St. Teresa's Catholic Primary School Maths Long Term Plan Class 7

Term	Maths Topics and Learning Objectives				
Autumn	**Number, Place Value and Rounding** • Identify, represent and estimate numbers using different representations. Recognise the place value of each digit in a 4-digit number. • Order and compare numbers beyond 1,000. • I can count in multiples of: ➢ 6, 7 and 9 ➢ 25 ➢ 1,000 • Find 1,000 more or less than a given number. • Round any number to the nearest 10, 100 or 1,000. • Can count backwards through zero to include negative numbers. • Solve number and practical problems with the above (involving increasingly large numbers). • Read Roman numerals to 100 and know that over time the numeral system changed to include the concept of zero and place value.	**Calculations (Addition and Subtraction)** • I can add and subtract numbers with up to 4-digits using the formal written methods of columnar addition and subtraction. • I can solve addition and subtraction 2-step problems in contexts, deciding which operations and methods to use and why.	**Measurement: Conversion of Length and Perimeter** • Convert between different units of measurements. (length) • Measure and calculate the perimeter of a rectilinear figure in cm and m.	**Calculations (Multiplication and Division)** • Use place value, known and derived facts to multiply and divide mentally, including: ➢ multiplying by 0 and 1 ➢ dividing by 1 ➢ multiplying together three numbers. • Recall multiplication and division facts up to 12x12 (Ongoing) • Recognise and use factor pairs and commutativity in mental calculations. • Multiply 2-digit numbers by a 1-digit number using formal written layout.	**Geometry – Properties of Shapes and Position and Direction (Double Maths Day)** • Compare and classify geometric shapes, including quadrilateral and triangles based on their properties and sizes. • Complete a simple symmetric figure with respect to a specific line of symmetry. • Identify lines of symmetry in 2D shapes presented in different orientations. • Identify acute and obtuse angles and compare and order angles up to two right angles by size. • Describe movements between positions as translations of a given unit to the left/right and up/down. • Plot specified points and draw sides to complete a given polygon. • Describe positions on a 2D grid as coordinates in the first quadrant.
Spring	**Calculations (Multiplication and Division)**	**Measurement Area**	**Calculations Fractions**	**Calculations Decimals** • Recognise that hundredths arise when dividing an object	**Measurement: Time and Money (Double Maths Day)**

	• Solve problems involving multiplying and adding, including: ➢ using the distributive law to multiply 2-digit numbers by 1-digit e.g. 49 x 6 = 40 x 6 + 9 x 6 = 240 + 54 = 294 ➢ integer scaling problems ➢ harder correspondence problems such as n objects are connected to m objects. • Estimate and use inverse operations to check answers in a calculation.	• I can find the area of rectilinear shapes by counting squares.	• Recognise and show using diagrams, families of common equivalent fractions. • Add and subtract factions within the same denominator. • Solve problems involving increasingly harder factions and fractions to divide quantities, including non-unit fractions where the answer is a whole number.	by a hundred and dividing tenths by ten. • Count up and down in hundredths. • Find the effect of dividing a 1-digit or 2-digit number by 10 and 100, identifying the value of the digits in the answer as ones, tenths and hundredths. • Recognise and write decimal equivalents of any number of tenths or hundredths. • Compare numbers with the same number of decimal places up to 2 decimal places. • Recognise and write decimal equivalents to 1/4, 1/2 and ¾.	• I can read, write and convert time between analogue and digital 12 hour clocks. • I can read, write and convert time between analogue and digital 24 hour clocks. • I can solve problems involving: ➢ converting from hours to minutes ➢ minutes to seconds ➢ years to months ➢ weeks to days.
Summer	**Calculations** **Decimals** • Solve simple measure and money problems involving fractions and decimals to 2 decimal places. • Round decimals with one decimal place to the nearest whole number.	**Measurement:** **Conversion of Mass and Capacity** • I can convert between different units of measurements. (kg and ml)	**Measurement:** **Money** • I can: ➢ compare different measures, including money in £ and p. ➢ estimate different measures, including money in £ and p. ➢ calculate different measures. Including money in £ and p.	**Statistics** • I can interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs. • I can solve comparison, sum and difference problems using information presented in: ➢ bar charts ➢ pictograms ➢ tables ➢ other graphs	**Revision and Consolidation** **(Double Maths Day)**