MATHS NEWSLETTER 2023-2024 TERM 2.

Happy New Year 2024!

At the end of the Autumn term, all year groups had completed their first end-of-term exams and had received feedback. Each student has been given a blue sheet with their next steps for improvement, which you can find in their books.

For Year 11, we have also returned their mock exams. As a reminder, they will be taking another set of mocks in the first week of March.

In addition to the Thursday after-school Master Class, we have also started morning Maths Master Class sessions every Monday, Tuesday, and Friday for selected students.

If you have any questions, please do not hesitate to contact me via email at ntakhar@rooksheath.harrow.sch.uk or email the relevant class teacher.

Thank you,

Mrs. N. Takhar (Head of Mathematics)

Assessment Dates

Year 7: End of term Assessment W/C 18th March

Year 8: End of term Assessment W/C 18th March

Year 9: End of term Assessment W/C 18th March

Year 10: End of term Assessment W/C 18th March

Year 11: Mock examination 2:

Exam	Day	Time	Marks
Maths Paper 1 (non- calculator)	Thursday 7th March	1:10pm	80 marks
Maths Paper 2 (calculator)	Friday 8th March	1:10pm	80 marks
Maths Paper 3 (calculator)	Monday 11th Match	Period 4/5	55 marks

Year 12: HT3 test W/C 19th Feb

Year 13: HT3 test W/C 19th Feb

Year 7-11: Skill review week W/C 11th March

In addition to these assessments, all students will have regular end of chapter tests and half termly skills tests.

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

Maths Support

What	When	Where
Maths Homework Club	Every Thursday 3:15pm – 4:10pm	EG6
KS4 Maths Master Class (Years 10 and 11)	Every Thursday 3:15pm – 4:10pm	EF7/EF3
GCSE Further Maths	Every Thursday 3:15pm – 4:10pm	EF6
KS5 Maths Club (Years 12 and 13)	Individual student will be informed about timings and room	
UKMT Maths Challenge Club	Every Thursday 3:15pm – 4:10pm	EG7
Artful Maths	Every Monday 3:15pm – 4:15pm	EF7

Homework

Homework is set once a week.

Once a week, it will be a written piece of homework - it can be a worksheet or an exercise from the homework books.

The following week, an online homework will be set on either MyMaths or Kerboodle.

Teachers will set the homework as an assignment on Teams, and you should also get a notification via Satchel One.

Years 7 and 8 will get printed homework sheets to stick in their books.

Years 9,10 and 11 will get a separate Maths homework book with a homework tracker at the back of the book. Parents/Carers please sign the tracker after each homework is completed in the space provided.

We gave an award to students for creating the best open homework (book cover/poster in October half term) and the winners were:

Year 7 - Kaianna Fontaine

Year 8 - Dunya Yadguny

Year 9 -Karolina Hryhorenko

Year 10 - Anamika Murugathas

Learning this term?

As a department we follow the schemes of learning from White Rose Maths and Kerboodle. The Knowledge Organiser for each topic can be found in Teams/SharePoint in Year Group folders.

GCSE Maths exam board - Edexcel

Level 2 Further Maths exam board - AQA
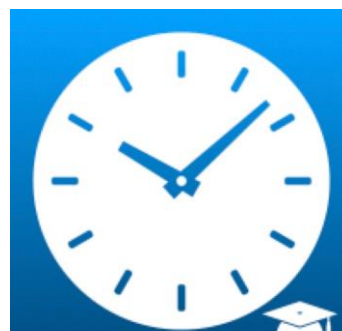
AS/A' level Maths exam board - Edexcel

This term the Year Groups are studying the following:

Year 7	• Addition and Subtraction • Multiplication and Division
Year 8	• Working in cartesian plane • Representing data • Indices • Expressions
Year 9	• Handling data • Fractions, Decimals and Percentages • Formulae and functions
Year 10	• Equations and inequalities • Circles and construction • Ratio and Proportion
Year 11	• Calculations • Graphs • Sequences • Pythagoras & Trigonometry

Year 12	• Circles • Binomial Expansion • Vectors • Forces and Motions • Correlation • Probability
Year 13	• Parametric equations • Numerical method • Integration • Conditional Probability • Friction • Projectile motion

Exam Tip

A lot of people struggle with the timing of exams

Students either go too quickly and end up with about forty painful minutes left at the end with nothing to do, or they go so slowly that they don't get chance to finish. If you want you can see how many marks are available on the exam (it will tell you this on the front of the paper) and divide the total length of the exam by this number. This will tell you how many minutes you have per mark and will then be a pretty good guide of how long you are supposed to spend on each question.

Symbol of the term

$$\theta$$

Symbol Name: Theta

Mathematical meaning: The Greek letter ϑ (theta) is used in math as a variable to represent a measured angle.

the symbol theta appears in the three main trigonometric functions: sine, cosine, and tangent as the input variable.

$$\cos(\theta)$$

Word of the term

BIDMAS

An acronym used to help people remember the correct order of operations for solving algebraic equations. BIDMAS stands for "Brackets, Indices, Division, Multiplication, Addition, and Subtraction.

You will likely come up with a wrong answer if you perform calculations out of the order. When you follow the correct order, the answer will be correct.

Career in Maths

Finance Workshop for Y10 students

It is critical that young people acquire financial education as it will provide them with the abilities, information, and self-assurance they need to manage their money wisely throughout their life.

On Wednesday, 24th January 2024, Year 10 took part in a finance workshop presented by HSBC Bank and coordinated by the mathematics department. It was an excellent opportunity for the students to learn how to manage finance, and what costs are essential and non-essential. Presenters addressed the future opportunities in finance career, interview skills and what to consider while writing a CV.

The workshop was divided into two parts; in first part the speaker provided information about what to consider while writing CV, facing the interviews and how to prepare for the world of work. In second part, the speaker discussed how to manage your budget effectively, including essential and non-essential costs, and important of saving. Students had an opportunity to learn how to prioritise spending to cover needs, and how to save by sacrificing spending on something we don't need, considering the potential consequences of unmanaged debt.

Many students provided positive feedback about this session.

- 'Today, I learned something new, how to prepare for and face interview'.
- 'It is important to start saving from early years, then waiting until later! The fact that we can start saving money from now for the future surprised me.'
- 'Because of the modern technology, the world of work is changing so quickly, that we need to learn to adapt. Understanding about the competition we are in was interesting.'

Enrichment activities this term

- Maths Feast: Selected Y10 students will be attending Maths Feast competition in Spring term half term 2.

- Finance workshop in school.

- Maths morning booster sessions.

- UKMT Maths intermediate challenge.

Maths Master class schedule

Maths Master Class (KS4- Year-11 **H**) Revision for Mock-2

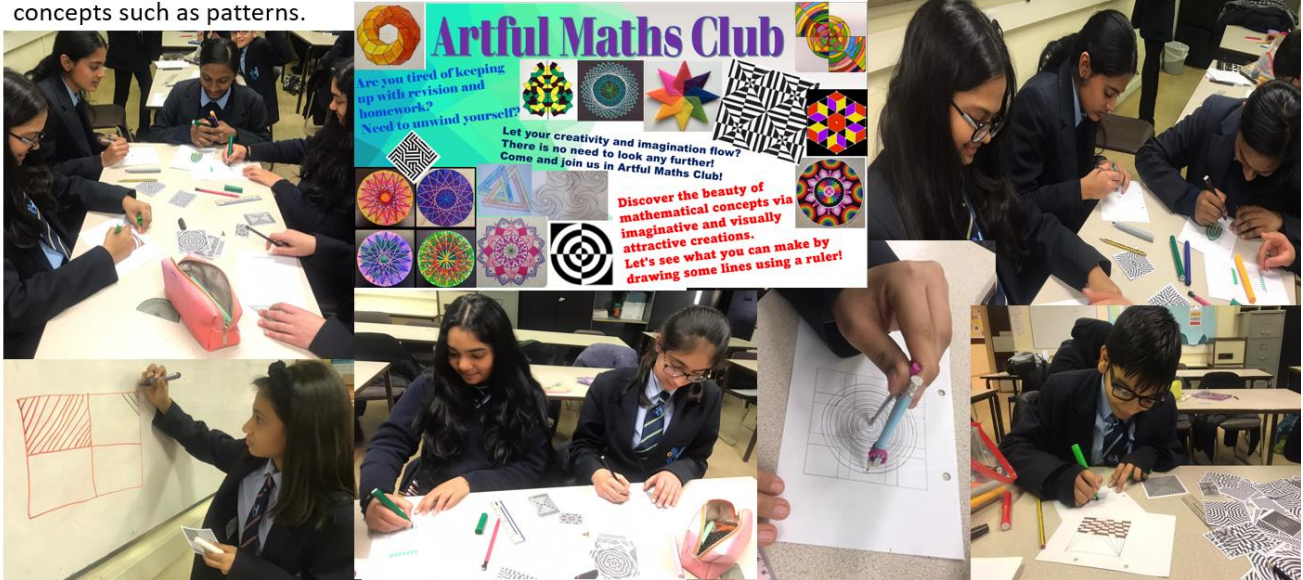| Date	Teacher	Topic/s
18 /1/2024 (W1)	HMB	Mock Paper 1 Review
25/1/2024 (W2)	HMB	Mock Paper 2 Review
1/2/2024 (W1)	HMB	Mock Paper 3 Review
8/2/2024 (W2)	HMB	Pythagoras Theorems and Trigonometric ratio
		Half Term
22/2/2024 (W1)	HMB	Problems involving Trigonometry
29/2/2024 (W2)	HMB	Statistics (Histogram, Cumulative frequency and Box plot)
7/3/2024 (W1)	HMB	Revision for Mock-2 (Non-Calculator Paper)
14/3/2024 (W2)	HMB	Revision for Mock-2 (Calculator paper)
21/3/2024 (W1)	HMB	Worde problems (on grade 6 to 8)
28/3/2024 (W2)	HMB	Worde problems (on grade 7 to 9)

Maths Master Class (KS4- Year-11 **F**) Revision for Mock-2

Date	Teacher	Topic/s
18 /1/2024 (W1)	HKC	Mock Paper 1 Review
25/1/2024 (W2)	HKC	Mock Paper 2 Review
1/2/2024 (W1)	HKC	Mock Paper 3 Review
8/2/2024 (W2)	HKC	Pythagoras Theorems
		Half Term
22/2/2024 (W1)	HKC	Problems involving area
29/2/2024 (W2)	HKC	Forming and Solving equations
7/3/2024 (W1)	HKC	Angles in Parallel lines
14/3/2024 (W2)	HKC	Volume of Prism (problem solving)
21/3/2024 (W1)	HKC	Worde problems (on grade 4)
28/3/2024 (W2)	HKC	Worde problems (on grade 5)

Artful Maths

Mathematics department is running 'Artful Maths' club on every Monday, in room EF7.

This provides an excellent opportunity to our students to discover fascinating aspects of mathematics through various activities during the session. Students use their artistic and creative skills to learn about a variety of mathematical ideas. While using their imagination to draw geometric patterns, students can enjoy learning new concepts such as patterns.

Meet the Maths Team

Mrs N. Takhar (Head of Maths)
Ms H. Bharadawa (KS4 Coordinator)
Mrs H. Grewal (KS3 Coordinator)
Mrs S. Subra
Mrs A. Syed
Mrs S. Sritharan
Ms H. Capper
Mr E. Bissoon
Mrs H. Afzalzada
Mrs R. Bandar
Ms V. Caullet
Ms Y. Liu
Mrs I. Bontas