## TERM: Autumn 2

WEEK 1	OBJECTIVES	SUPPORT FOR LEARNING / GUIDANCE
Fractions and Decimals	<ul> <li>Use common factors to simplify fractions; use common multiples to express fractions in the same denomination.</li> <li>Compare and order fractions, including fractions less than 1</li> </ul>	Common factors can be related to finding equivalent fractions. Pupils list equivalent fractions and identify fractions with common denominators.  NRICH Chocolate

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WEEK 2	OBJECTIVES	SUPPORT FOR LEARNING / GUIDANCE
Fractions and Decimals	<ul> <li>Add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions</li> <li>Associate a fraction with division and calculate decimal fraction equivalents [for example, 0.375] for a simple fraction [for example, 3/8]</li> <li>Recall and use equivalences between simple fractions, decimals, including in different contexts</li> </ul>	Pupils should practice, use and understand the addition and subtraction of fractions with different denominators by identifying equivalent fractions with the same denominator. They should start with fractions where the denominator of one fraction is a multiple of the other (for example, ½ + 1/8 = 5/8) and progress to varied and increasingly complex problems.  Pupils can explore and make conjectures about converting a simple fraction to a decimal fraction (for example, 3 ÷ 8 = 0.375). For simple fractions with recurring decimal equivalents, pupils learn about rounding the decimal to 3 decimal places, or other appropriate approximations depending on the context.  Pupils also develop their skills of rounding and estimating as a means of predicting and checking in order of magnitude of their answers to decimal calculations. This includes rounding answers to a specified degree of accuracy and checking the reasonableness of their answers.  They practise calculations with simple fractions and decimal fractions equivalents to aid fluency, including listing equivalent fractions to identify with common denominators.  Mathematical challenges for able pupils – Slick Jim activity 76

WEEK 3 OBJECTIVES	SUPPORT FOR LEARNING / GUIDANCE
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Percentages	Recall and use equivalences     between simple fractions, decimals	Real life situations bank interest rates, shopping.  NRICH Matching fractions game
	<ul> <li>and percentages including in different context</li> <li>Solve problems involving the calculation of percentages [for</li> </ul>	Mathematical challenges for able pupils – Pet Shop – activity 71
	example, of measures, and such as 15 % of 360] and the use of percentages for comparison.	

WEEK 4	OBJECTIVES	SUPPORT FOR LEARNING / GUIDANCE
2D shapes and angles	<ul> <li>Draw 2-D shapes using given dimensions and angles.</li> </ul>	Pupils draw shapes accurately, using measuring tools and conventional markings and labels for lines and angles.
	<ul> <li>Recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles.</li> </ul>	Pupils describe the properties of shapes and explain how unknown angles and lengths can be derived from known measurements.  NRICH Where are they?  NRICH How safe are you?
Compare and classify geometric shapes based on their priorities and sizes and unknown angles in any triangles, quadrilaterals, and regular polygons.	NRICH Olympic Turns NRICH Round a Hexagon	

WEEK 5	OBJECTIVES	SUPPORT FOR LEARNING / GUIDANCE
3D shapes	Recognise, describe and build simple 3-D shapes, including making nets	Pupils draw shapes and nets accurately, using measuring tools and conventional markings and labels for lines and angles.  NRICH Stringy Quads  NRICH Making Cuboids  Making Spirals  (link to Christmas decorations, parcels and wrapping)

WEEK 6	OBJECTIVES	SUPPORT FOR LEARNING / GUIDANCE
Measurement	<ul> <li>Use, read write and convert between standard units, converting measurements of length, mass and volume</li> <li>Solve problems involving the calculation and conversion of units of measure, using decimal notation up to three decimal places where appropriate.</li> </ul>	They know approximate conversions and are able to tell if an answer is sensible.  Pupils make links between multiplying and dividing by 10,100 and 1000 and real life conversions of measurements.

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