



Maths Medium Term 2017- 2018

Year: 6

Term: Autumn

Teacher: Miss Moss

Week	Topic	Objectives
Week 1 & 2	NUMBER AND PLACE VALUE	<p>Read and write numbers up to 10 000 000</p> <p>To be able to recognise the value of digits within decimal numbers</p> <p>To use place value knowledge to order decimals to complete number sequences</p> <p>To identify value of decimals on a number line, to three decimal places</p> <p>To correctly place decimal numbers on a number line</p> <p>To round any whole number to the nearest 10, 100, 1 000 or 10 000 using a number line and decimals with three places to the nearest whole number</p> <p>To use negative numbers in context and calculate intervals across zero</p> <p>ALGEBRA – generate and describe linear number sequences</p> <p>Solve number and practical problems that involve number and place value</p> <p>ALGEBRA – find all the possibilities of combinations of two variables</p>
Week 3	ADDITION AND SUBTRACTION	<p>Add whole numbers and decimals using a formal written method</p> <p>Solve addition multi-step problems in contexts, deciding which operations and methods to use and why</p> <p>Subtract whole numbers and decimals using a formal written method</p> <p>Solve subtraction multi-step problems in contexts, deciding which operations and methods to use and why</p> <p>Estimate answers and use the inverse to check answers to calculations</p> <p>Consider the most appropriate strategy to solve a calculation: calculate mentally, use a jotting or a written method</p>
Week 4	ADDITION AND SUBTRACTION	<p>ALGEBRA– find pairs of number that satisfy number sequences involving two unknowns e.g. $x+y = 1.5$</p> <p>Understand how to find the average (mean) of a range of numbers</p> <p>Use their knowledge of the order of operations (BODMAS) to solve problems</p> <p>Solve problems involving a combination of addition, subtraction, multiplication and/or division</p>

Week 5	MULTIPLICATION AND DIVISION	<p>Consider the most appropriate strategy to solve a calculation: calculate mentally, use a jotting or a written method</p> <p>Estimate answers and use the inverse to check answers to calculations</p> <p>Multiply numbers with up to 4 digits by a two-digit whole number using a formal written method of long multiplication</p> <p>Multiply one-digit numbers with up to two decimal places by whole numbers</p> <p>ALGEBRA find pairs of number that satisfy number sequences involving two unknowns e.g. $a \times b = 60$</p> <p>Solve problems which involve multiplication and/or division</p>
Week 6	MULTIPLICATION AND DIVISION	<p>Divide numbers up to 4 digits by a two-digit number using a formal written method of short division where appropriate</p> <p>Divide numbers up to 4 digits by a two-digit whole number using a formal written method of long division</p> <p>Interpret remainders as whole number remainders, fractions, or by rounding, as appropriate for the context</p> <p>Divide one-digit numbers with up to two decimal places by whole numbers</p>
Week 7	MULTIPLICATION AND DIVISION	<p>ALGEBRA– find pairs of number that satisfy number sequences involving two unknowns e.g. $100 \div a = b$</p> <p>Use their knowledge of the order of operations (BODMAS) to solve problems involving a combination of addition, subtraction, multiplication and/or division</p> <p>Solve problems which involve multiplication and/or division</p>
Week 8	FRACTIONS	<p>Identify and use common factors to simplify fractions</p> <p>Identify and use common multiples to turn two or more fractions to the same denomination</p> <p>Identify and use prime numbers</p> <p>Compare and order fractions, including fractions >1 (including on a number line).</p> <p>Add and subtract fractions with different denominators</p> <p>Add and subtract mixed numbers, using the concept of equivalent fractions</p> <p>ALGEBRA– find pairs of number that satisfy number sequences involving two unknowns e.g. $x+y = 3/5$</p> <p>Find decimal fraction equivalents for a simple fractions</p> <p>Solve problems involving fractions</p>
Week 9	PERCENTAGES	<p>Revise percentages</p> <p>Recall and use equivalences between simple fractions, decimals and percentages (e.g. 50% is the same as 50/100 r 0.5)</p> <p>Find simple percentages of amounts</p> <p>Use percentages for comparison</p>

		Solve problems involving percentages
Week 10	RATIO AND PROPORTION	<p>Understand ratio as unequal grouping or sharing</p> <p>Understand proportion as scaling up or down</p> <p>Solve problems involving the relative sizes of two quantities where missing values can be found by using integer multiplication and division facts</p> <p>Solve problems involving similar shapes where the scale factor is known or can be found</p> <p>Solve problems involving unequal sharing and grouping using knowledge of fractions and multiples</p>
Week 11	SHAPE AND POSITION AND DIRECTION	<p>Draw 2-D shapes using given dimensions and angles—using ruler and protractor</p> <p>Build simple 3-D shapes, including making nets</p> <p>Compare and classify 2D and 3D shapes based on their properties and angle sizes – regular and irregular</p> <p>Recognise angles where they meet at a point, are on a straight line, or are vertically opposite</p> <p>Find unknown angles in any triangle, quadrilateral or other regular polygons</p> <p>Illustrate and name parts of circles, including radius, diameter and circumference</p> <p>Know that the diameter is twice the radius</p> <p>Solve problems involving shape including problems involving similar shapes where the scale factor is known or can be found</p>
Week 12	MEASURES-LENGTH, AREA AND VOLUME	<p>Solve problems involving the calculation and conversion of units of measure using decimal notation up to three decimal places</p> <p>Calculate the area of rectangles and squares—link to other shapes</p> <p>Calculate the area of parallelograms and triangles</p> <p>Recognise that shapes with the same area can have different perimeter and vice versa</p> <p>ALGEBRA- Use the formulae for the area of shapes where possible. Find pairs of number that satisfy number sequences involving two unknowns e.g. $x + y = 250$ g</p>
Week 13	STATISTICS	<p>Link pie charts to angles e.g. 360 degrees, fractions and percentages</p> <p>Construct pie charts and line graphs</p> <p>Interpret pie charts and line graphs use these to solve problems</p>