<table>
<thead>
<tr>
<th>Year</th>
<th>Number</th>
<th></th>
<th>Measure</th>
<th></th>
<th>Number</th>
<th></th>
<th>Number</th>
<th></th>
<th>Statistics</th>
<th></th>
<th>Number</th>
<th></th>
<th>Fractions</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Nursery</td>
<td>can select a number of objects from a group and recite the numbers in sequence. Can begin to make comparisons between quantities. Can recognise the numerals from 1 to 5, using marks to show how many. Can recognise numbers important to them and count up to objects from a larger group. <strong>Shape and space</strong> – can notice shape and patterns in pictures, can use the language of position, can describe time-based activities. Begin to use names of 2d and 3d shapes. Can recreate and build patterns.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reception</td>
<td>recognise and order numbers. Count beyond ten and recognise numerals for groups of objects. Can count irregular arrangements of shapes. Can write numerals to 10. <strong>Measure</strong> – can relate objects to a position, can compare lengths and heights of objects. Can use the language of weight and compare objects and positions. Can understand portions of time <strong>Number</strong> – can use the language of more and fewer in relation to objects. Can fill in numbers in order recognising which come before and after to 20. Begin to understand the meaning of zero. <strong>Geometry</strong> – can begin to recognise and name 2d shapes <strong>Geometry</strong> – can sequence objects and recreate a pattern. Can build 3d shapes.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Year 1</td>
<td>recognise, write and order numbers. Identify place value of tens and ones/units. Begin to introduce numbers beyond 100. <strong>Number</strong> – understand cardinal and ordinal numbers. Use positional language identifying before, between and after values. Order numbers to 50 from a list. <strong>Measure</strong> – master positional language. Can weigh objects using grams to the nearest 100g. Can understand equal, more and less. <strong>Measure</strong> – can recognise, read and write times to o’clock and half past. Can match times and activities. Can state an hour before and after a given time. <strong>Number</strong> – number bonds to 7, 8, 9, 10. Can add and subtract ten from given numbers, varying start points. <strong>Statistics</strong> – can create tally’s, block graphs and pictograms. <strong>Geometry</strong> – can sort 3d shapes into a Venn diagram using names and properties, <strong>Number</strong> – Solve worded problems and number problems that involve a mix of addition and subtraction. Can solve two step problems and missing value problems. Can complete number sentences for given calculations.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Year 2</td>
<td>count in steps, recognise place value to hundreds, read and write numerals and words <strong>Number</strong> – recall and use 2, 3, 4, 5, 8 and 10 times table, recall and use division facts - include odd and even numbers, using x, ÷ and = signs <strong>Number</strong> – add two digit numbers using expanded column addition. Fluently use addition and subtraction facts to 20 and 100. <strong>Fractions</strong> – recognise, find and name halves, quarters and three quarters and thirds of shapes and quantities using formal signs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| Year 3 | Number – can develop fluent and efficient methods for calculations including partitioning and commutativity to solve missing value and multi-step problems.  
Geometry – can draw 2d shapes accurately, measuring perimeter and explain the difference between the area and perimeter.  
Number – can recognise place value, understand where decimals and fractions fit in the number line. Can round in order to estimate. Can use inverse operations to check calculations.  
Number – can add and subtract three digit numbers, written and mentally, can write number sentences  
Measure – read, write and convert time between the 12 and 24 hour clocks telling the time to the nearest 5 minutes. Can identify minutes, hours, days, months, years facts.  
Measure - introduce angles: including right angles. Can find angles in their environment and state whether more or less than a right angle.  
Statistics – Sort information into categories, draw and interpret tally charts, pictograms and block drawings. |
| Year 4 | Number – understand the impact of rounding on calculations in context. Can compare quantities of the same value in different representations.  
Statistics – can draw line and bar graphs with different scales. Can draw time series graphs. Can interpret a range of line, bar and time series graphs.  
Number – solve two step addition and subtraction problems explaining which operations are needed and why.  
Number – complete formal multiplication and division of two by one digit numbers. Use factors with division.  
Measure – can convert different measures of time, know and spell days of week and months of the year. Learn the number of days in each month of the year.  
Number – introduce Roman numerals and their History. Understand different representations of numbers using symbols.  
Measure – can identify types of angle. Can define movements as translations using a description and numerical value. |
<table>
<thead>
<tr>
<th>Year 5</th>
<th>Year 6</th>
</tr>
</thead>
</table>
| **Statistics** – know what the x and y axis relates to, can draw line and frequency graphs, interpret a range of line and frequency graphs  
**Statistics** – can find the mean, median, mode and range for a simple series of numbers  
**Statistics** – use vocabulary to find describe probability, know probability in relation to a number line, write the probability for simple single events  
**Geometry** – can read and write 12/24 hour time, convert between 24 and 12 hour time, calculate an amount of time elapsed, read time off train/bus timetables, solve problems involving time  
**Number** – can identify and understand a decimal place value, write decimals in ascending order, relate simple fractions to their decimal value, round decimals to one / two decimal places  
**Number** – can add / subtract decimals to 2 decimal places, divide / multiply decimals by integer, use formal methods, solve ‘real life’ problems  
**Number** – can multiply 2 and 3 digit numbers by a 2 digits number, divide 3 and 4 digit numbers by a 2 digit number using factors method  
**Geometry** – can read and plot coordinates in all four quadrants, construct shapes in all 4 quadrants, reflect shapes in the x and y axis  
**Geometry** – calculate missing angles on a straight, in a triangle/quadrilateral, vertically opposite  
**Geometry** – understand the volume of cube/cuboid, use formula to find the volume, identify and calculate the surface area of cubes /cuboids | **Statistics** – can read and draw frequency and line graphs, carry out a survey to collect data, present data using appropriate graphs  
**Statistics** – can interpret data from a pie chart, calculate the angles for a pie chart, accurately draw a pie chart  
**Statistics** – can calculate the mean, median, mode and range for a given set of data, know how to find the probability of a single event, able to write probability as a fraction  
**Algebra** – can expand algebraic brackets by an integer, letter or integer and letter, solve equations in which brackets occur  
**Algebra** – can continue sequences, write a sequence from an nth term, find the nth term of a sequence  
**Algebra** – derive a simple expression from a statement, form and solve simple equations from a statement, use algebraic expressions and equations for the perimeter of rectangles  
**Number** – convert between mixed numbers and improper fractions, add/subtract missed numbers  
**Number** – can convert fractions to decimals, convert between fractions and percentages, convert between decimals and percentages, order fractions, decimals and percentages  
**Number** – introduce the concept of ratios, simplify ratios, simplify ratios with fractions and decimals, divide quantities in a given ratio. |
| Year 7 | **Algebra** – can expand algebraic brackets, factorise two terms fully, factorise terms using indices  
**Algebra** – can continue sequences, find the nth term of a sequence (including simple squared sequences), derive a sequence from the nth term, continue sequences in picture format, construct a table to record a sequence from picture format, give nth terms for sequences related to drawings  
**Algebra** – can substitute numbers into an equation plotting straight line graphs in all four quadrants, understand the gradient and intersect of a linear function, draw parallel lines and find points of intersection of lines, find the area enclosed by given linear functions (top set to work with quadratic functions)  
**Geometry** – can use formulas for the area and perimeter of 2d shapes, use areas and perimeters composite shapes, calculate the volume and surface area  
**Number** – calculate the product of prime factors giving answers with indices, find the Highest Common Factor, find the Lowest Common Multiple  
**Number** – can increase and decrease a quantity by a percentage, find the percentage change, work with profit and loss solving ‘real life’ problems  
**Geometry** – understand the origins of pi, know the formulae for area and circumference of circles, use a scientific calculator, find the area and circumference of whole and parts of circles  
**Algebra** – can solve equations using inverse operations. |
| Year 8 | **Statistics** – can interpret conversion graphs, understand correlations, draw conversion graphs, plot and draw scatter graphs, draw the line of best fit, interpret scatter graphs  
**Statistics** – can interpret and draw line and frequency graphs, find the MMMR from a frequency table/graph, calculate the angles for a pie chart, accurately draw a pie chart  
**Geometry** – can solve area and perimeter problems involving quadrilaterals, including kites, rhombi and trapezia. Can solve volume and surface area problems.  
**Geometry** – can find interior and exterior angles in regular polygons, identify parallel line angles and calculate them, solve angle problems in polygons including parallel lines rules.  
**Algebra** – can continue sequences, find the nth term of a sequence (including simple squared sequences), derive a sequence from the nth term, continue sequences in picture format, construct a table to record a sequence from picture format, give nth terms for sequences related to drawings  
**Algebra** – can substitute numbers into an equation plotting straight line graphs in all four quadrants, understand the gradient and intersect of a linear function, draw parallel lines and find points of intersection of lines, find the area enclosed by given linear functions (top set to work with quadratic functions)  
**Number** – can write probability using fractions/decimals, construct, complete and evaluate a probability table, calculate the probability of a single event, calculate conditional probability  
**Number** – can solve problems simplifying ratios and dividing quantities into a ratio. |
| Scholarships and entrance exams this term |
CE Trial Exams: