St. Teresa's Catholic Primary School Maths Skills Progression 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. • 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 solve addition and subtraction 2-step problems in contexts, deciding which operations and methods to use and why.	**Place value: decimals** • 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. • Compare numbers with the same number of decimal places up to 2 decimal places. • Round decimals with one decimal place to the nearest whole number.	**Measurement: Perimeter and Area** • Measure and calculate the perimeter of a rectilinear figure in cm and m. • Find the area of rectilinear shapes by counting squares.	**Geometry – Properties of Shapes** • 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.

Autumn: Basic Skills and Arithmetic Practice

BASIC SKILLS, RECORDED IN BASIC SKILLS EXERCISE BOOKS AND REHEARSED ORALLY AS APPROPRIATE:

- Count in steps of 2, 3 and 5 from 0, and in tens from any number, forward and backward
- Count from 0 in multiples of 4, 8, 50 and 100
- Recall how to identify odd and even numbers
- Double and halve 2-digit numbers mentally
- Recall and use multiplication and division facts for 11 times table
- Use place value, known and derived facts to multiply and divide mentally
- Add and subtract mentally: a two-digit number and ones; a two-digit number and tens; two two-digit numbers; three one-digit numbers
- Add and subtract numbers with up to three digits, using a formal written method
- Add and subtract numbers with up to four digits, using a formal written method
- Count up and down in tenths and hundredths

Autumn Term 1 KIRF:

Know multiplication and division facts for 7 x tables.

Autumn Term 2 KIRF:

Know multiplication and division facts for the 12 x times table.

Distributed daily practice of these basic skills and arithmetic skills to be informed by AfL; the revisiting of stated objectives through recall activities is informed by teacher AfL.

Spring	**Calculations applied to reasoning and problem solving: (Multiplication and Division)** • 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.	**Calculations Fractions** • Recognise and show using diagrams, families of common equivalent fractions. • Solve problems involving increasingly harder factions and fractions to divide quantities, including non-unit fractions where the answer is a whole number. • Recognise that hundredths arise when dividing an object by a hundred and dividing tenths by ten.	**Measurement: Conversion of Length, Mass and Capacity** • I can convert between different units of measurements. (kg and ml) • Convert between different units of measurements. (length)	**Geometry – Position and Direction** • 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: Basic Skills and Arithmetic Practice

BASIC SKILLS, RECORDED IN BASIC SKILLS EXERCISE BOOKS AND REHEARSED ORALLY AS APPROPRIATE:

- Count in multiples of 6, 7, 9, 25 and 1000
- Multiply two-digit numbers by a one-digit number, using a formal written method for calculating
- Multiply one-digit and two-digit numbers by 10
- Multiply one-digit and two-digit numbers by 0 and 1
- Multiply three numbers together
- Divide by 1
- Recognise and use factor pairs and commutativity in mental calculations.
- Add and subtract fractions with the same denominator within one whole
- Count up and down in tenths and hundredths
- RECALL OF PREVIOUSLY TAUGHT BASIC SKILLS AND ARITHMEITC CALCULATIONS INFORMED BY REGULAR AfL.

Spring Term KIRF:

Know multiplication and division facts

for all times tables up to 12 x 12.

Distributed daily practice of these basic skills and arithmetic skills to be informed by AfL;
the revisiting of stated objectives through recall activities is informed by teacher AfL;
sustained practice of these skill from both Spring and Autumn term applied to SATs style arithmetic papers to support and develop experience with answering a range of questions in a given time frame.

Summer	**Calculations: Decimals** • Recognise and write decimal equivalents of any number of tenths or hundredths. • Recognise and write decimal equivalents to 1/4, 1/2 and ¾.	**Measurement: Time** • 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.	**Measurement: Money** • compare different measures, including money in £ and p. • estimate different measures, including money in £ and p. • calculate different measures. Including money in £ and p. • Solve simple money problems involving decimals to 2 decimal places.	**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**

Summer: Basic Skills and Arithmetic Practice

BASIC SKILLS, RECORDED IN BASIC SKILLS EXERCISE BOOKS AND REHEARSED ORALLY AS APPROPRIATE:

- Recall times table facts up to 12 x 12 – MTC preparation
- Tell and write the time from an analogue clock, including Roman numerals, and 12-hour and 24-hour clocks
- Convert time between analogue and digital clocks
- Recall vocabulary am and pm
- Recall number of seconds in a minute, days in a given month, year and leap year
- Convert basic units of metric measure

Summer Term 1 KIRF:

Find 10, 100 and 1000 more or less than a given number.

Summer Term 2 KIRF:

Know decimal number bonds to 1; e.g. 0.3 + 0.7 = 1.

Distributed daily practice of these basic skills and arithmetic skills to be informed by AfL; the revisiting of stated objectives through recall activities is informed by teacher AfL.