

**TERM: Autumn 1**

**YEAR: 5**

WEEK 1	OBJECTIVES	NON-STATUTORY GUIDANCE AND SUPPORT FOR LEARNING
Number  Place Value	<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>Read, write, order and compare numbers to at least 1 000 000 and determine the value of each digit</li> <li>Round any number up to 1 000 000 to the nearest 10,100,1000, 10 000 and 100 000</li> </ul>	<p><i>Pupils identify the place value in large whole numbers. They should recognise and describe linear number sequences (for example 3, 3 ½, 4, 4 ½ ...) including those involving fractions and decimals, and find the term-to-term rule in words (for example add ½ )</i></p>

WEEK 2	OBJECTIVES	NON-STATUTORY GUIDANCE AND SUPPORT FOR LEARNING
Number  Addition	<ul style="list-style-type: none"> <li>Add whole numbers with more than 4 digits, including using columnar addition</li> <li>Add 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 multi-step problems in contexts, deciding which operations and methods to use and why</li> </ul>	<p><i>Pupils practise using the formal written methods of columnar addition with increasingly large numbers to aid fluency (see mathematics Appendix 1)</i></p> <p><i>They practise mental calculations with increasingly large numbers to aid fluency (for example <math>12\,462 + 2300 = 14\,762</math>)</i></p> <p>NRICH: <a href="#">Twenty Divided Into Six</a> **  NRICH: <a href="#">Reach 100</a> ***  NRICH: <a href="#">Two and Two</a> ***  NRICH: <a href="#">Journeys in Numberland</a> *  NRICH: <a href="#">Make 100</a> **</p> <p><b>Real life links:</b>  Numbers with decimals are frequently seen in real life, For example: catalogues or take away menus. Ask them to choose two or three items to buy. Give them a budget and ask them total the prices and find out how much of their budget is left.</p>

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WEEK 3	OBJECTIVES	NON-STATUTORY GUIDANCE AND SUPPORT FOR LEARNING
Number Subtraction	<ul style="list-style-type: none"> <li>Subtract numbers mentally with increasingly large numbers</li> <li>Subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction)</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><i>Pupils practise using the formal written methods of columnar subtraction with increasingly large numbers to aid fluency.</i></p> <p><i>They practise mental calculations with increasingly large numbers to aid fluency (for example <math>12\ 462 - 2300 = 10\ 162</math>)</i></p> <p>NRICH: <a href="#">Twenty Divided Into Six</a> **            NRICH: <a href="#">Reach 100</a> ***            NRICH: <a href="#">Two and Two</a> ***            NRICH: <a href="#">Journeys in Numberland</a> *            NRICH: <a href="#">Make 100</a> **</p> <p><b>Real life links:</b>            Learners will encounter addition and subtraction when focusing on:            Money – when required to add prices, calculate change, add surcharges or interest, or subtract discounts;            Measurement – when required to add lengths, calculate remaining distance in a journey, find how much more/less liquid is needed, add quantities when cooking, calculate perimeters of regular and irregular shapes, work out time differences e.g. how many days until Christmas, how many minutes until break time etc.;</p> <p><b>Mathematical Challenges for the more able</b>            Joins - 54</p>

WEEK 4	OBJECTIVES	NON-STATUTORY GUIDANCE AND SUPPORT FOR LEARNING
Number Multiplication	<ul style="list-style-type: none"> <li>Multiply numbers mentally drawing upon known facts.</li> <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>Multiply whole numbers and those involving decimals by 10, 100 and 1000</li> </ul>	<p>See calculation policy.</p> <p><i>Pupils practise and extend their use of the formal written methods of short multiplication.</i>  <i>They apply all the multiplication tables and related division facts frequently, commit them to memory and use them confidently to make larger calculations.</i></p> <p>NRICH: <a href="#">Sweets in a Box</a> *            NRICH: <a href="#">Which Is Quicker?</a> *            NRICH: <a href="#">Multiplication Squares</a> *            NRICH: <a href="#">Flashing Lights</a> *            NRICH: <a href="#">Abundant Numbers</a> *            NRICH: <a href="#">Factor Track</a> **            NRICH: <a href="#">Factors and Multiples Game</a> ***            NRICH: <a href="#">Curious Number</a> ***            NRICH: <a href="#">Make 100</a> **</p>

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WEEK 4	OBJECTIVES	NON-STATUTORY GUIDANCE AND SUPPORT FOR LEARNING
		<p><b>Real life links:</b>  Problems for the children to solve that involve multiplication for example:  Naomi was making some fruit juice for a party. She decided each person would need 350ml of juice. If there were 24 people at the party, how many litres of juice does she need to make?  Jessie had eight lengths of rope. Each was 1m 36cm. If he put them side by side what would the total length be?  Paddy had 12 cartons of orange juice. Each carton contained 0.750l. How much juice did he have altogether?  Suzie, the baker, was making 14 loaves of bread for the local supermarket. For each loaf she needed 1.275kg of flour. What is the total amount of flour that she needed?  India took part in a sponsored bike ride at her school. She cycled 25 times around the perimeter of the school playground. The perimeter is 105.34m. How far did she travel?</p> <p><b>Mathematical Challenges for the more able</b>  Zids and Zods - 66</p>

WEEK 5	OBJECTIVES	NON-STATUTORY GUIDANCE AND SUPPORT FOR LEARNING
Number Division	<ul style="list-style-type: none"> <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> <li>Divide whole numbers and those involving decimals by 10, 100 and 1000</li> <li>Solve problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign</li> </ul>	<p><i>Pupils practise and extend their use of the formal written methods of short division (see Mathematics Appendix 1).</i></p> <p><i>They apply all the multiplication tables and related division facts frequently, commit them to memory and use them confidently to make larger calculations.</i></p> <p><b>NRICH:</b> <a href="#">Curious Number</a> ***  <b>NRICH:</b> <a href="#">Make 100</a> **</p> <p><b>Real life links:</b>  You could make up problems for the children to solve that involve division for example:  Harris had £38. 96. He shared his money into four equal piles. How much money was in each pile?  Suzie, the baker, was making 14 loaves of bread for the local supermarket. For each loaf she needed 1.275kg of flour. What is the total amount of flour that she needed?  India took part in a sponsored bike ride at her school. She cycled 25 times around the perimeter of the school</p>

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WEEK 5	OBJECTIVES	NON-STATUTORY GUIDANCE AND SUPPORT FOR LEARNING
		playground. The perimeter is 105.34m. How far did she travel?  <b>Mathematical Challenges for the more able</b> Maze - 6

WEEK 6	OBJECTIVES	NON-STATUTORY GUIDANCE AND SUPPORT FOR LEARNING
Geometry 2D/3D shape	<ul style="list-style-type: none"><li>Distinguish between regular and irregular polygons based on reasoning about equal sides and angles</li><li>Identify 3D shapes, including cubes and other cuboids, from 2D representations</li></ul>	<i>Pupils become accurate in drawing lines with a ruler to the nearest millimeter. They use conventional markings for parallel lines and right angles.</i>  <b>NRICH:</b> <a href="#">Egyptian Rope</a> **