St. Teresa's Catholic Primary School Maths Skills Progression Class 3

Term	Maths Topics and Learning Objectives	
Autumn	**Number, Place Value and Rounding** **Year 2** **Number & Place Value (within 100)** - count in steps of 2, 3, and 5 from 0, and in tens from any number, forward and backward - recognise the place value of each digit in a two-digit number (tens, ones) - identify, represent and estimate numbers using different representations, including the number line - compare and order numbers from 0 up to 100; use <, > and = signs - read and write numbers to at least 100 in numerals and in words - use place value and number facts to solve problems.	**Calculations (addition and subtraction with a focus on FLUENCY)** **Year 2** **Addition & Subtraction (up to 100)** - solve problems with addition and subtraction: using concrete objects and pictorial representations, including those involving numbers, quantities and measures - applying increasing knowledge of mental and written methods - recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100 - add and subtract numbers using concrete objects, pictorial representations, and mentally, including: - a two-digit number and ones - a two-digit number and tens - two two-digit numbers - adding three one-digit numbers - two two-digit numbers with regrouping - show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot.
	Geometry – Properties of Shapes **Year 2** - identify and describe the properties of 2-D shapes, including the number of sides and line symmetry in a vertical line - identify and describe the properties of 3-D shapes, including the number of edges, vertices and faces - identify 2-D shapes on the surface of 3-D shapes [for example, a circle on a cylinder and a triangle on a pyramid]	**Measurement (Money)** **Year 2** - recognise and use symbols for pounds (£) and pence (p); combine amounts to make a particular value - find different combinations of coins that equal the same amounts of money - solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change
	BASIC SKILLS (Rehearsed orally, through practical activities and recorded in basic skills exercise books when appropriate): - Name and order the days of the week - Name and order the months of the year. - Read numbers up to 100. - Subitise quantities up to 20. - Recall and write number bonds to 20. - Verbally count to 100 starting at any number. - Verbally count backwards from and to a given number (up to 100). - Compare quantities up to 20 (recognise when one quantity is greater than, less than or the same as the other quantity). - Recall doubles of numbers up to 10 + 10. - Recall halves of even numbers (up to half of 20).	

Autumn Term 1 KIRFs:

Count in steps of 2 from a given number up to 100.

Autumn Term 2 KIRFs:

Count in steps of 5 (from a given multiple of 5) up to 100.

Ongoing KIRF:

Tell the time to quarter past/to the hour.

Spring

Fractions	Calculations (addition and subtraction with a focus on REASONING AND PROBLEM SOLVING)	Calculations (multiplication and division with a focus on FLUENCY)

Year 2
 	
• recognise, find, name and write fractions $\frac{1}{3}$, $\frac{1}{4}$, $\frac{2}{4}$ and $\frac{3}{4}$ of a length, shape, set of objects or quantity
• write simple fractions for example, $\frac{1}{2}$ of 6 = 3 and recognise the equivalence of $\frac{2}{4}$ and $\frac{1}{2}$.
	Year 2
	Addition & Subtraction (within 100)
	• solve problems with addition and subtraction: using concrete objects and pictorial representations, including those involving numbers, quantities and measures
	• applying their increasing knowledge of mental and written methods
	• recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100
	• add and subtract numbers using concrete objects, pictorial representations, and mentally, including:
	  – a two-digit number and ones
	  – a two-digit number and tens
	  – two two-digit numbers
	  – adding three one-digit numbers
	• show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot
	• recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems.
		Year 2
		Multiplication & Division
		• recognise and begin to recall multiplication and division facts for the 2, 5 and 10 multiplication tables
		• calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (×), division (÷) and equals (=) signs
		• show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot
		• solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts

Measurement: Length, height and capacity

Year 2: Reading Scales

• read intervals on scales (such as rulers and weighing scales)

Measurement – Length and Height

• choose and use appropriate standard units to estimate and measure length/height in any direction (m/cm) to the nearest appropriate unit, using rulers, scales in 1s, 2s,5s and 10s compare and order lengths, record the results using >, < and =

Measurement – Weight

• choose and use appropriate standard units to estimate and measure mass (kg/g) to the nearest appropriate unit, using scales and balances
• compare and order mass and record the results using >, < and =

Measurement – Capacity

• choose and use appropriate standard units to estimate and measure capacity (l/ml) to the nearest appropriate unit, using bottles, measuring jugs and measuring cylinders
• compare and order capacity and record the results using >, < and =

BASIC SKILLS (rehearsed orally, through practical activities and recorded in basic skills exercise books when appropriate):

- Verbally count to and across 50, starting at any number.
- Verbally count backwards from 100 in steps of 1 and 2.
- Compare quantities up to 50 (recognise when one quantity is greater than, less than or the same as the other quantity).
- Recall and write number bonds to .
- Recall 1 more and 10 more, and 1 less and 10 less of numbers up to 100 (mentally).
- Add and subtract up to 50 (mentally).

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Spring Term 1 KIRFs:

Recall doubles of even numbers up to 20.

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Spring Term 2 KIRFs:

Recall halves of even numbers up to 20.

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Ongoing KIRF:

Tell the time to quarter past/to the hour.

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	Measurement: Time	**Calculations (addition and subtraction focus on FLUENCY with moving towards REASONING and PROBLEM SOLVING as appropriate)**	**Calculations (multiplication and division with a focus on REASONING AND PROBLEM SOLVING)**
Summer	**Year 2** **Time** • compare and sequence intervals of time • tell and write the time to five minutes, including quarter past/to the hour and draw the hands on a clock face to show these times • know the number of minutes in an hour and the number of hours in a day.	**Year 2** **Addition & Subtraction (3-digit numbers)** • solve problems with addition and subtraction: • using concrete objects and pictorial representations, including those involving numbers, quantities and measures • applying their increasing knowledge of mental and written methods • recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100 • add and subtract numbers using concrete objects, pictorial representations, and mentally, including: – a two-digit number and ones – a two-digit number and tens – two two-digit numbers – adding three one-digit numbers • show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot • recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems.	**Year 2** **Multiplication & Division** • recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers • calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (×), division (÷) and equals (=) signs • show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot • solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts.

Geometry		**Statistics**
Year 2 **Position & Direction** • order and arrange combinations of mathematical objects in patterns and sequences • use mathematical vocabulary to describe position, direction and movement, including • movement in a straight line and distinguishing between rotation as a turn and in terms • of right angles for quarter, half and three-quarter turns (clockwise and anti-clockwise).		**Year 2** **Charts** • interpret and construct simple pictograms, tally charts, block diagrams and simple tables • ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity • ask and answer questions about totalling and comparing categorical data.

BASIC SKILLS (rehearsed orally, through practical activities and recorded in basic skills exercise books when appropriate):
- Verbally count to and across to 100 starting at any number.
- Verbally count backwards from 100 in steps of 2, 5 and 10.
- Read and write numbers from 1 – 100 in words.
- Recognise odd and even numbers.
- Name and recognise basic properties of 2-D and 3-D shapes.

Summer Term 1 KIRFs:

Recall 2s and 5s multiplication and division facts.

Summer Term 2 KIRFs:

Recall 10s and 3s multiplication and division facts.

Ongoing KIRF:

Tell the time to quarter past/to the hour.