

# Maths Medium-term planning

## Autumn Term 1 Eagle Class



YEAR 6

Week commencing	Area to be studied	<u>Main Learning intentions</u>	
Ongoing	<p><b>Mental Maths Objectives</b> (Objectives will change subject to assessment of children's needs-child led learning)</p>	<p>3X ARITHMETIC PRACTICE A WEEK FOLLOWED BY ARITHMETIC TEST ON A FRIDAY</p> <ul style="list-style-type: none"> <li>To add and subtract whole numbers with more than 4 digits, including using efficient written methods (column addition and subtraction).</li> <li>To add and subtract numbers mentally with increasingly large numbers.</li> <li>To use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy.</li> <li>Practise and complete past arithmetic papers.</li> </ul>	
<p>Week 1 &amp; 2 4.9.19 and 9.9.19</p>	<p><b>Place value ordering and rounding</b> <b>Solving problems involving larger numbers</b></p>	<p>YEAR 6 BASELINE MATHS TEST TO BE COMPLETED</p> <ul style="list-style-type: none"> <li>To read, write, order and compare numbers at least to 10,000,000 and determine the value of each digit.</li> <li>To round any whole number to a required degree of accuracy.</li> <li>To use negative numbers in context, and calculate intervals across zero.</li> <li>To recognise and use Roman numerals</li> </ul>	<p>YEAR 5 BASELINE MATHS TEST TO BE COMPLETED</p> <ul style="list-style-type: none"> <li>count forwards or backwards in steps of powers of 10 for any given number up to 1 000 000</li> <li>interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through zero</li> <li>round any number up to 1 000 000 to the nearest 10, 100, 1000, 10 000 and 100 000</li> <li>solve number problems and practical problems that involve all of the above</li> <li>read Roman numerals to 1000 (M) and recognise years written in Roman numerals.</li> </ul>

<p>Week 3 16.9.19</p>	<p><i>Multiples factors and prime numbers</i></p>	<p>YEAR 6</p> <ul style="list-style-type: none"> <li>• To identify factors and multiples, including all factor pairs of a number and common factors of two numbers</li> <li>• To identify common factors, common multiples and prime numbers.</li> <li>• To identify prime numbers</li> </ul>	<p>YEAR 5</p> <ul style="list-style-type: none"> <li>• identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers</li> <li>• know and use the vocabulary of prime numbers, prime factors and composite (non-prime) numbers</li> <li>• establish whether a number up to 100 is prime and recall prime numbers up to 19</li> </ul>
<p>Week 4 &amp; 5 23.9.19 and 30.10.19</p>	<p><i>Multiplication and division</i></p>	<ul style="list-style-type: none"> <li>• Round 4-digit numbers to the nearest 100 to make approximations.</li> <li>• Use short multiplication to multiply 4-digit numbers by single-digit numbers.</li> <li>• To multiply multi-digit numbers up to four digits by a 2 digit number using formal written method of long multiplication</li> <li>• To use estimation to check answers to calculations and determine, in the context of the problem, an appropriate degree of accuracy</li> <li>• To divide numbers up to 4 digits by a 2 digit whole number using the formal written method of long division and interpret remainders as a whole number remainder, fraction remainder or decimal remainder</li> </ul>	<ul style="list-style-type: none"> <li>• multiply numbers up to 4 digits by a one- or two-digit number using a formal written method, including long multiplication for two-digit numbers</li> <li>• divide numbers mentally drawing upon known facts</li> <li>• 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</li> </ul>

<p>Week 6 7.10.19</p>	<p><i>Calculation with the four operations including decimals</i></p>	<ul style="list-style-type: none"> <li>• To revise standard written methods for addition and subtraction</li> <li>• To perform mental calculations, including with mixed operations and large numbers</li> <li>• To solve addition and subtraction multi-step problems in contexts deciding which operations and methods to use and why</li> </ul>	<ul style="list-style-type: none"> <li>• add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction)</li> <li>• add and subtract numbers mentally with increasingly large numbers</li> <li>• use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy</li> <li>• solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why.</li> </ul>
<p>Week 7 14.10.19</p>	<p><i>Circles and angles</i></p>	<ul style="list-style-type: none"> <li>• Name parts of circles (radius, diameter, circumference) and know that the diameter is twice the radius.</li> <li>• Sort quadrilaterals.</li> <li>• Know that angles around a point add up to <math>360^\circ</math> and use this to work out missing angles.</li> <li>• Know the totals of angles inside triangles and quadrilaterals and use this and rules about angles on a straight line and about a point to find missing angles.</li> <li>• Know that opposite angles are equal.</li> <li>• Find angles in polygons.</li> </ul>	<ul style="list-style-type: none"> <li>• know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles</li> <li>• draw given angles, and measure them in degrees (o)</li> <li>• identify:</li> <li>• angles at a point and one whole turn (total <math>360^\circ</math>)</li> <li>• angles at a point on a straight line and in a turn (total <math>180^\circ</math> other multiples of <math>90^\circ</math>)</li> </ul>