



Year 10 Maths Learning Journey

Students will follow either a foundation, higher or intermediate course.

The intermediate course allows access to either the foundation or higher paper. This decision will on tier of entry for these students will be made after Christmas time in year 11.

We also offer an entry level qualification in addition to GCSE for those students who will benefit from using this as a bridge to GCSE content.

For fuller details of the objectives in each block please follow the look at the section on the school website: <u>https://www.wensumtrust.org.uk/hellesdonhigh/curriculum/subject-pages/mathematics/maths/year-10-maths-1899</u>

Foundation Course

Students on the foundation course will study from blocks 1 to 10 across the 2 year course. Timings are approximately Blocks 1 to 5 in year 10, and the remining elements of the course in year 11. Some students will not study all of the blocks, and will spend more time progressing through the earlier blocks of work. The blocks will vary in length depending on the difficulty of the topics, and so cannot be allocated into terms.

Block 1 units are: Co-ordinates; Scale and Units; Properties of Numbers 1; Symmetry; Fractions; Maps and Angles.

Block 2 units are: Decimals; Directed numbers; Shape; Percentages; Ratio and Proportion; Statistics.

Block 3 units are: Spending money; Introduction to algebra and formulae; Collecting and recording data; Perimeter and area.

Block 4 units are: Graphs; Probability; 3D shapes; Earning money;

Block 5 units are: Estimation; Equations; Fractions 2; Properties of numbers 2 (Using indices)

Higher Course

Students on the higher course will study blocks 1 to 9 across the 2 year course. Timings are approximately Blocks 1 to 5 in year 10, and the remining elements of the course in year 11. The blocks will vary in length depending on the difficulty of the topics, and so cannot be allocated into terms.

Block 1 units are: Basic Arithmetic; Shapes and angles; Equations and inequalities;

Block 2 units are: Statistics review; Formulae and expressions; Ratio, proportion and variation

Block 3 units are: Trigonometry; Grouped data;

Block 4 units are: More about numbers; Area and volume

Block 5 units are: Quadratic equations; Graphs

Intermediate Course

Students on the intermediate course will study blocks 1 to 6 across the 2- year course. Students who are likely to take a higher paper in final entry will aim to finish all six blocks around Christmas of year 11, and then top up with some higher units. The blocks will vary in length depending on the difficulty of the topics, and so cannot be allocated into terms.

Block 1 units are: Angles; Fractions; Formulae and expressions; Rearranging formulae: Ratio: Proportion.

Block 2 units are: Decimals; Accuracy, estimating and checking; Transformations; Powers; Prime; Equations; Inequalities; Percentages.

Block 3 units are: 2D shapes; Pythagoras; Right angled trigonometry; Functions and sequences.

Block 4 units are: Data; Scatter graphs; Displaying data; circles; Compound rates.

Block 5 units are: Charts and tables; Probability; Straight line graphs; Curves; quadratics;

Block 6 units are: 3D surfaces, area and volume; Loci and constructions; Simultaneous equations; Vectors.

Assessment format, preparation and feedback:

The Maths GCSE specification has 3 assessment objectives: AO1 is about using and applying standard techniques. AO2 is about reasoning, interpreting and communicating mathematically. AO3 is about solving problems with a much greater focus on solving non-routine problems in mathematical and non-mathematical contexts

There are knowledge quizzes and a block test at the end of each block of work. The knowledge quizzes will be taken a lesson or two ahead of the block test. They are designed to make sure the students have learnt the key facts (AO1). It gives all students a chance to score well and is an important step in the revision for the block tests.

The block tests will include some knowledge questions, but also reasoning and applications questions (AO2 and 3)

Some preparation for the assessments will be done in class, but independent revision will also be needed. Class teachers will make sure that students have resources and give them guidance, but it is very helpful if parents have an overview and can encourage their children to revise carefully.

After a test some analysis will be done on strengths and where a little more work is needed. Some of this may be tackled as a whole class piece of work, but you may also see your child working on their individual targets to improve.

Year 10 PPE exams begin on the week of 29th April. The exam will be a non-calculator GCSE style paper. It will be 1 hour 30 minutes long.



