1. **Representing Data**
- Bar charts, line graphs, and frequency tables
- Calculating and interpreting averages (mean, median, mode)
- Two-way tables

2. **Geometry & Construction**
- Identifying and classifying angles
- Drawing and measuring angles and line segments
- Understanding parallel and perpendicular lines

3. **Transformations & Patterns**
- Exploring reflections, rotations, translations, and enlargements
- Investigating tessellations and symmetry
- Creating Rangoli and Islamic patterns through geometric transformations

ROOKS HEATH SCHOOL
Strive to be your best

Summer Term Overview – Year 8

This term, Year 8 students focus on building algebraic thinking, applying geometry skills, and solving real-world problems:

1. Equations & Inequalities

- Identifying formulae, expressions, identities, and equations
- Solving linear equations
- Representing inequalities on a number line
- Understanding and solving basic inequalities

2. Pythagoras' Theorem

- Discovering and using **Pythagorean triples**
- Calculating missing side lengths in **right-angled triangles** using the theorem

3. Area & Perimeter

- Calculating area of **triangles**, **rectangles**, **parallelograms**, and **trapezium.**
- Working with **compound shapes**
- Finding **perimeter** and solving word problems involving measurements.

ROOKS HEATH SCHOOL
Strive to be your best

Summer Term Overview – Year 9

This term, Year 9 students will deepen their understanding of algebra, geometry, trigonometry, and probability:

1. Formulae & Functions

- Distinguishing between **equations**, **identities**, and **functions**
- Expanding and factorising algebraic expressions (including quadratics)

2. Working in 2D

- Measuring and calculating **lengths and angles**
- Applying knowledge of shapes in 2D contexts
- Using **Pythagoras' Theorem** to solve area problems

3. Trigonometry 1

- Introducing **SOHCAHTOA** to find missing sides or angles in right-angled triangles

4. Probability

- Conducting and analysing **probability experiments**
- Calculating **expected outcomes** and **theoretical probability**
- Understanding **mutually exclusive** and **conditional events**

ROOKS HEATH SCHOOL
Strive to be your best

Summer Term Overview – Year 10

This term, Year 10 students will develop their skills in algebra, graph work, and 3D geometry:

1. Graphs & Functions

- Drawing and interpreting **straight-line graphs**
- Understanding the **equation of a straight line**
- Exploring **linear and quadratic functions**
- Identifying and describing **properties of quadratic graphs**
- Analysing **kinematic graphs** (distance-time, velocity-time)

2. Working in 3D

- Recognising and drawing **3D shapes**
- Calculating **volume of prisms** (including cylinders)
- Finding **volume and surface area** of:
  - **Cylinders**
  - **Cones**
  - **Pyramids**
  - **Frustums**

Underlined topics are for Higher Tier students.

ROOKS HEATH SCHOOL
Strive to be your best

Summer Term Overview – Year 12

This term, Year 12 students are focusing on advanced algebra, functions, trigonometry, and mathematical proof:

1. Algebraic & Partial Fractions
- Simplifying complex **algebraic fractions**
- Decomposing expressions using **partial fractions**

2. Trigonometry (Part 1)
- Understanding and working in **radians**
- Using **small-angle approximations**
- Applying trigonometry in modelling contexts

3. Functions & Modelling
- Exploring the **modulus function**
- Understanding **composite and inverse functions**
- Describing and applying **transformations of functions**
- **Modelling real-world problems** using functions

4. Proof
- Developing logical reasoning through **proof by deduction**
- Exploring deeper understanding with **proof by contradiction**

Year 12 students are currently taking their end-of-year exams and beginning to transition into the Year 13 syllabus.

ROOKS HEATH SCHOOL
Strive to be your best

Functional Skills in Maths

At our school, the Maths Department proudly offers **Functional Skills in Maths** for some students in KS3.

What are Functional Skills? Functional Skills Maths focuses on **real-life maths** — helping students build confidence and apply maths to everyday situations like:

- Budgeting and managing money.
- Measuring and estimating.
- Reading data and interpreting.
- Solving problems at work or in daily life.

Who is it for? Functional Skills is ideal for students who:

- Benefit from an applied, hands-on approach to maths
- Need a pathway to progress in maths at **Entry Level, which can serve as a stepping stone to a successful GCSE** in maths.

ROOKS HEATH SCHOOL
Strive to be your best

Key Maths Vocabulary – Summer Term

Here are some key maths terms we're using this term – try to learn their meanings and use them in your revision!

Year 7

- Frequency table
- Perpendicular / Parallel lines

Year 8

Equation
Inequality
Pythagorean triple
Compound shape
Parallelogram
Trapezium

Year 9

Formula
Function
SOHCAHTOA
Theoretical probability
Mutually exclusive events

Year 10

Linear graph
Quadratic graph
Kinematic graph
Volume
Surface area
Frustum
Prism

Year 12

Partial fraction
Modulus function
Composite function
Inverse function
Radian
Small angle approximation
Proof by deduction
Proof by contradiction

ROOKS HEATH SCHOOL
Strive to be your best

Maths Team

Mrs S. Subra (Acting Head of Maths)

Ms H. Bharadawa (KS4 Coordinator)

Mrs H. Grewal (KS3 Coordinator)

Mrs A. Syed

Mrs S. Sritharan

Ms H. Capper

Mr E. Bissoon

Mrs R. Bandar

Ms V. Caullet

Ms Y. Liu

Mr. N. Noreiga

ROOKS HEATH SCHOOL
Strive to be your best

Riddle of the Term

The Mystery Number Riddle

I am a two-digit number.

- My tens digit is twice my ones digit.
- If you reverse my digits, the new number is 18 less than me.

What number am I?

Write your answer and bring it to the maths department for a chance to win a small prize!

First correct answer wins!

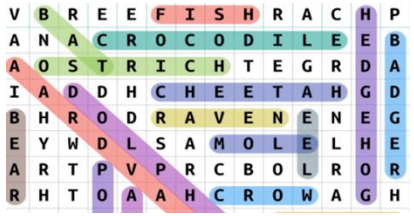
ROOKS HEATH SCHOOL
Strive to be your best

Word Search

Rooks Heath School CAREERS Strive to be your best

Maths Word Search

I	D	M	V	A	Y	C	N	E	U	Q	E	R	F	R	E	M	H	W	D
J	V	W	Y	J	Y	B	C	V	P	R	L	U	O	H	I	L	H	J	H
T	U	J	N	M	U	I	Z	E	P	A	R	T	H	D	L	L	G	P	N
Y	J	S	G	K	T	H	G	F	J	E	W	O	E	W	F	D	G	N	V
J	C	E	T	U	R	X	Q	J	M	L	Q	N	N	U	K	M	F	I	A
S	S	M	E	E	A	G	L	O	J	N	T	W	N	P	K	L	I	M	C
U	M	C	S	P	N	O	Q	M	A	I	P	C	A	E	R	B	Z	X	P
L	H	R	S	Y	S	G	J	I	T	X	T	O	O	Q	H	I	E	M	R
U	C	I	E	T	F	G	D	Y	V	I	F	H	M	U	B	P	S	Y	O
D	U	N	L	H	O	A	E	Z	O	L	D	M	M	A	C	G	A	M	O
O	S	E	L	A	R	V	C	N	B	J	T	U	E	T	W	X	U	R	F
M	T	Q	A	G	M	H	Z	O	P	P	B	E	A	I	X	S	C	P	G
Y	D	U	T	O	W	R	W	D	Y	A	U	X	N	O	Y	F	A	D	Q
X	A	A	I	R	J	U	S	H	E	I	R	M	U	N	F	S	E	X	Y
K	T	L	O	A	U	U	H	U	N	W	F	A	E	V	I	G	R	I	Q
M	N	I	N	S	I	S	B	V	H	P	D	H	L	C	O	Q	S	R	V
Z	P	T	G	D	O	S	E	S	A	Z	H	T	O	L	T	L	E	J	I
S	V	Y	A	Q	R	R	F	D	L	I	N	L	V	E	E	L	U	R	L
Y	Z	R	M	Z	S	V	K	T	X	F	K	Q	M	Z	X	L	H	M	U
C	R	L	F	E	W	K	W	K	Z	A	E	J	M	I	D	P	V	X	E



Find the following words:

ANGLE	IDENTITY	TESSELLATION
EQUATION	PARALLEL	VOLUME
LOCI	FUNCTION	INEQUALITY
PRISM	FREQUENCY	PYTHAGORAS
TRAPEZIUM	MODULUS	RADIUS
INVERSE	TRANSFORM	GRAPH
MEAN	RADIAN	PROOF

ROOKS HEATH SCHOOL

Strive to be your best

The beauty of maths is that there's always more to explore. Keep asking questions, keep practising, and success will follow.

Thanks for Reading!

Mrs. Bandar and the Maths Team