

## Leyland St James' CE Primary School

### Year 5 Maths: Vocabulary and Content

Vocabulary	Content
<b>Number and Place Value</b>  <u>Vocabulary:</u> <i>Greater than, equal to, hundred thousand</i>	Count forwards or backwards in steps of powers of 10 for any given number up to 1,000,000. Count forwards or backwards in steps of powers of 10 for any given number up to 1,000,000. Interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through zero. Round any number up to 1,000,000 to the nearest 10, 100, 1000, 10,000, 100,000.
<b>Addition and Subtraction</b>  <u>Vocabulary:</u> <i>One's boundary</i>	Add and subtract whole numbers with more than 4 digits, including using formal written methods. Add and subtract numbers mentally with increasingly large numbers. Use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy.
<b>Multiplication and Division</b>  <u>Vocabulary:</u> <i>Divisibility, square number, cube number.</i>	Identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers. Know and use the vocabulary of prime numbers, prime factors and composite (non-prime) numbers. Establish whether a number up to 100 is prime and recall prime numbers up to 19. Multiply numbers up to 4 digits by one- or two- digit number using a formal written method, including long multiplication for two-digit numbers. Multiply and divide numbers mentally drawing upon known facts. Divide numbers up to 4 digits by a one-digit number using the formal written method of short division and interpret remainders appropriately for the context. Multiply and divide whole numbers and those involving decimals by 10, 100 and 1000.
<b>Fractions</b>  <u>Vocabulary:</u> <i>Tenths boundary, proper, improper, equivalent, thousandths, percent.</i>	Compare and order fractions whose denominators are all multiples of the same number. Identify, name and write equivalent fractions of a given fraction, represented visually including tenths and hundredths. Recognise mixed numbers and improper fractions and convert one from to the other and write mathematical statements $>1$ as a mixed number. Add and subtract fractions with the same denominator and denominators that are multiples of the same number. Multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams. Read and write decimal numbers as fractions. Recognise and use thousandths and relate them to tenths, hundredths and decimal equivalences. Round decimals with two decimal places to the nearest whole number and to one decimal place. Read, write, order and compare numbers with up to three decimal places. Solve problems involving number up to three decimal places. Recognise the percent symbol (%) and understand that percent relates to 'number of parts per hundred', and write percentages as a fraction with denominator 100, and as a decimal. Solve problems which require knowing percent rate and decimal equivalents and those fractions with a denominator of a multiple of 10 or 25.
<b>Measurement</b>  <u>Vocabulary:</u>	Convert between different units of metric measure (for example, kilometre and metre; centimetre and metre; centimetre and millimetre; gram and kilogram; litre and millilitre) Understand and use appropriate equivalences between metric units and common imperial units such as inches, pounds and pints. Measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres.

<p><i>Imperial unit, discount, currency, square meter, square millimetre, pint, gallon</i></p>	<p>Calculate and compare the area of rectangles (including squares), parallelograms and triangles and including using standard units, square centimetres and square metres and estimate the area of irregular shapes.</p> <p>Estimate volume (for examples using 1cm<sup>3</sup> blocks to build cuboids (including cubes) and capacity).</p> <p>Solve problems involving converting between units of time.</p> <p>Use all four operations to solve problems involving measure (length, mass, volume, money) using decimal notation, including scaling.</p>
<p><b>Geometry</b></p> <p><u><b>Vocabulary:</b></u>  <i>Axis of symmetry, reflective, symmetry, x axis, y axis, quadrant, co-ordinate, protractor.</i></p>	<p>Identify 3D shapes, including cubes and other cuboids from 2D representations .</p> <p>Know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles.</p> <p>Draw given angles, and measure them in degrees. (°)</p> <p>Identify: angles at a point and one whole turn total 360°, angles at a point on a straight line and half a turn total 180° and other multiples of 90°.</p> <p>Use the properties of rectangles to deduce related facts and find missing lengths and angles.</p> <p>Distinguish between regular and irregular polygons based on reasoning about equal sides and angles.</p>
<p><b>Statistics</b></p> <p><u><b>Vocabulary:</b></u>  <i>Line graph, bar line chart, outcome.</i></p>	<p>Solve comparison, sum and difference problems using information presented in a line graph.</p> <p>Complete, read and interpret information in tables, including timetables.</p>