Maths Medium Term

Year: 6 **Term: Autumn** **Teacher: Mrs Pemberton**

Week	Topic	Objectives
Week 1&2	NUMBER AND PLACE VALUE	Read and write numbers in numerals and words and recognise the place value of numbers up to 100,000. Identify the place value of each digit for whole numbers and decimals to two decimal places and use decimal notation for tenths and hundredths. Partition, round, compare and order whole numbers and decimals. Solve one and two step problems involving number, deciding which operation to use and why.
Week 3&4	ADDITION & SUBTRACTION TO SOLVE PROBLEMS	Estimate answers to calculations. Consider the most appropriate strategy to solve a calculation: calculate mentally, use a jotting or a written method. Revise addition of whole numbers with up to 4 digits and decimals with two decimal place, including using a compact written method. Revise subtraction whole numbers with up to 4 digits and decimals with two decimal place including using a compact written method. Use the inverse to check the answers to calculations. Solve addition and subtraction problems in contexts, deciding which operations and methods to use and why.
Week 5	MEASURES – MONEY TO SOLVE PROBLEMS	Add amounts of money including using a compact written method Subtract amounts of money including using a compact written method Calculate change including from £10, £20 or £50 Solve addition and subtraction multi-step problems in the context of money deciding which operations and methods to use and why
Week 6	MULTILPICATION, FACTORS AND PRIMES TO SOLVE PROBLEMS	Identify patterns of similar calculations, e.g. If I know 5x9, I also know 0.5x0.9, 90x5, 90x50 etc. Use mental starters to revise and recall multiplication facts and number sequences using multiples. Find factor pairs and factors of numbers using table knowledge and arrays. Know how to find the common factors of two numbers. Know how to find prime numbers up to 100 – link to square numbers. Know and use the vocabulary of prime numbers. Record square numbers using ^{2} for squared. Solve problems involving using and applying the knowledge of factors, multiples, square numbers and cube numbers.
Week 7	MULTIPLICATION TO SOLVE PROBLEMS	Use mental starters to revise multiplication facts and related division facts. Solve missing number problems. Multiply numbers up to 4 digits by a one-digit or two-digit number using an expanded written method (once secure use compact method). Use the inverse to check.

		Solve problems involving multiplication.
Week 8	DIVISION TO SOLVE PROBLEMS	Use mental starters to revise division facts. Solve missing number problems. Divide numbers up to 4 digits by a one-digit number using a compact written method of short division. Use the inverse to check. Interpret remainders appropriately in the context of the question. Solve problems involving division including remainders.
Week 9 & 10	FRACTIONS TO SOLVE PROBLEMS	Understand that a fraction is one whole number divided by another (for example, $\frac{3}{4}$ can be interpreted as 3 ÷ 4). Read and write decimal numbers as fractions and vice versa. Identify, name and write equivalent fractions of a given fraction, use manipulatives and diagrams represented visually – link to factors and multiples. Identify, name and write equivalent fractions of a number of tenths or hundredths – use manipulatives or diagrams. Compare and order fractions where the denominators are all multiples of the same number (on a number line) i.e. ½, 1/3, ¼, 1/6 and 1/12. Once secure add fractions with the same denominator and denominators that are multiples of the same number (using diagrams and/ or manipulatives) and subtract fractions with the same denominator and denominators that are multiples of the same number (using diagrams and/or manipulatives). Solve problems involving fractions.
Week 11	SHAPE, POSITION AND DIRECTION TO SOLVE PROBLEMS	Know how to use a protractor. Know angles are measured in degrees. Estimate and compare acute, obtuse and reflex angles. Draw given angles and measure them in degrees (°). Know how to compare lengths and angles to decide if a polygon is regular or not. Sort regular polygons and those that are not regular. Use the properties of rectangles to find missing lengths and angles in given shapes. Measure and calculate the perimeter of rectangular shapes in centimetres and/or metres.
Week 12	MEASURES – TIME TO SOLVE PROBLEMS	Continue to read, write and convert time between analogue and digital 12 hour clocks. Know the link between the 12 hour and 24 hour clock. Read, write and convert time between analogue and digital 12 hour clock and 24 hour clock. Solve problems involving converting between units of time e.g. seconds and minutes, half past 12 and 13:30. Understand and use approximate equivalences between metric and common imperial units such as pints.
Week 13	STATISTICS TO SOLVE PROBLEMS	Revise continuous and discrete data. Read and understand scales, including estimating points that are between the numbers marked on the scales. Solve comparison, sum and difference problems using information presented in a line graph. Complete, read and interpret information in tables, including timetables – link to 24 hour clock.