



Ashford School 11+ Mathematics Assessment:

The Mathematics Examination is 1 hour long. We assume that the students have followed the national curriculum covering Number, Shape and Space, Measurement and Data Handling. The entrance paper is based on the KS2 Year 6 syllabus focussing predominantly on level 4 and 5. Students should be able to add, subtract, multiply and divide whole numbers, simple fractions and decimals. We attach great importance to fluency and accuracy in arithmetic and to the knowledge of multiplication tables. We are looking for students with the ability to reason and to apply these basic skills in order to solve problems involving, among other things, the use of charts, diagrams and tables. The examination will be based upon but not limited to the attached key objectives.

Key Objectives**NC level**

Multiply and divide decimals mentally by 10 or 100, and integers by 1000, and explain the effect	5
Order a mixed set of numbers with up to three decimal places	4
Reduce a fraction to its simplest form by cancelling common factors	5
Use a fraction as an operator to find fractions of numbers or quantities (e.g. $\frac{5}{8}$ of 32, $\frac{7}{20}$ of 40, $\frac{9}{100}$ of 400 centimetres)	5
Understand percentage as the number of parts in every 100, and find simple percentages of small whole-number quantities	4
Solve simple problems involving ratio and proportion	5
Carry out column addition and subtraction of numbers involving decimals	4
Derive quickly division facts corresponding to multiplication tables up to 12 x12	4
Carry out short multiplication and division of numbers involving decimals	5
Carry out long multiplication of a three-digit by a two-digit integer	5
Use a protractor to measure acute and obtuse angles to the nearest degree	5
Calculate the perimeter and area of simple compound shapes that can be split into rectangles	5
Read and plot coordinates in all four quadrants	5
Identify and use the appropriate operations (including combinations of operations) to solve word problems involving numbers and quantities, and explain methods and reasoning	5
Solve a problem by extracting and interpreting information presented in tables, graphs and charts	5