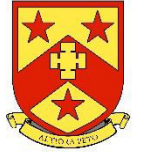


SUBJECT: Mathematics Year 11H 2019 2020



	Topic	Assessment
Autumn Term 1	REVISION - REVIEW & RECAP Use of Year 10 Mock Exam Question and Analysis to deliver bespoke curriculum to each class	Progress Check 1 w/c 24/09/19 *MILESTONE 1 w/c 08/10/19
Autumn Term 2	REVISION - REVIEW & RECAP Use of Year 10 Mock Exam Question and Analysis to deliver bespoke curriculum to each class	Progress Check 2 w/c 05/11/19
Spring Term 1	REVISION FOR TRIAL EXAMS Practice Papers and Exam Technique	TAIL EXAMS w/c 13/01/20
Spring Term 2	REVISION - REVIEW & RECAP Use of Trial Exam Question and Analysis to deliver bespoke curriculum to each class Practice Papers and Exam Technique	Progress Check 3 w/c 21/01/20 *MILESTONE 3 MOCKS w/c 04/03/20
Summer Term 1	REVISION Practice Papers and Exam Technique	EXTERNAL EXAMS BEGIN (provisional dates) AQA Paper 1: Tuesday 19th May 2020 a.m.
Summer Term 2	REVISION Practice Papers and Exam Technique	EXTERNAL EXAMS CONTINUE (provisional dates) AQA Paper 2: Thursday 4th June 2020 a.m. AQA Paper 3: Monday 8th June 2020 a.m.



Additional Topics

Algebra: Further quadratics; rearranging formulae and identities

- Simplify and manipulate algebraic expressions (including those involving surds) by:
 - expanding products of two or more binomials
 - factorising quadratic expressions of the form $x^2 + bx + c$ including the difference of two squares
 - factorising quadratic expressions of the form $x^2 + bx + c$
 - simplifying expressions involving sums, products and powers, including the laws of indices
- Understand and use standard mathematical formulae
- Rearrange formulae to change the subject
- Know the difference between an equation and an identity
- Argue mathematically to show algebraic expressions are equivalent, and use algebra to support and construct arguments and proofs
- Where appropriate, interpret simple expressions as functions with inputs and outputs
- Interpret the reverse process as the 'inverse function'
- Interpret the succession of two functions as a 'composite function'

Trigonometry recap and extension

- Know the formula for Pythagoras' Theorem $a^2 + b^2 = c^2$
- Apply it to find length in right angled triangles and, where possible, general triangles in two and three dimensional figures
- Know and use the trigonometric ratios

$$\sin \theta = \frac{\text{opposite}}{\text{hypotenuse}}$$

$$\cos \theta = \frac{\text{adjacent}}{\text{hypotenuse}}$$

$$\tan \theta = \frac{\text{opposite}}{\text{adjacent}}$$

- Apply them to find angles and lengths in right-angled triangles in two dimensional figures
- Know the exact values of $0^\circ, 30^\circ, 45^\circ, 60^\circ$ and 90° $\sin \theta$ and $\cos \theta$ for $\theta =$
- Know the exact value $\tan \theta$ for $\theta =$ of $0^\circ, 30^\circ, 45^\circ$ and 60°
- Apply angle facts, triangle congruence, similarity and properties of quadrilaterals to conjecture and derive results about angles and sides including Pythagoras' Theorem, use known results to obtain simple proofs
- Compare lengths using ratio notation; Make links to trigonometric ratios

Growth and decay

- Set up, solve and interpret the answers in growth and decay problems, including compound interest and work with general iterative processes

Equation of a circle

- Recognise and use the equation of a circle with centre at the origin
- Find the equation of a tangent to a circle at a given point.

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