

Maths Skills Progression Map



Intent: Mastery in mathematics at St Francis CE Primary School is based upon a fundamental belief that all children can achieve confidence and competence in mathematics. Teaching and learning builds fluency through prolonged and varied practice. Learning is structured in sequenced steps that are supported by a range of concrete, pictorial and abstract representations which build and deepen pupils' mathematical knowledge, developing the ability to reason and make connections.

EYFS Intent: Children in the Early Years Foundation Stage will be given the opportunity to develop and improve their skills in counting, understanding and using numbers, calculating simple addition and subtraction problems; and to describe shapes, spaces, and measures. Children will learn how to count, recognise and form numbers and use numbers in our everyday play. Children will experience with playing shape games and finding about different types of measures –capacity, size, length, weight, height, money and time.

Maths features into the Specific Area Of Learning – Maths under the two strands called – 'Number' and 'Shape, Space and Measure.'

EYFS Stage	Development Matters - Numbers	Development Matters – Shape, Space and Measure
F3 	16-26 Months – Maths - Number • Knows that things exist, even when out of sight. • Beginning to organise and categorise objects, e.g. putting all the teddy bears together or teddies and cars in separate piles. • Says some counting words randomly 22-36 Months - Maths – Number • Selects a small number of objects from a group when asked, for example, '<i>please give me one</i>', '<i>please give me two</i>'. • Recites some number names in sequence. • Creates and experiments with symbols and marks representing ideas of number. • Begins to make comparisons between quantities. • Uses some language of quantities, such as '<i>more</i>' and '<i>a lot</i>'. • Knows that a group of things changes in quantity when something is added or taken away.	16-26 Months – Maths – Shape, space and measure • Attempts, sometimes successfully, to fit shapes into spaces on inset boards or jigsaw puzzles. • Uses blocks to create their own simple structures and arrangements. • Enjoys filling and emptying containers. • Associates a sequence of actions with daily routines. • Beginning to understand that things might happen 'now' 22-36 Months - Maths – Shape, space and measure • Notices simple shapes and patterns in pictures. • Beginning to categorise objects according to properties such as shape or size. • Begins to use the language of size. • Understands some talk about immediate past and future, e.g. '<i>before</i>', '<i>later</i>' or '<i>soon</i>'. • Anticipates specific time-based events such as mealtimes or home time.

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EYFS Stage	Development Matters - Number	Development Matters – Shape, Space and Measures
F2 	30-50 Months - Maths – Number • Uses some number names and number language spontaneously. • Uses some number names accurately in play. • Recites numbers in order to 10. • Knows that numbers identify how many objects are in a set. • Beginning to represent numbers using fingers, marks on paper or pictures. • Sometimes matches numeral and quantity correctly. • Shows curiosity about numbers by offering comments or asking questions. • Compares two groups of objects, saying when they have the same number. • Shows an interest in number problems. • Separates a group of three or four objects in different ways, beginning to recognise that the total is still the same. • Shows an interest in numerals in the environment. • Shows an interest in representing numbers. • Realises not only objects, but anything can be counted, including steps, claps or jumps.	30-50 Months - Maths – Shape, space and measure • Shows an interest in shape and space by playing with shapes or making arrangements with objects. • Shows awareness of similarities of shapes in the environment. • Uses positional language. • Shows interest in shape by sustained construction activity or by talking about shapes or arrangements. • Shows interest in shapes in the environment. • Uses shapes appropriately for tasks. • Beginning to talk about the shapes of everyday objects, e.g. 'round' and 'tall'.

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EYFS Stage	Development Matters - Number	Development Matters – Shape, Space and Measures
Reception 	40-60 Months – Maths - Number • Recognise some numerals of personal significance. • Recognises numerals 1 to 5. • Counts up to three or four objects by saying one number name for each item. • Counts actions or objects which cannot be moved. • Counts objects to 10, and beginning to count beyond 10. • Counts out up to six objects from a larger group. • Selects the correct numeral to represent 1 to 5, then 1 to 10 objects. • Counts an irregular arrangement of up to ten objects. • Estimates how many objects they can see and checks by counting them. • Uses the language of 'more' and 'fewer' to compare two sets of objects. • Finds the total number of items in two groups by counting all of them. • Says the number that is one more than a given number. • Finds one more or one less from a group of up to five objects, then ten objects. • In practical activities and discussion, beginning to use the vocabulary involved in adding and subtracting. • Records, using marks that they can interpret and explain. • Begins to identify own mathematical problems based on own interests and fascinations. ELGs Maths - Number Children count reliably with numbers from one to 20, place them in order and say which number is one more or one less than a given number. Using quantities and objects, they add and subtract two single-digit numbers and count on or back to find the answer. They solve problems, including doubling, halving and sharing.	40-60 Months – Maths - Shape, space and measure • Beginning to use mathematical names for 'solid' 3D shapes and 'flat' 2D shapes, and mathematical terms to describe shapes. • Selects a particular named shape. • Can describe their relative position such as '<i>behind</i>' or '<i>next to</i>'. • Orders two or three items by length or height. • Orders two items by weight or capacity. • Uses familiar objects and common shapes to create and recreate patterns and build models. • Uses everyday language related to time. • Beginning to use everyday language related to money. • Orders and sequences familiar events. • Measures short periods of time in simple ways. ELGs Maths – Shape, space and measure Children use everyday language to talk about size, weight, capacity, position, distance, time and money to compare quantities and objects and to solve problems. They recognise, create and describe patterns. They explore characteristics of everyday objects and shapes and use mathematical language to describe them.

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	Number – Number and Place Value	Number – Addition and Subtraction	Number – Multiplication and Division	Number – Fractions	Geometry – Properties of Shape	Geometry – Position and Direction	Measurement– Length and Height	Measurement– Money	Measurement– Time	Measurement– Weight, capacity Temperature	Statistics
Nursery F3 	- Counts up to 10. - Talks about missing numbers and identify where they belong on the track by counting. - Begins to identify numerals 0 -- 5. - Explores different representations of the same number. E.g. 3 toys, 3 bricks, 3 dots on a dice, numeral 3.	- Counts a small number of objects. - Counts a small number objects and add one more and count the new total.	- With an adult explores sharing out a small number of objects with other children. - Sorts objects into groups.	- Starting to explore halves and through play. E.g. Halve the pizza or biscuit.	- Identifies everyday objects and shapes. - Children explore creating patterns. - Adults supports children to recognise existing patterns. - Children explore shapes through play opportunities.	- Children are supported to use everyday language to talk about position. - Children explore positional language through play opportunities.	- Children are supported to use everyday language to talk about size, length and height. - Children explore size, including length and height through play opportunities.	- Children are supported to use everyday language and role play opportunities to talk about money. - Children explore money through play opportunities.	- Children are supported to use everyday language to talk about time. E.g. Celebrating Birthdays and adults talk about days of the week. - Children explore time language through play opportunities.	- Children are supported to use everyday language to talk about weight, capacity and temperature to compare objects and to solve problems. - Children explore weight, capacity and temperature through play opportunities. - Children enjoy filling and emptying containers	- Children are supported to use self-register. Adults model displaying the data. How many children are here today? How many are away today.
Nursery F2 	- Counts along a class number track 0 - 20. - Talks about missing numbers and identify where they belong on the track by counting. - Begins to match number and numeral. - Tries to subitize familiar arrangements of number. E.g. two dots on a dice, number 3 numicon piece.	- Counts a small number of objects. - Counts out a small number objects and add one more and count the new total. - Children talk about how a total changes when you add or take away objects. - Children put some objects aside and know that the total is still the same.	- Shares out a small number of objects with other children. - Sorts objects into groups.	- Explores whole, halves and quarters through play. E.g. Halve the pizza or biscuit. E.g. Folding paper in half.	- Explore characteristics of everyday objects and shapes and use everyday language to describe them. - Children explore creating and describe patterns. - Children are encouraged to recognise existing patterns. - Children find shapes and explore shapes in their environment and through play.	- Children use everyday language to talk about position, to compare quantities and objects and to solve problems. - Children explore and use positional language through play opportunities.	- Children use everyday language to talk about size, length and height to compare quantities and objects to solve problems. - Children explore size, including length and height through play opportunities. - Children order objects by length, height, weight or size. - Children use the correct mathematical vocabulary related to measures.	- Children use everyday language and role play opportunities to talk about money and to solve problems. - Children explore money through play opportunities. - Children use vocabulary related to money during their play.	- Children use everyday language to talk about time to solve problems. E.g. Talk about birthday months and days of the week. - Children explore time language through play opportunities. - Children talk about the timing of events – now, then, soon, before, next, yesterday, tomorrow, next month etc.	- Children use everyday language to talk about weight, capacity and temperature to compare objects and to solve problems. - Children explore weight, capacity and temperature through play opportunities. - Children use vocabulary related to weight, capacity and temperature during their play.	-Children count how many children are here or away, how many girls/boys or how many in each key group? -Children complete class votes and adults work with children to gather information and display class results through pictograms and tally charts.

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Reception 	- Children become confident at subitising. - Children can recognise numerals. - Counting numbers 1-20 - Sorting into two groups - Say which number is one more or one less than a given number - Knowing which number comes before or after any given number - Counting on and counting back.	- Children can find the total of two groups by counting all of them. - Using quantities and objects, they add and subtract 2 single-digit numbers and count on or back to find the answer. - Children use the language involved in adding and subtracting.	- They solve problems, including doubling, halving and sharing.	- They solve problems, including doubling, halving and sharing.	- Children create and build models using shapes. - Explore characteristics of everyday objects and shapes, 2D and 3D and use mathematical language to name and describe them. - Children recognise, create and describe patterns.	- Children use everyday and some mathematical language to talk about size, weight, capacity, position, distance, time and money to compare quantities and objects and to solve problems.	- Children use everyday and some mathematical language to talk about size, weight, capacity, position, distance, time and money to compare quantities and objects and to solve problems.	- Children use everyday and some mathematical language to talk about size, weight, capacity, position, distance, time and money to compare quantities and objects and to solve problems.	- Children use everyday and some mathematical language to talk about size, weight, capacity, position, distance, time and money to compare quantities and objects and to solve problems.	- Children use everyday and some mathematical language to talk about size, weight, capacity, position, distance, time and money to compare quantities and objects and to solve problems.	- Children complete class votes and explore how results are displayed. E.g. votes for schools, and walking surveys.

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Autumn	Place Value - Numbers to 5 Addition and Subtraction - Sorting Place Value - Comparing groups Addition and Subtraction - Change within 5 Measurement - Time											
Spring	Addition and Subtraction - Numbers to 5 Place Value - Numbers to 10 Addition and Subtraction - Addition to 10 Geometry - Shape and space											
Summer	Geometry - Exploring patterns Addition and Subtraction - Count on and back Place Value - Numbers to 20 Multiplication and Division - Numerical patterns Measurement - Measure											

White Rose Maths Framework

In Reception we use the White Rose Maths Framework to deliver the skills throughout the year.

The Characteristics of Effective Learning and Teaching

Playing and exploring

Engagement:

- Finding out and exploring
- Playing with what they know
- Being willing to 'have a go'



Active Learning

Motivation:

- Being involved and concentrating
- Keeping trying
- Enjoying achieving what they set out to do



Creating and thinking critically

Thinking:

- Having their own ideas
- Making links
- Choosing ways to do things

