**ALL HALLOWS RC HIGH SCHOOL**

 

**Maths Curriculum Overview**

**September 2022**

**Mr G Grundy**

**Curriculum Intent**

***“Without mathematics, there's nothing you can do. Everything around you is mathematics. Everything around you is numbers.”***

Shakuntala Devi

The Mathematics Curriculum at All Hallows aims to allow all students access to a range of experiences that will:

• Develop a broad knowledge and understanding of the mathematical concepts that allow students to become numerate and resilient problem solvers.

• Help them understand the links between key mathematical concepts and see how they are used in a variety of interesting and useful contexts.

• Allow them to realise the power that mathematics has to help us communicate effectively in a technological world.

• Allow them to appreciate the intrinsic and aesthetic qualities of mathematical shapes, proofs and patterns.

• Allow them to realise the satisfaction of tackling a problem or a puzzle and understanding that good Mathematicians are stuck most of the time.

Mathematics is the means of exploring and communicating the ideas and patterns that make up our world. We aim to build on the many skills that are developed in primary school so that we can provide a meaningful and enjoyable secondary experience. Students will be placed into setted groups according to their performance in the KS2 maths tests so that all students can develop at an appropriate level. Regular assessment helps to ensure that all potential is spotted and groups are adjusted accordingly during the year.

**KS3 Order of Teaching 2022/2023**

Our scheme of work focuses on the six subject content areas identified in the Key Stage 3 National Curriculum for mathematics:

* Number
* Algebra
* Ratio, proportion and rates of change
* Geometry and measures
* Probability
* Statistics

All of these elements are covered in Year 7 and the experience is enriched for students with opportunities to develop their problem solving ability.

The mathematics course in Year 8 is designed to build on the skills and understanding that students develop in their Year 7. As such the headings are very similar but topics are developed to a higher degree and the complexity of problems increases. Students are still placed in setted groups according to their abilities. Regular assessment helps to ensure that all potential is spotted and the groups are adjusted accordingly during the year.

The mathematics course in Year 9 builds on the skills and understanding that students have already developed. It is designed to prepare all of the students for the transition to their GCSE courses. Students continue to be taught in setted classes according to their abilities. Regular assessment monitors progress and ensures all potential is recognised.

Our scheme of learning covers all of the requirements for the National Curriculum and is scheduled as follows.

| **Year** | **Term 1** | **Term 2** | **Term 3** |
| --- | --- | --- | --- |
| **Year 7** | **Factors, Multiples and Primes****Division and Fractions****Place Value and Arithmetic****Rounding and Estimation****Length, area and volume****Expressions** | **Time, units and measure.****Proportional Equivalence****Properties of shapes****Angles****Transformations** **Statistics** | **Order of Operations****Sequences****Equations****Proportionality and ratio****Probability****Constructions,** **Scale drawing and ratio** |
| **Year 8** | **Properties of Number and Indices****Division and Fractions****Place Value and Arithmetic****Rounding and Estimation****Length, area and volume****Expressions** | **Time, units and measure.****Proportional Equivalence****Properties of shape****Angle rules****Transformations** **Statistics** | **Order of Operations****Sequences, rules and graphs****Equations****Proportionality and ratio****Probability****Constructions****Scale Drawing** |
| **Year 9**  | **Properties of Number - Indices and Surds****Division and Fractions****Place Value and Arithmetic****Rounding and Estimation****Length, area and volume****Expressions** | **Proportional Equivalence****Properties of shape****Angle rules and circle theorems****Order of Operations****Indices****Transformations** **Formulae and Equations** | **Formula****Sequences, rules, linear and quadratic graphs****Proportionality and ratio****Enlargement and similarity****Probability** |

**KS4 Order of Teaching**

| **Year**  | **Term 1** |  | **Term 2** |  | **Term 3** |
| --- | --- | --- | --- | --- | --- |
| **10** | **NUMBER OPERATIONS AND INTEGERS** | **FRACTIONS,****DECIMALS AND PERCENTAGES** | **INDICES AND SURDS** |  | **APPROXIMATION AND ESTIMATION** | **RATIO, PROPORTION AND RATES OF CHANGE** | **ALGEBRA** |  | **GRAPHS OF EQUATIONS AND FUNCTIONS** | **BASIC GEOMETRY** | **CONGRUENCE AND SIMILARITY** |
| **11** | **MENSURATION** | **PROBABILITY** | **STATISTICS** |  | **REVISION** | **REVISION** | **REVISION** |  | **REVISION** |  |  |