

# Maths @ WBS Year 7 Roadmap

**Subject Aim:** To begin gaining mastery of the fundamental foundations of mathematics, expanding on ideas from Key Stage 2, and developing techniques for answering more challenging questions involving problem solving



## HT 1, 2, 3 & 4 NUMBER

- Place Value & Decimals:
  - Recurring Decimals
  - Rounding
  - Number Bases
- Calculation Methods
  - Multiplying & Dividing Decimals
  - Clever Calculation Tricks
- Negative Numbers
  - Four Operations with Negatives
  - Negative Decimals
- Fractions & Decimals
  - Four Operations with Fractions and Mixed Numbers
  - Four Operations with Fractions, Decimals and Negatives
- Indices
  - Laws of Indices
  - Roots



## HT 4-5 ALGEBRA

- Introduction to Algebra
- Algebraic Fractions
- Substitution
- Solving Equations



## HT 5-6 GEOMETRY

- Working with Measures
  - Converting Lengths & Time
  - Perimeter
- Shapes & Area
  - Parallelograms, Triangles, Trapezia & Compound Shapes
- Pythagoras

## Assessment

The first half of Year 7 is taught in mixed attainment groups. We use this time to focus on the foundations of maths – Working with Numbers.

We will start with an Initial Assessment so that we can see what you know already.

You will also have three short assessments to check your understanding throughout this time. The average of these tests will inform the setting for after Christmas, when you will be placed in one of sets 1-4.

There are three Schemes of Learning within Maths, and the one which you follow is dictated by the set that you are in.

### SUPPORT

Our SoL enabling all of our students to make progress with additional encouragement and support  
(Set 3)

### CORE

Our middle SoL enabling students to consolidate their existing knowledge progress and stretch themselves towards deeper thinking  
(Set 2 & 3)

### ADVANCED

Our SoL to stretch our top sets, pushing them towards GCSE style problem solving questions at every opportunity  
(Sets 1 & 2)

At the end of each unit, you will take the assessment which is relevant to your set. This will be marked and reviewed in another lesson. In a future lesson you will be set a review question, targeted at the individual areas where you have struggled.

The average of these tests will inform the setting for Year 8.

## Homework and Revision

- Homework includes both online and offline tasks.
- Feedback is given on our online systems and in written form.
- Revision clocks and practice questions for assessments are published on Brightspace.
- Each assessment is focused on the content of that Unit but will include skills previously learned as well.
- Completed and assessed homework and assessments will be placed into your progress folder.

## Enrichment Themes

In Year 7, there are a variety of opportunities for enrichment within Maths.

These include the Junior Maths Challenge, a study project on the mathematics of running a farming business and exploring mathematical puzzles and activities in our Problem Solving Club!

## Where Next?

In Year 8, you will learn more about all of these topics, as we explore algebra in more depth, learn to solve geometric problems and are introduced to the wonders of statistics!