Entrance Exam Maths Topics

Number and Algebra

Fractions (including simplifying, equivalence and fractions of amounts). Place Value (from 3 decimal places up to one million - includes rounding to two decimal places)

A the four operations:

- addition (up to tens of thousands)
- subtraction (up to tens of thousands)
- multiplication (including multiplying large numbers by two digits)
- division (including division of large numbers by two digits)

Negative numbers

Number machines

Magic squares

Equations:

- balancing equations
- solving equations
- composing algebraic expressions

Factors

Divisibility

Multiples

Square numbers

Cube numbers

Powers

Prime numbers

Relationship between fractions, decimals and percentages.

Percentages of amounts.

Handling Data

Frequency tables

Bar charts

Pie charts

Line Graphs

Venn Diagrams

Carroll Diagrams

Averages:

- Mean
- Mode
- Median
- Range

Probability

Space, Shape and Measures

Recognition of 2D and 3D shapes (including knowledge of their properties).

Triangles:

- types of triangle (right-angled, isosceles, equilateral, scalene)
- types of angle (acute, obtuse, reflex, right)
- degrees in a triangle (180)

Degrees in a circle/full rotation (360)

Symmetry

Rotational symmetry

Co-ordinates

Area of compound shapes

Area of triangles

Perimeter of compound shapes

Perimeter of triangles

Ratio and proportion

Estimating measures

Measures:

- kg, g, l, ml, cl, m, cm, mm
- converting from grammes to kilos etc.
- the calendar (days in a year/ leap year/ days in each month etc.
- Hours, minutes, days etc.
- Time (including 24 hour clock)

Other skills

Reading the question carefully.

Understanding the question.

Speed - your child must work rapidly to complete the exam in the time allotted.

Answering every question - all questions must be answered, whether they are guessed or not.