

### LONG TERM CURRICULUM PLAN

At Duke's we use the White Rose Maths Hub schemes for each year group which are designed to support a mastery approach to maths teaching and learning. They have been designed to support the aims and objectives of the National Curriculum.

## The schemes of learning:

- have number at their heart. A large proportion of time is spent reinforcing number to build competency.
- ensure teachers stay in the required key stage and support the ideal amount of depth before breadth.
- ensure that pupils have the opportunity to stay together as they work through the schemes as a group.
- provide plenty of opportunities to build reasoning and problem solving elements into the curriculum.

### **Concrete - Pictorial - Abstract**

We believe that all children, when introduced to a new concept, should have the opportunity to build competency by taking this approach.

Concrete - pupils should have the opportunity to use concrete objects and manipulatives to help them understand what they are doing.

Pictorial - students should use pictorial representations. These representations can then be used to help reason and solve problems.

Abstract - both concrete and pictorial representations should support children's understanding of abstract methods.

We also support the students learning outside of the classroom using Eedi which is an online platform which uses diagnostic questioning to assess what students know and understand, and identifies the specific nature of any gaps.

With such individualised information, students achieve a deeper understanding of their own strengths and weaknesses to help them feel more confident in their learning.

YEAR 7				
HT1	HT3	HT5		
Sequences, Understand and use algebraic	Solve problems with addition and subtraction,	Constructing, measuring and using geometric		
notation, Equality and equivalence.	Solving problems with multiplication and division,	notation, Developing geometric reasoning.		
	Fractions and percentages of amounts.			
HT2	HT4	HT6		

# DUKE'S SECONDARY SCHOOL FACULTY OF

# LONG TERM CURRICULUM PLAN

Place value and ordering integers and decimals, Fraction, decimal and percentage equivalence.	Operations and equations with directed number, Addition and subtraction of fractions.	Developing number sense, Sets and probability, Prime numbers and proof.

YEAR 8				
HT1	HT3	HT5		
Ratio and scale, Multiplicative change, Multiplying and dividing fractions.	Brackets, equations and inequalities, Sequences, Indices.	Angles in parallel lines and polygons, Area of trapezia and circles, Line symmetry and reflection.		
HT2	HT4	HT6		
Working in the Cartesian plane, Representing data, Tables & probability.	Fractions and percentages, Standard index form, Number sense.	The data handling cycle, Measures of location.		

YEAR 9				
HT1	HT3	HT5		
Numbers, Using percentages, Straight line graphs.	Maths and Money, Constructions and congruency, Deduction.	Enlargement and Similarity, Solving Ratio & Proportion Problems, Rates.		
HT2	HT4	HT6		
Forming and solving equations, Three-dimensional shapes	Rotation and Translation, Pythagoras' Theorem.	Probability, Algebraic Representation, Testing conjectures.		