

HOLMER GREEN SENIOR SCHOOL – CURRICULUM INFORMATION

Subject: Mathematics

Year Group:	7
Exam Board: <i>(For years 10, 11, 12 and 13 only)</i>	
Assessment requirements:	<p>Students will take 3 large assessments during the year. These will be based upon SATs papers, and they will receive a revision list from their teacher in advance. These will assess their ability across the complete range of skills.</p> <p>Students will also be assessed by their teachers throughout the year. These will be topic based and will assess students on what they have been learning recently.</p>
Scheme of work overview:	<p>Autumn 1: Introduction to number Properties of shapes and angles Introduction to Algebra</p> <p>Autumn 2: Data: Averages and Frequency Properties of numbers Rounding and Estimation Area, Perimeter and Volume</p> <p>Spring 1: Circles Algebra: Solving equations and using Brackets Presenting Data</p> <p>Spring 2: Probability</p>

	<p>Fractions decimals and Percentages</p> <p>Summer 1:</p> <p>Graphing functions</p> <p>Interpreting and Sketching real Life Graphs</p> <p>Transformations</p> <p>Sequences</p> <p>Summer 2:</p> <p>Constructions, bearings and loci</p> <p>Pythagoras</p> <p>Ratio and Proportion</p> <p>Please note: Teachers will adapt their teaching according to the needs of their classes. As such, the order and pacing of this scheme can vary. Your child is always welcome to ask their teacher for further information on the structure of their learning.</p>
<p>Reading materials/resources:</p>	<p>There are many fantastic websites which offer practice, games and general interest for the keen mathematician. Your child will have a password to access Mymaths online, which is a brilliant place to start for their revision and interest.</p> <p>Other useful websites include:</p> <ul style="list-style-type: none"> • BBC Bitesize • Manga High <p>There are also many books students can read to enrich their understanding of mathematics. Authors include Professor Ian Stewart, Professor Marcus Du Sautoy, Simon Singh. The LRC contains a number of these books which are available for students to borrow, as well as revision guides and some text books.</p>

HOLMER GREEN SENIOR SCHOOL – CURRICULUM INFORMATION

Subject: Mathematics

Year Group:	8
Exam Board: <i>(For years 10, 11, 12 and 13 only)</i>	
Assessment requirements:	<p>Students will take 3 large assessments during the year. These will be based upon SATs papers, and they will receive a revision list from their teacher in advance. These will assess their ability across the complete range of skills.</p> <p>Students will also be assessed by their teachers throughout the year. These will be topic based and will assess students on what they have been learning recently.</p>
Scheme of work overview:	<p>Autumn 1: Number: Calculations</p> <p>Indices and Standard Index Form</p> <p>Interior, exterior angles and parallel lines</p> <p>Simplifying algebra</p> <p>Autumn 2: Area, Perimeter, Volume and Surface Area</p> <p>Multiples, Factors and Primes</p> <p>Solving Equations</p> <p>Spring 1: Graphing Equations</p> <p>Fractions</p> <p>Probability</p> <p>Average and Frequency</p> <p>Spring 2:</p>

	<p>Forming and Using Algebra</p> <p>Pythagoras</p> <p>Sequences</p> <p>Summer 1:</p> <p>Percentages</p> <p>Circles</p> <p>Data: Scatter Graphs and Correlation</p> <p>Introducing Inequalities</p> <p>Summer 2:</p> <p>Transformations</p> <p>Introducing Quadratics</p> <p>Data Project : Hypotheses</p> <p>Construction and Loci</p> <p>Proportion and Problem Solving</p> <p>Please note: Teachers will adapt their teaching according to the needs of their classes. As such, the order and pacing of this scheme can vary. Your child is always welcome to ask their teacher for further information on the structure of their learning.</p>
<p>Reading materials/resources:</p>	<p>There are many fantastic websites which offer practice, games and general interest for the keen mathematician. Your child will have a password to access Mymaths online, which is a brilliant place to start for their revision and interest.</p> <p>Other useful websites include:</p> <ul style="list-style-type: none"> • BBC Bitesize • Manga High <p>There are also many books students can read to enrich their understanding of mathematics. Authors include Professor Ian Stewart, Professor Marcus Du Sautoy, Simon Singh. The LRC contains a number of these books which are available for students to borrow, as well as revision guides and some text books.</p>

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HOLMER GREEN SENIOR SCHOOL – CURRICULUM INFORMATION

Subject: Mathematics

Year Group:	9
Exam Board: <i>(For years 10, 11, 12 and 13 only)</i>	
Assessment requirements:	<p>Students will take 3 large assessments during the year. These will be based upon GCSE papers, and they will receive a revision list from their teacher in advance. These will assess their ability across the complete range of skills.</p> <p>Students will also be assessed by their teachers throughout the year. These will be topic based and will assess students on what they have been learning recently.</p>
Scheme of work overview:	<p>Our current year 9 students will be the second cohort to experience the new GCSE exam. In anticipation of this, when in year 8 they were introduced to a broader range of new topics, and this year are beginning the new scheme of work designed to take them through years 9, 10 and 11 to take the new GCSE at the end. As the qualification is new, we are following the schemes as produced by the exam board, but are continually monitoring any resources, advice and further specification information.</p> <p>Please note: Teachers will adapt their teaching according to the needs of their classes. As such, the order and pacing of this scheme can vary. Your child is always welcome to ask their teacher for further information on the structure of their learning.</p>
Reading materials/resources:	<p>There are many fantastic websites which offer practice, games and general interest for the keen mathematician. Your child will have a password to access Mymaths online, which is a brilliant place to start for their revision and interest.</p> <p>Other useful websites include:</p> <ul style="list-style-type: none"> • BBC Bitesize • Manga High <p>There are also many books students can read to enrich their understanding of mathematics. Authors include Professor Ian Stewart, Professor Marcus Du Sautoy, Simon Singh. The LRC contains a number of these books which are available for</p>

students to borrow, as well as revision guides and some text books.

As students begin to prepare themselves for their GCSE's, they should be experimenting to find the method of revision which works best for them. Recommended online resources for GCSE revision are:

- BBC GCSE Bitesize
- Mymaths: Keystage 4 section
- Exam Solutions video's (available on youtube)

Revision guides are available in the LRC.

If your child would like further guidance on their revision, they should first talk to their class teacher who will be best able to provide support suitable to them.

HOLMER GREEN SENIOR SCHOOL – CURRICULUM INFORMATION

Subject: Mathematics

Year Group:	10
Exam Board: <i>(For years 10, 11, 12 and 13 only)</i>	Edexcel
Assessment requirements:	<p>Students will take 3 large assessments during the year. These will be based upon past GCSE papers, and they will receive a revision list from their teacher in advance. These will assess their ability across the complete range of skills.</p> <p>Students will also be assessed by their teachers throughout the year. These will be topic based and will assess students on what they have been learning recently.</p> <p>Students should be taking an active role in preparing themselves for these assessments by revising independently. They should also be reviewing their results and identifying areas of weakness to focus on.</p>
Scheme of work overview:	<p>Our current year 10 students will be the first cohort to experience the new GCSE exam. In anticipation of this, when in year 9 they follow the Edexcel transition scheme, and this year are beginning the new scheme of work designed to take them through years 10 and 11 to take the new GCSE at the end. As the qualification is new, we are following the schemes as produced by the exam board, but are continually monitoring any resources, advice and further specification information.</p> <p>Please note: Teachers will adapt their teaching according to the needs of their classes. As such, the order and pacing of this scheme can vary. Your child is always welcome to ask their teacher for further information on the structure of their learning.</p>
Reading materials/resources:	<p>There are many fantastic websites which offer practice, games and general interest for the keen mathematician. Your child will have a password to access Mymaths online, which is a brilliant place to start for their revision and interest.</p> <p>Other useful websites include:</p> <ul style="list-style-type: none"> • BBC Bitesize • Manga High

There are also many books students can read to enrich their understanding of mathematics. Authors include Professor Ian Stewart, Professor Marcus Du Sautoy, Simon Singh. The LRC contains a number of these books which are available for students to borrow, as well as revision guides and some text books.

As students prepare themselves for their GCSE's, they should be experimenting to find the method of revision which works best for them. Recommended online resources for GCSE revision are:

- BBC GCSE Bitesize
- Mymaths: Keystage 4 section
- Exam Solutions video's (available on youtube)

Revision guides are available in the LRC.

If your child would like further guidance on their revision, they should first talk to their class teacher who will be best able to provide support suitable to them.

HOLMER GREEN SENIOR SCHOOL – CURRICULUM INFORMATION

Subject: Mathematics

Year Group:	11
Exam Board: <i>(For years 10, 11, 12 and 13 only)</i>	Edexcel
Assessment requirements:	<p>At the end of the first half term in Autumn, students will have a topic assessment on the new topics they have studied during the half term.</p> <p>Before Christmas, students will have their mock exam, which will be both non-calculator and calculator papers, to be taken in the hall.</p>
Scheme of work overview:	<p>The year 11's will be the final cohort to take the current Edexcel GCSE.</p> <p>Classes will be completing the Edexcel scheme of work, and most classes will aim to complete learning new material by the end of the spring term.</p> <p>At this stage, we have to be incredibly responsive to the differing needs of each class to ensure we have time to recover the topics they are still losing marks on. Teachers will be analysing the question breakdown of both their end of year 10 exams, as well as their December mocks to ensure lessons are maximally effective for their class. This means of course that not all classes will be studying the same topics at the same time and at the same pace. If your child wants further information on upcoming topics, they should speak to their class teacher in the first instance.</p>
Reading materials/resources:	<p>There are many fantastic websites which offer practice, games and general interest for the keen mathematician. Your child will have a password to access Mymaths online, which is a brilliant place to start for their revision and interest.</p> <p>Other useful websites include:</p> <ul style="list-style-type: none"> • BBC Bitesize • Manga High <p>There are also many books students can read to enrich their understanding of mathematics. Authors include Professor Ian</p>

Stewart, Professor Marcus Du Sautoy, Simon Singh. The LRC contains a number of these books which are available for students to borrow, as well as revision guides and some text books.

As students prepare themselves for their GCSE's, they should be doing targeted revision thoroughly throughout the year. Recommended online resources for GCSE revision are:

- BBC GCSE Bitesize
- Mymaths: Keystage 4 section
- Exam Solutions video's (available on youtube)

The LRC also have maths revision guides available.

To start their revision, students can refer to the green tables they filled out at the end of year 10, which detail their areas of weakness from the end of year 10 exam. If your child would like further guidance on their revision, they should first talk to their class teacher who will be best able to provide support suitable to them.

HOLMER GREEN SENIOR SCHOOL – CURRICULUM INFORMATION

Subject: Mathematics

Year Group:	12
Exam Board: <i>(For years 10, 11, 12 and 13 only)</i>	Edexcel
Assessment requirements:	<p>Students will be assessed by their teacher as topics are covered, but will be expected to review their learning and recover weak areas in their independent revision time. A C1 mock will be given around Christmas time, when all the C1 material has been covered.</p> <p>C2 and S1 mocks will happen later in the year, once the module has been completed.</p>
Scheme of work overview:	<p>Autumn 1 and 2: Core 1 completed and Statistics 1 started.</p> <p>Spring 1, 2: and Summer 1: Core 2 completed and Stats 1 completed.</p> <p>Core 1 plan:</p> <p>Autumn 1:</p> <ul style="list-style-type: none"> • Indices • Surds • Linear graphs and equations • Quadratic Graphs and equations • Further Equations • Polynomials • Inequalities <p>Autumn 2:</p> <ul style="list-style-type: none"> • Graphs and Transformations • Sequences and Series • Differentiation • Integration
Reading materials/resources:	<p>Students will be issued an SMP text book to keep and study from for the whole year. These books are designed to support the exam board they are studying, and introductory sections at the start of each topic provide an explanation. If students haven't fully understood a topic, they should first</p>

work through these sections before coming to their teacher for advice and help.

To assess their own understanding, students should attempt the 'test yourself' exercise at the end of each section and then go back over their weaker areas.

'Exam Solutions' video's talk students through method and working out required in exams. These are available on Youtube. Ideally students should watch enough of the video to find out what the question is, pause and attempt it for themselves, and then watch the explanation.

The best way to revise maths is to do maths! So answering questions is the way to go!

HOLMER GREEN SENIOR SCHOOL – CURRICULUM INFORMATION

Subject: Mathematics

Year Group:	13
Exam Board: <i>(For years 10, 11, 12 and 13 only)</i>	Edexcel
Assessment requirements:	<p>Students will be assessed by their teacher as topics are covered, but will be expected to review their learning and recover weak areas in their independent revision time. A C3 mock will be given around Christmas time, when all the C3 material has been covered.</p> <p>C4 and S2 mocks will happen later in the year, once the module has been completed.</p>
Scheme of work overview:	<p>Autumn 1 and 2: Core 3 completed and Statistics 2 started.</p> <p>Spring 1, 2: and Summer 1: Core 4 completed and Stats 2 completed.</p> <p>Covered at the end of last year:</p> <ul style="list-style-type: none"> • Polynomials and Algebraic Fractions • Functions- inverse functions, modulus, transformations. <p>Core 3 plan:</p> <p>Autumn 1:</p> <ul style="list-style-type: none"> • Trigonometry • Logarithms and 'e' • Differentiating with logarithms and 'e' <p>Autumn 2:</p> <ul style="list-style-type: none"> • Differentiation • Numerical methods • Proof
Reading materials/resources:	<p>Students will be issued an SMP text book for each module to keep and study from for the whole year. These books are designed to support the exam board they are studying, and introductory sections at the start of each topic provide an explanation. If students haven't fully understood a topic, they should first work through these sections before coming to their teacher for advice and help.</p>

	<p>To assess their own understanding, students should attempt the 'test yourself' exercise at the end of each section and then go back over their weaker areas.</p> <p>'Exam Solutions' videos talk students through method and working out required in exams. These are available on Youtube. Ideally students should watch enough of the video to find out what the question is, pause and attempt it for themselves, and then watch the explanation.</p> <p>The best way to revise maths is to do maths! So answering questions is the way to go!</p>
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