

### KS3

#### Year 7

Students build strong foundations in Number, Algebra, Geometry, Statistics, and Probability by developing arithmetic skills with whole numbers, decimals, fractions, percentages, and ratios, while also exploring place value, measurement, time, and money.

#### Year 8

Students deepen their understanding of Number, Algebra, Geometry, and Data handling. They develop fluency with operations involving whole numbers, decimals, fractions, percentages, and negative numbers, including rounding and using significant figures. Topics include powers and roots, estimation, ratio, and proportion.

### KS4

#### Year 9

Students build advanced skills in Number, Algebra, Geometry, Statistics, and Probability. Topics include stem-and-leaf diagrams, frequency tables, coordinates, Pythagoras' Theorem, trigonometry (SOHCAHTOA), calculating perimeter, area, surface area and volume of straight-line shapes, and working with scale drawings. These topics are applied to real-world contexts like currency conversion, growth and decay, and compound interest.

#### Year 10

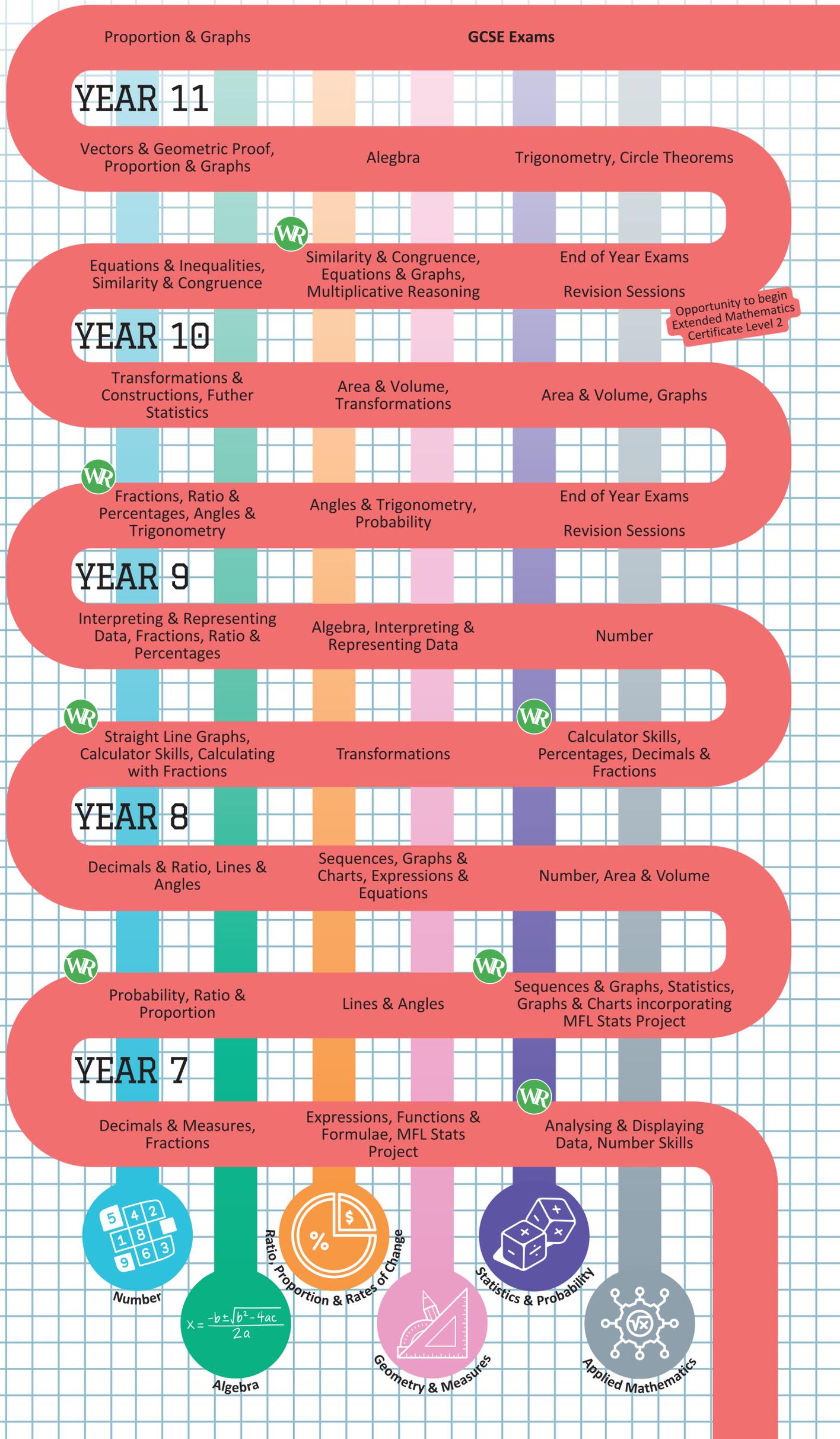
Students develop key skills across Geometry, Algebra, Graphs, and Real-life applications. Additionally at the end of Year 10, Higher students have the opportunity to enrol in the Extended Mathematics Certificate Level 2 (equivalent to GCSE in Further Maths), which they can carry on until the end of Year 11.

#### Year 11

Students tackle advanced topics in Algebra, Geometry including Trigonometry, and Graphs. Throughout the year, mock exams and classwork are used to guide focused revision and prepare students for their final assessments.

The Maths curriculum looks to develop students ability to contextualise their knowledge in to real-world terms e.g. currency exchange, instead of an autopilot rote-learning approach. We look to develop independent logical thinkers who are able to problem solve and provide solutions, as opposed to producing students who can simply remember a formula.

“To every problem, there is a solution”



Topics with the WR logo are directly linked to the Hoe Valley School Work Ready Agenda.