11+ Mathematics Syllabus

Girls entering Kent College in Year 7 should have the following mathematical skills:

- Know all their multiplication tables up to 12 x 12
- Understand place value
- Able to recognise prime numbers, square numbers etc.
- Be capable of addition, subtraction, multiplication and division with whole numbers (including negative numbers) and decimals. They should be able to apply these skills to practical topics
- Able to round numbers
- Have studied time with the 24-hour clock
- Know the British money system
- Understand the concept of equivalent fractions and understand what fractions represent. They should also understand the concept of proportion
- Know how percentages are related to fractions. Simple examples such as 10% and 25% should be familiar
- Know the meaning of the words "Multiple" and "Factor"
- Applying BIDMAS
- Understand how to convert metric units and have learnt the relevant units
- Simplifying simple algebraic expressions and solving simple equations
- Be capable of exploring linear number patterns and explaining rules in words or possibly symbols
- Understand the concepts of perimeter, area and volume. They should be able to find areas of shapes made up of combinations of rectangles
- Be able to describe the line symmetry and rotational symmetry of an object
- Have studied angles in triangles, angles on a straight line, angles in a quadrilateral, Equilateral and isosceles triangles
- Be able to interpret graphs and understand what they tell us. They should be able to use co-ordinates with 2 positive variables
- Understand the concept of probability and be capable of calculating this, in simple cases. They should be familiar with the words "Certain, likely, unlikely, impossible"
- Be familiar with calculations of mean, mode, median and range
- Have developed abilities to visualise diagrams
- Be able to interpret bar charts, pictograms and pie charts

The 11+ mathematics examination is 60 minutes long and is not multiple choice.

The exam will cover a selection of the above topics.