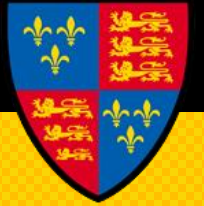




**KING EDWARD VI
HANDSWORTH GRAMMAR
SCHOOL FOR BOYS**



**KING EDWARD VI
ACADEMY TRUST
BIRMINGHAM**



**START OF YEAR INFORMATION
KS5**

www.hgsmaths.com

Introduction

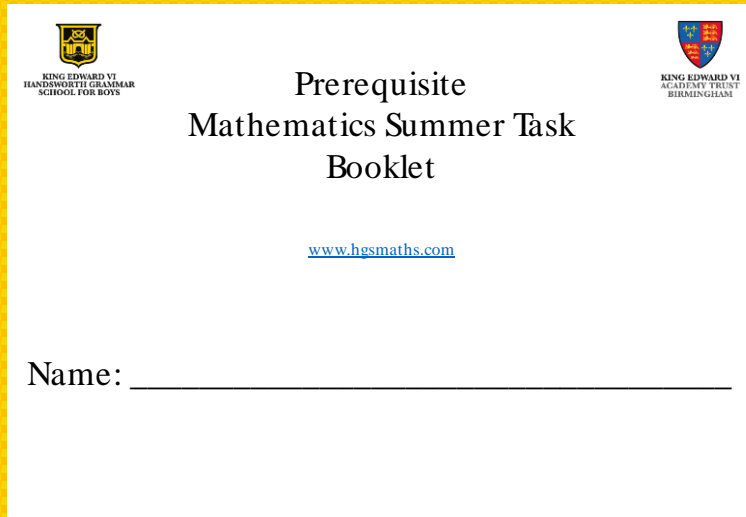
In this short presentation, we will look at how we will work in Mathematics.

We will cover:

- Summer Work
- Booklets
- Exercise Book
- Equipment
- Homework
- Assessments
- Online Platforms – HGS Maths, Dr Frost, and Active Learn
- Enrichment and Support
- Success
- Survey

Summer Work (Year 12)

- You should have completed the summer task booklet. Remember, you will have a baseline assessment on this soon.
- If you haven't got a copy of the booklet or have lost it, you will need to get another one. The booklet can be accessed on the HGS Maths website.



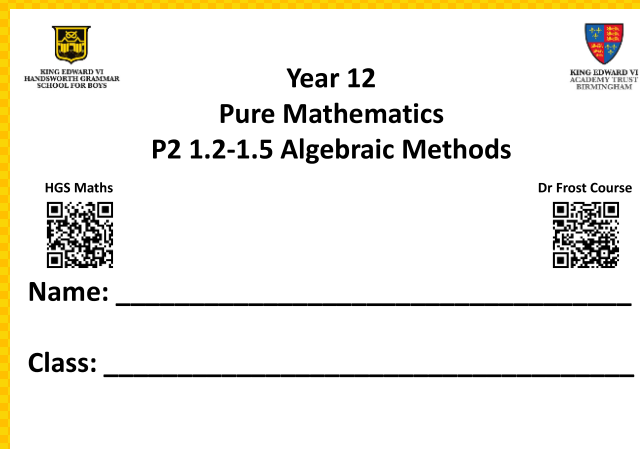
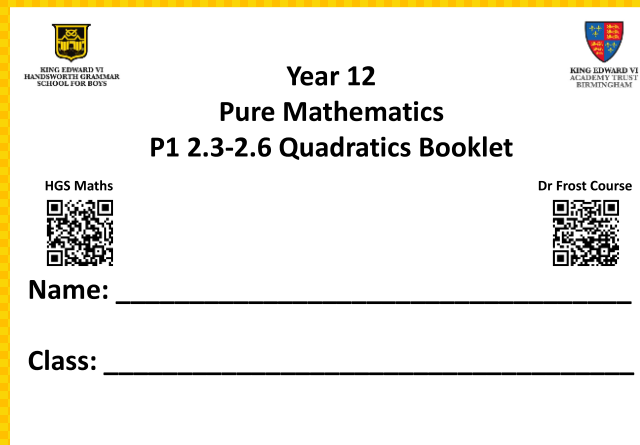
Summer Work (Year 13)

- You should have completed the task on Dr Frost labeled as "Year 13 Preparation Work Summer 2024". Remember, this contains questions on Year 12 topics, which are vital for understanding this year's content.

TASK	SET DATE	DUE DATE
Year 13 preparation work summer 2024 All of 12C/Ma2, All of 12C/Ma3, All of 12CFM/Ma, All of 12E/Ma1, All of 12E/Ma2, All of 12E/Ma3 Homework	Jul 15th	Sept 2nd 6:00am

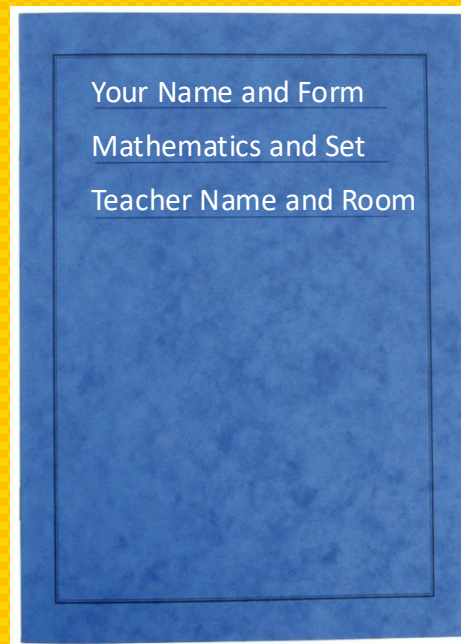
Booklets

- All your notes and examples will be completed in a printed booklet for each chapter.
- The booklets must be kept neat and up to date.
- You will take the booklet home and must bring it to every lesson.
- It is recommended that you buy a folder to keep these in, as well as any other paper or worksheets printed for you.
- An electronic version of the booklets will be available on your OneNote Class Notebook so you can stay up to date.



Exercise Book

- This is your book for all classwork and homework exercises. You should keep this book neat.
- All **classwork and independent work** is done at the **front** of the book.
- All **homework** is done at the **back** of the book.
- All marking is done through self or peer assessment.
- You should always include:
 - Dates
 - Headings
 - Margins
- You will take this book home and must bring it to every lesson.



Equipment

- As well as your booklet and exercise book, you should bring the following equipment to every lesson:
 - 2 pens (ideally black)
 - 1 red or green pen
 - Pencil
 - Ruler
 - Sharpener
 - Eraser
 - Calculator (Casio fx-991CW)
- The calculator can be purchased from the school. Details will be posted on Microsoft Teams.



Homework

- You will receive 3 homeworks per week. They will be recorded on Satchel One.
- One homework will be a retrieval task set online on Dr Frost for the entire year group. Details will be confirmed on Microsoft Teams.
- The other 2 homeworks are set by your classroom teachers. This could be another Dr Frost task or an exercise from the textbooks.
- You must always show your working out at the back of your blue exercise book for any Dr Frost homework.

- **If you score 100% on a Dr Frost homework, you will be awarded a house point.**
- **If you fail to complete your homework, you will be sanctioned (our policy is shown below).**


Stage	Sanction	Contact
1	Verbal warning/reprimand	Email FT/Parent
2	Short teacher detention (5 minutes)	Email FT/Parent
3	Longer teacher detention (break or 15 minutes after school)	Email FT/Parent
4	Department detention (30 minutes)	Email FT/Parent and HoY
5	Department detention (45 minutes)	Call home + Email FT/HoY
6	Department detention (60 minutes)	Call home + Email FT/HoY
7	Whole school – get parents in	HoD/HoY meeting

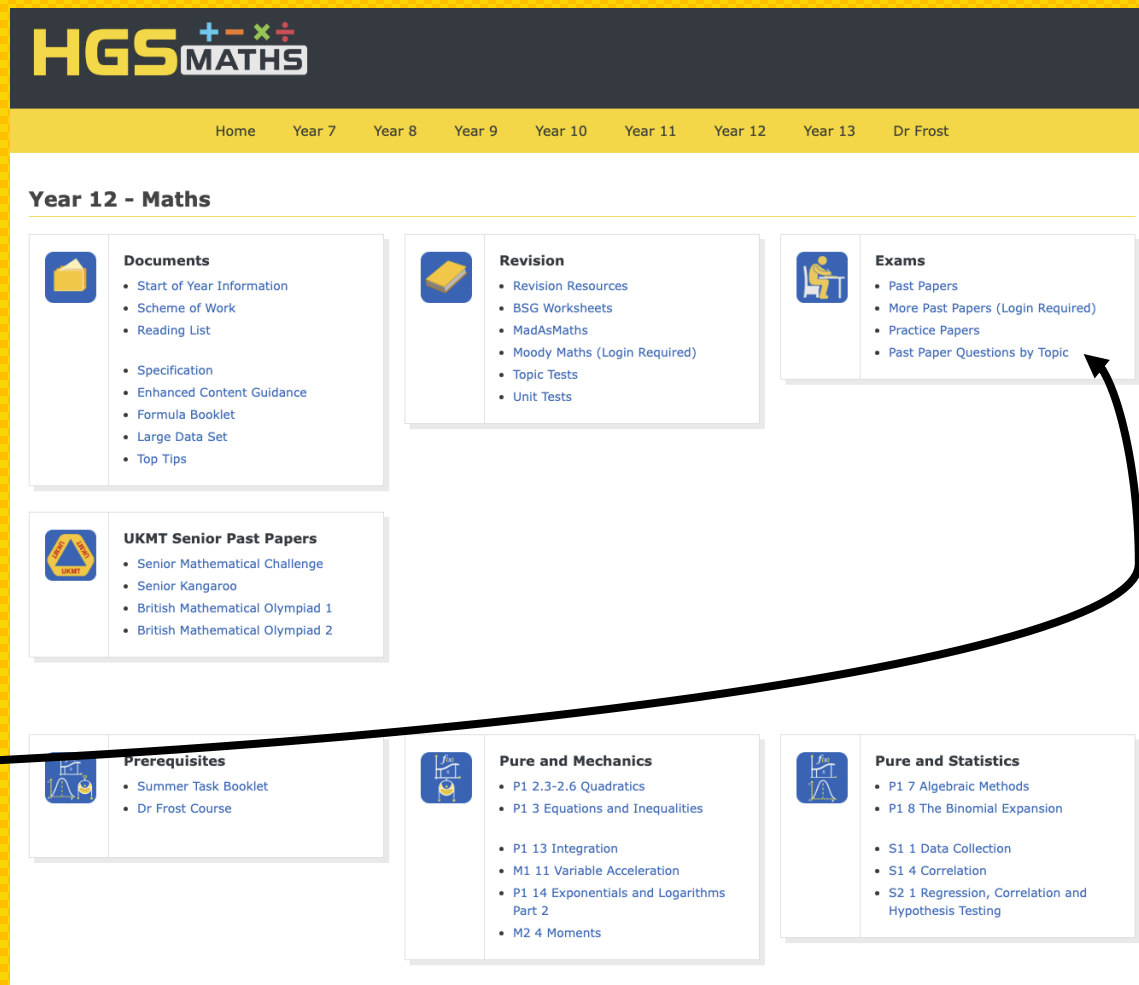
Assessments

- You will have entrance/exit tickets in class to check your understanding of current or previous work.
- You will have formal assessments throughout the year.
- There will also be an end of year exam.
- The scheme of work and assessment schedule is shown on the right-hand side.

Year 13	
Teacher 1 - Pure and Mechanics	Teacher 2 - Pure and Statistics
Pure 1 and Pure 2 Chapter 7 - Algebraic Methods and Chapter 1 - Algebraic Methods Proof P1 7.4 - 7.5 & P2 1.1	Pure 2 Chapter 1 - Algebraic Methods 1.2 - 1.5
Pure 2 Chapter 2 - Functions and Graphs 2.1 - 2.7	Pure 2 Chapter 6 - Trigonometric Functions 6.1 - 6.5
DEPT INTERVENTION	
Pure 2 Chapter 3 - Sequences and Series 3.1 - 3.8	Pure 2 Chapter 7 - Trigonometry and Modelling 7.1 - 7.7
Pure 2 Chapter 4 - Binomial Expansion 4.1 - 4.3	Pure 2 Chapter 8 - Parametric Equations 8.1 - 8.5
CA1 1st Mock w/c 25/11 PR1	
Pure 2 Chapter 9 - Differentiation 9.1 - 9.10	Statistics 1 Chapter 6 - Statistical Distributions 6.2 - 6.3
Pure 2 Chapter 12 - Vectors 12.1 - 12.4	Statistics 2 Chapter 3 - The Normal Distribution 3.1 - 3.7
Mechanics 2 Chapter 6 - Projectiles 6.1 - 6.4	Statistics 1 Chapter 7 - Hypothesis Testing 7.1 - 7.4
CA2 2nd Mock w/c 03/03 FR	
Mechanics 2 Chapter 7 - Applications of Forces 7.1 - 7.6	Pure 2 Chapter 11 - Integration 11.1 - 11.11
Mechanics 2 Chapter 8 - Further Kinematics 8.1 - 8.5	Pure 2 Chapter 10 - Numerical Methods 10.1 - 10.4

Website

- The Documents section contains the scheme of work, a reading list of mathematical books, the specification, and the formula booklet.
- The Revision section contains resources with links to PowerPoints, videos, questions by topic, and practice papers. It also includes BSG worksheets, topic tests, and unit tests for you to use.
- The Exams section contains all past papers and practice papers.
- The recommended resource for past paper questions is the following link. 
- The booklets can be accessed using the links in the boxes at the bottom of the page.



HGS MATHS

Home Year 7 Year 8 Year 9 Year 10 Year 11 Year 12 Year 13 Dr Frost

Year 12 - Maths

- Documents**
 - Start of Year Information
 - Scheme of Work
 - Reading List
 - Specification
 - Enhanced Content Guidance
 - Formula Booklet
 - Large Data Set
 - Top Tips
- Revision**
 - Revision Resources
 - BSG Worksheets
 - MadAsMaths
 - Moody Maths (Login Required)
 - Topic Tests
 - Unit Tests
- Exams**
 - Past Papers
 - More Past Papers (Login Required)
 - Practice Papers
 - Past Paper Questions by Topic
- UKMT Senior Past Papers**
 - Senior Mathematical Challenge
 - Senior Kangaroo
 - British Mathematical Olympiad 1
 - British Mathematical Olympiad 2
- Prerequisites**
 - Summer Task Booklet
 - Dr Frost Course
- Pure and Mechanics**
 - P1 2.3-2.6 Quadratics
 - P1 3 Equations and Inequalities
 - P1 13 Integration
 - M1 11 Variable Acceleration
 - P1 14 Exponentials and Logarithms Part 2
 - M2 4 Moments
- Pure and Statistics**
 - P1 7 Algebraic Methods
 - P1 8 The Binomial Expansion
 - S1 1 Data Collection
 - S1 4 Correlation
 - S2 1 Regression, Correlation and Hypothesis Testing

Dr Frost

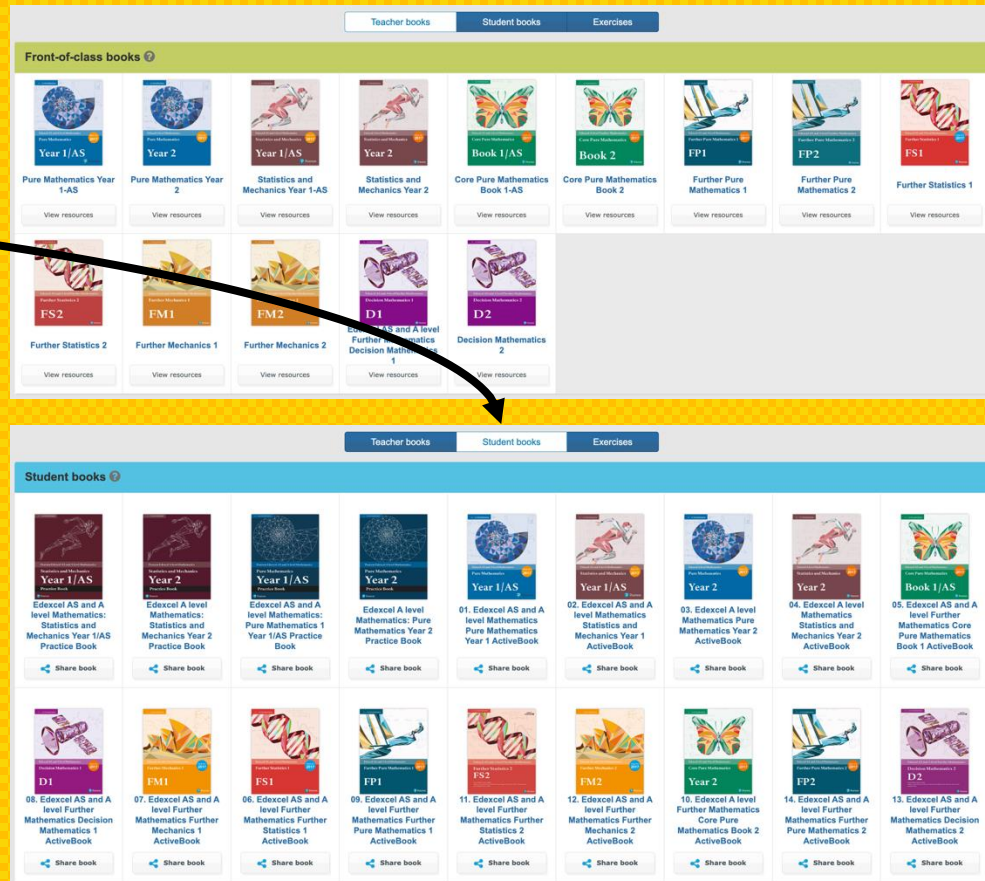
- We have uploaded our curriculum to Dr Frost so that you can easily do independent work based on what you cover in lessons.
- In each course, you can click through to the chapter and topic you want to practice and do key skills or exam questions.

The screenshot shows the user dashboard for a 'Demo Test Student' at King Edward VI Handsworth Grammar School for Boys. The dashboard includes a header with the user's name and school, and a navigation menu. The main content area is divided into three sections: 'What to work on next?', 'My Homework', and 'Resources'. The 'What to work on next?' section features a 'Start a Practice' button and a 'YOUR COURSES' list with 'A Level' highlighted in a red circle. The 'My Homework' section shows 'You haven't been set any tasks.' and the 'Resources' section is currently empty.

The screenshot shows the course page for 'A Level' at King Edward VI Handsworth Grammar School for Boys. The page is titled 'A Level' and features a large image of the school building. The course is divided into three main sections: 'Prerequisites', 'Pure and Mechanics 1', and 'Pure and Statistics 1'. The 'Pure and Mechanics 1' section is selected and shows a list of topics: 'P1 - Ch2 - Quadratics' (7 skills), 'P1 - Ch3 - Equations & Inequalities' (3 skills), 'P1 - Ch4 - Graphs & Transformations' (5 skills), 'M1 - Ch9 - Constant Acceleration' (3 skills), and 'P1 - Ch5 - Straight Line Graphs' (1 skill). The 'P1 - Ch2 - Quadratics' section is expanded, showing a 'DOWNLOADABLE RESOURCE' for 'Pure 1 Chapter 2 - Quadratics' and a list of practice questions. The first question is '200 Solving equations involving integer powers and their roots as inverses' with a mastery of 0/100. The second question is '200g: Solve a two-step equation involving a power of a variable.' with a mastery of 0/2.

Active Learn

- You will find your online A Level textbooks here.
- Extra practice books are available under the "Student Books" tab.



Enrichment

Support

There are two **break time clubs** running for Mathematics. These will be on **Tuesday**.

ROOM 27

Prepare for the Junior, Intermediate, or Senior UKMT

Challenges by:

- Practising questions from the challenges
- Tackling other advanced problem-solving tasks

ROOM 28

Get help with:

- Dr Frost retrieval homework
- Past paper questions
- Any maths topic you don't understand

You can also use this time and space to just do maths.

Details will be confirmed on Microsoft Teams.

Success

- You are obviously capable of achieving a top grade, as you met the entry requirements to study Mathematics at a grammar school.
- Some of you may not have needed to work too hard to achieve your 7s, 8s, or 9s because you are very talented mathematicians. Not itself a bad thing!
- However, all of you will need to **work consistently** throughout your A Levels, no matter who you are, because they are significantly **more challenging**.
- Practice is key, and you need plenty of it! **YOU MUST COMPLETE ALL TEXTBOOK EXERCISES!**

- Whatever you do, **DO NOT FALL BEHIND**. Don't think you can cram it all in at the last minute. Many like you have tried at **GCSE and SUCCEEDED**...but then tried at **A level and FAILED!**

THE 6 P'S FOR SUCCESS ARE:

- **PRACTICE**
- **PERSEVERANCE**
- **PRECISION**
- **AND PRACTICE, PRACTICE, PRACTICE**



Survey

If you could have told yourself ONE thing at the beginning of year 12 to have made a better start to A level Maths, what would it have been?

Responses from last year's year 13 students:

- Do every single textbook exercise as homework as soon as it is set
- Try to do past paper questions as soon as you can
- If you don't understand something, ask someone and try to watch YouTube videos that explain topics you struggle with
- Pre-read content before the lesson
- Revise more consistently and more often
- DO NOT underestimate the jump from GCSE to A level, it takes much more hours of work
- Start on entrance exams earlier, e.g., STEP, ENGAA, etc.