Maths @ WBS Year 8 Roadmap

Subject Aim: To further explore and understand the fundamental elements of mathematics. Development of skills learned in Year 7. To gain familiarity with data analysis, graphs and algebraic problem solving.

TT Promotion

Autumn Term

Spring Term

Summer Term

HT 1 FDP

- Converting
- Percentage of an amount
- Percentage change

HT 2 ALGEBRAIC EXPRESSIONS

- Collecting like terms & multiplying variables
- > Four operations with algebraic fractions
- > Expanding brackets & factorising

ightharpoonup HT 3 ANGLES & FORMULAE

- Angles in parallel lines, triangles & quadrilaterals
- Writing, using and rearranging formulae

- > Expressions for area
- Area of circles & part circles
- > Properties of 3D shapes & surface area
- > Volume of cuboids, cylinders & other prisms

— HT 5 EQUATIONS, SEQUENCES & NUMBER THEORY

- > Forming and solving equations
 - One step, multi step & double sided
- > Factors, primes, composites & multiples
- > Odd, evens & multiples in algebra
- > Term-to-term rule and finding the nth term

HT 6 FUNCTIONS & GRAPHS

- Functions & coordinates
- Plotting, reading & using graphs

HT 6/7 INTRO TO STATISTICS

- Collecting & presenting data
- Averages & range

Assessment

There are 3 Schemes of Learning within KS3 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 4)

CORE

Our middle SoL enabling students to consolidate their existing knowledge progress and stretch themselves towards deeper thinking

(Set 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 by your teacher, and reviewed in another lesson.

You may be asked to do a second assessment if your teacher feels this will help to assess you fully. You will then be set a review question in a future lesson which will be targeted at the individual areas where you have struggled.

The average of these tests will inform the setting for Year 9.

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 will be stuck in books and assessments will be placed into your progress folder.

Enrichment Themes

In Year 8, there are even more opportunities for enrichment within Maths. These can include the Junior Maths Challenge, a study project on the mathematics of codebreaking, a look at analysing the average Year 8 student, an opportunity to develop understanding of Maths based careers and exploring real world maths in our Problem Solving club!

Where Next?

Year 9 is a transition year between Key Stage 3 and GCSE Mathematics. The skills you have acquired at Key Stage 3 are developed and extended through deeper problem solving and regular exposure to actual exam questions. New topics include Transformations, Averages from Frequency Tables, and an introduction to Trigonometry!

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