St.Brigid's
Catholic Primary School

Mathematics Overview

St. Brigid's Catholic Primary School - Progression through EYFS (Nursery)

Playing and Exploring – Engagement	Active Learning – Motivation	Creating and thinking critically - Thinking
• Finding out and exploring • Playing with what they know • Being willing to 'have a go'	• Being involved and concentrating • Keep on trying • Enjoying achieving what they set out to do	• Having their own idea (creative thinking) • Making links (building theories) • Working with ideas (critical thinking)

Progression Map:

PLACE VALUE - COUNTING

24mths	30mths	36mths	42mths	48mths	54mths	60mths
Matches one object with another object or pictures Participates in number rhymes and action games	Plays hide and seek with people and objects and knows that they exist even when out of sight	Uses number names in play and imitates adults actions rote counting or saying counting randomly alongside their physical actions	Use number names with increasing accuracy in their role play and purposefully using number songs in play. Counts up to 3 objects. Can count alongside actions in games, rhymes and songs. Explores mathematical resources in the provision in everyday exploration.	Can count up to 4 objects and can recognise 2 objects (moveable and non) without counting Join in with number songs which count on – one more or count down – one less Finds totals by counting Begins to recite numbers in order, with some inconsistency Attempts to count beyond 4 Is able to anticipate which amount will be next in the context of one more/one less – number songs	Recites numbers accurately to 5 demonstrating 'some' accuracy of numbers to 10. Counts small groups of manipulatives correctly using 1:1 correspondence, whilst playing a variety of number games. Able to recite numbers forwards and backwards from 5 Counts small groups of fixed objects with accurate 1-1 correspondence	Counts reliably up to 5 Accurately count fixed objects to five and recognise numerals to at least 5 out of sequence
PLACE VALUE - COMPARING NUMBERS						

24mths	30mths	36mths	42mths	48mths	54mths	60mths
Matches one object with another object or pictures Uses signs or speech to request 'more'	Organises objects into groups.	Shows 'spontaneous' interest in numbers in the environment, books, rhymes and in songs	In play uses some language to compare quantities Makes comparisons between different quantities Act out exchanges of objects/ cards/ money or goods in role play	Explores numbers in play with growing purpose Use everyday vocabulary to describe and compare	Recognise some numbers of personal significance Identify groups of objects that have more or less than and the same	Can order numbers to 5 Using resources can create quantities which are greater than, less than, the same as a given number
PLACE VALUE - IDENTIFYING, REPRESENTING AND ESTIMATING NUMBERS						
24mths	30mths	36mths	42mths	48mths	54mths	60mths
Matches one object with another object or picture	Plays hide and seek with people and objects and knows that they exist even when out of sight Organises set of natural everyday objects into groups	Shows 'spontaneous' interest in numbers in the environment, books, rhymes and in songs	Makes comparisons between different groups	Recognise some numerals of personal significance and talks about numbers in the everyday environment. Is able to anticipate which amount will be next in the context of one more/one less – number songs	Uses graphic representations to record number explorations in pictures and mark making Counts small groups of manipulatives correctly using 1:1 correspondence, whilst playing a variety of number games.	Creates groups of numbers to up at least 5 and is able to place them in order Recognise the relationship between a group of objects and the corresponding number. Accurately count fixed objects to five and recognise numerals to at least 5 out of sequence Recognise up to 3 objects (without counting) in a range of orientations Record quantities in pictures or numerals
ADDITION AND SUBTRACTION - READING AND WRITING NUMBERS						
24mths	30mths	36mths	42mths	48mths	54mths	60mths
				Recognise some numerals of personal significance and talks about numbers	Uses graphic representations to record	Read numbers up to 5 in and out of sequence

				in the everyday environment. Uses graphic representations to record number exploration in pictures and mark making	number explorations in pictures and mark making Recognise numbers of personal significance	In self-initiated play begin to record numbers Represent an amount as a picture or numeral
PLACE VALUE AND ADDITION AND SUBTRACTION - PROBLEM SOLVING						
24mths	30mths	36mths	42mths	48mths	54mths	60mths
			Act out exchanges of objects/ cards/ money or goods in role play	When combining materials know how to change an amount if something is added/or taken away	Can use resources and say one more or one less than a given number and to create equal groups Begin to find the totals of combining groups	Can use resources to say one more or one less than a given number and to create equal groups
ADDITION AND SUBTRACTION - NUMBER BONDS						
24mths	30mths	36mths	42mths	48mths	54mths	60mths
					Begin to find the totals of combining groups	Begin to use number bonds and related subtraction facts within 5
ADDITION AND SUBTRACTION - MENTAL CALCULATION						
24mths	**30mths**	**36mths**	**42mths**	**48mths**	**54mths**	**60mths**
			Act out exchanges of objects/ cards/ money or goods in role play	Is able to anticipate which amount will be next in the context of one more/one less – number songs	Can use resources and say one more or one less than a given number and to create equal groups	Can add and subtract single digit numbers in their play to 5 Say one more/ less that a given number (within 5)
						Is beginning to recognise the symbols +, - and =
SHAPE – IDENTIFYING SHAPES AND THEIR PROPERTIES						
24mths	30mths	36mths	42mths	48mths	54mths	60mths
Matches one object with another object	Plays 'hide and seek' with people and objects and		Explores mathematical resources in the provision in every day exploration	With a purpose in mind, recognises and selects simple geometric shapes	Uses everyday language to recreate and describe patterns	Creates patterns by lining, placing, building and arranging.

	knows that they exist even when out of sight			in their construction and block play		
SHAPE – DRAWING AND CONSTRUCTING						
24mths	30mths	36mths	42mths	48mths	54mths	60mths
Builds a tower or creates lines with objects	Plays with a range of block/ solid shapes to construct and position.	Children explore pattern, using manipulatives in their independent play. Engages in lining up, placing, arranging and repositioning materials	Explores mathematical resources in the provision in every day exploration	With a purpose in mind, recognises and selects simple geometric shapes in their construction and block play	Uses everyday language to recreate and describe patterns	Orders three or more measures (size, weight and capacity) whilst playing.
SHAPE – COMPARE AND CLASSIFY						
24mths	**30mths**	**36mths**	**42mths**	**48mths**	**54mths**	**60mths**
	Organises a set of natural or everyday objects in a group.	Engages in lining up, placing, arranging and repositioning materials	Explores mathematical resources in the provision in every day exploration	Uses everyday vocabulary to describe and compare.	Uses comparative language to describe and compare measures (size, weight, capacity and time).	Orders three or more measures (size, weight and capacity) whilst playing.
MEASUREMENT – COMPARING AND ESTIMATING						
24mths	**30mths**	**36mths**	**42mths**	**48mths**	**54mths**	**60mths**
Builds a tower or creates lines with objects	Fills and empties containers with growing purpose using sand, water or other play materials.	Engages in lining up, placing, arranging and repositioning materials	Explores mathematical resources in the provision in every day exploration	Uses everyday vocabulary to describe and compare measure (size, weight, capacity and time).	Uses comparative language to describe and compare measures (size, weight, capacity and time).	Orders three or more measures (size, weight and capacity) whilst playing.
MEASURWMENT – MEASURING AND CALCULATING						
24mths	**30mths**	**36mths**	**42mths**	**48mths**	**54mths**	**60mths**
Builds a tower or creates lines with objects Uses signs or speech to request 'more'	Fills and empties containers with growing purpose using sand, water or other play materials.	Engages in lining up, placing, arranging and repositioning materials		Uses everyday vocabulary to describe and compare measure (size, weight, capacity and time).	Uses comparative language to describe and compare measures (size, weight, capacity and time).	Orders three or more measures (size, weight and capacity) whilst playing.
MEASUREMENT – TIME						
24mths	**30mths**	**36mths**	**42mths**	**48mths**	**54mths**	**60mths**
		Begins to notice that there is an order and sequence to familiar events.		Uses everyday vocabulary to describe and compare measure (size, weight, capacity and time)	Uses comparative language to describe and compare measures (size,	

					weight, capacity and time).	
MULTIPLICAION AND DIVISION FACTS						
24mths	**30mths**	**36mths**	**42mths**	**48mths**	**54mths**	**60mths**
POSITION, DIRECTION AND MOVEMENT						
24mths	**30mths**	**36mths**	**42mths**	**48mths**	**54mths**	**60mths**
		Recognises the pattern of everyday familiar routines	In play uses some language to compare quantities and talk about position such as 'on/in/under' Independently uses and demonstrates positional language as part of everyday role play scenarios			

ELG: Number

- Have a deep understanding of number to 10, including the composition of each number. Subitise (recognise quantities without counting) up to 5. Automatically recall (without reference to rhymes, counting or other aids) number bonds up to 5 (including subtraction facts) and some number bonds to 10, including double facts

ELG: Numerical Patterns

- Verbally count beyond 20, recognising the pattern of the counting system. Compare quantities up to 10 in different contexts, recognising when one quantity is greater than, less than or the same as the other quantity. Explore and represent patterns within numbers up to 10, including evens and odds, double facts and how quantities can be distributed equally.

Nursery skills

Nursery 1

• Autumn	• Spring	• Summer
• Engage in open-ended play, developing one-to-one correspondence e.g. one doll in a pram / one peg in each bowl • Begin to participate in number songs – • Count by rote from 1-3+ • Sort objects by colour using the words same and different • Sort different objects by noticing similarities and differences e.g. Autumn items • Begin to use the language of position – on/ in/ under • Explore objects and create own constructions • Recognise patterns in daily routine e.g. register/ snack etc	• Count accurately using 1-1 correspondence for numbers 1-3 • Identify some representations of numbers 1,2,3, • Match objects to numerals using 1-3 • Count by rote to 5 • Explore objects by shape and size • Begin to copy a repeating pattern • Compare amounts using full / empty to make comparisons	• Count forwards and backwards • Count accurately using 1- correspondence for numbers 1-3 • Identify which group has more/ less • Begin to subitise to 3 • Recognise and order numbers 1-3 • Begin to make own repeating pattern • Organise shapes/ objects into groups • Talk about shapes they see within provision and within play

Nursery 2

• Autumn	• Spring	• Summer
• Engage in open-ended play, developing one-to-one correspondence e.g. one doll in a pram / one peg in each bowl • Participate in number songs – beginning to use fingers to represent numbers • Count by rote from 1-5+ • Identify a small set that has 'more' or 'less' or the 'same' • Begin to order and record numerals 0-3 • Sort different objects by noticing similarities and differences e.g. Autumn items • Use the language of size – big/ little, small/ large. • Use language of long and short to describe lengths • Copy a simple repeating pattern • Follow the daily routine and begin to predict what might happen next with a visual timetable	• Count accurately using 1-1 correspondence for numbers 1-3 • Identify some representations of numbers 1,2,3, • Begin to subitise 1-2 • Match objects to numerals using 1-3 • Count by rote to 10 • Begin to order numerals 0-5 • Sort objects by shape and size • Begin to continue a repeating pattern • Compare amounts using full / empty to make comparisons • Start to make direct comparisons using longer/ shorter, taller/ shorter to describe • Compare lengths using practical objects and begin to make some comparisons using appropriate language • Name simple 2D shapes of circle, triangle, rectangle and square	• Count forwards and backwards • Count accurately using 1- correspondence for numbers 1-5 • Find 1 more and 1 less than a number between 1 and 5 • Begin to subitise to 1-3 • Begin to order numerals 1-5+ • Begin to make own repeating pattern • Describe shapes they see in images and pictures. • Use words such as round/ straight/ flat to describe shape characteristics. • Talk about and sequence the events within a school day • Use time vocabulary of - day/night/today/tomorrow/before/after that to describe when an event is happening • Use words such as heavy/light • Use words of more or less when describing quantities

			• Use positional language to place and describe items - under/ in/ on/ on top of/ behind/ in front of/ • Use directional language of up/ down / across to describe locations.

St. Brigid's Primary School - Progression through EYFS (Reception)

Playing and Exploring – Engagement	Active Learning – Motivation	Creating and thinking critically - Thinking
• Finding out and exploring • Playing with what they know Being willing to 'have a go'	• Being involved and concentrating • Keep on trying Enjoying achieving what they set out to do	• Having their own idea (creative thinking) • Making links (building theories) Working with ideas (critical thinking)

Progression Map:

PLACE VALUE - COUNTING			
48mths	**54mths**	**60mths**	**66mth**
Can count up to 4 objects and can recognise 2 objects (moveable and non) without counting Join in with number songs which count on – one more or count down – one less Finds totals by counting Begins to recite numbers in order, with some inconsistency Attempts to count beyond 4 Is able to anticipate which amount will be next in the context of one more/one less – number songs	Recites numbers accurately to 5 demonstrating 'some' accuracy of numbers to 10. Counts small groups of manipulatives correctly using 1:1 correspondence, whilst playing a variety of number games. Able to recite numbers forwards and backwards from 5 Counts small groups of fixed objects with accurate 1-1 correspondence	Counts reliably up to 5 Accurately count fixed objects to 5 and recognise numerals to at least 5 out of sequence	Counts reliably up to 10 ELG Count up to 10 forwards and backwards including from any given number ELG Accurately count fixed objects to 10 and recognise numerals to at least 5 out of sequence Verbally count beyond 20 ELG
PLACE VALUE - COMPARING NUMBERS			
48mths	**54mths**	**60mths**	**66mths**

Explores numbers in play with growing purpose Use everyday vocabulary to describe and compare	Recognise some numbers of personal significance Identify groups of objects that have more or less than and the same	Can order numbers to 5 Using resources can create quantities which are greater than, less than, the same as a given number	Can order numerals to 10 ELG Compare quantities up to 10 – recognise when one quantity is greater than, less than, or the same as another quantity ELG
PLACE VALUE - IDENTIFYING, REPRESENTING AND ESTIMATING NUMBERS			
48mths	**54mths**	**60mths**	**66mths**
Recognise some numerals of personal significance and talks about numbers in the everyday environment. Is able to anticipate which amount will be next in the context of one more/one less – number songs	Uses graphic representations to record number explorations in pictures and mark making Counts small groups of manipulatives correctly using 1:1 correspondence, whilst playing a variety of number games.	Creates groups of numbers to up at least 5 and is able to place them in order Recognise the relationship between a group of objects and the corresponding number. Accurately count fixed objects to five and recognise numerals to at least 5 out of sequence Recognise up to 3 objects (without counting) in a range of orientations Record quantities in pictures or numerals	Create groups of numbers to 10 using a range of objects ELG Place numerals in order to 10 ELG Recognise up to 5 objects (without counting) in a range of orientations ELG Recognise numerals to 10 in and out of sequence ELG Use resources to create parts of a whole, to partition pairs of numbers up to 10 ELG Will demonstrate thinking through use of verbal number sentences/ number stories Is beginning to recognise the symbols +, - and = Explore and represent patterns within numbers up to 10, including evens and odds, double facts and how quantities can be distributed equally. ELG
PLACE VALUE- READING AND WRITING NUMBERS			
48mths	**54mths**	**60mths**	**66mths**
Recognise some numerals of personal significance and talks about numbers in the everyday environment.	Uses graphic representations to record number explorations in pictures and mark making Recognise numbers of personal significance	Read numbers up to 5 in and out of sequence In self-initiated play begin to record numbers	Recognise numerals to 10 Begin to record some numbers to 10

Uses graphic representations to record number exploration in pictures and mark making		Represent an amount as a picture or numeral	
PLACE VALUE and ADDITION AND SUBTRACTION - PROBLEM SOLVING			
48mths	**54mths**	**60mths**	**66mths**
When combining materials know how to change an amount if something is added/or taken away	Can use resources and say one more or one less than a given number and to create equal groups Begin to find the totals of combining groups	Can use resources to say one more or one less than a given number and to create equal groups	Begin to know number pairs to 10 including double facts ELG Explore and represent patterns within numbers up to 10, including evens and odds, double facts and how quantities can be distributed equally. ELG
ADDITION AND SUBTRACTION - NUMBER BONDS			
48mths	**54mths**	**60mths**	**66mths**
	Begin to find the totals of combining groups	Begin to use number bonds and related subtraction facts within 5 within play	Use a range of objects to create 5 in different ways ELG Recognise number bonds t0 5 ELG Begin to know number pairs to 10 ELG
ADDITION AND SUBTRACTION - MENTAL CALCULATION			
48mths	54mths	60mths	66mths
Is able to anticipate which amount will be next in the context of one more/one less – number songs	Can use resources and say one more or one less than a given number and to create equal groups	Can add and subtract single digit numbers in their play to 5 Say one more/ less that a given number (within 5)	Begin to know number pairs to 10 including double facts ELG Say one more/ less that a given number (within 10) ELG
SHAPE – IDENTIFYING SHAPES AND THEIR PROPERTIES			
48mths	**54mths**	**60mths**	**66mths**
With a purpose in mind, recognises and selects simple geometric shapes in their construction and block play	Uses everyday language to recreate and describe patterns	Creates patterns by lining, placing, building and arranging. Begin to recognise and name some common 2-d and 3-shapes	Begin to recognise familiar 2-d shapes using their properties and name e.g. squares and rectangles have four side/ triangles have three sides and a circle has one curved side. Begin to recognise familiar 3d shapes using their properties and

			names e.g. flat face/ curved face/ edges/ vertices
SHAPE – DRAWING AND CONSTRUCTING			
48mths	**54mths**	**60mths**	**66mths**
With a purpose in mind, recognises and selects simple geometric shapes in their construction and block play	Uses everyday language to recreate and describe patterns	Creates patterns by lining, placing, building and arranging. Orders three or more measures (size, weight and capacity) whilst playing.	
SHAPE – COMPARE AND CLASSIFY			
48mths	**54mths**	**60mths**	**66mths**
Uses everyday vocabulary to describe and compare shape.	Uses comparative language to describe and compare shape/ measures (size, weight, capacity and time).	Orders/ classifies three or more measures/ shapes (size, weight and capacity) whilst playing.	In everyday contexts children are able to talk/ demonstrate shape/measures (size, weight/ number of sides and capacity) when comparing and combining quantities.
MEASUREMENT – COMPARING AND ESTIMATING			
48mths	**54mths**	**60mths**	**66mths**
Uses everyday vocabulary to describe and compare measure (size, weight, capacity and time).	Uses comparative language to describe and compare measures (size, weight, capacity and time).	Orders three or more measures (size, weight and capacity) whilst playing.	In everyday contexts children are able to talk/ demonstrate measures (size, weight and capacity) when comparing and combining quantities.
MEASURWMENT – MEASURING AND CALCULATING			
48mths	**54mths**	**60mths**	**66mths**
Uses everyday vocabulary to describe and compare measure (size, weight, capacity and time).	Uses comparative language to describe and compare measures (size, weight, capacity and time).	Orders three or more measures (size, weight and capacity) whilst playing.	In everyday contexts children are able to talk/ demonstrate measures (size, weight and capacity) when comparing and combining quantities.
MEASUREMENT – TIME			
48mths	**54mths**	**60mths**	**66mths**

Uses everyday vocabulary to describe and compare measure (size, weight, capacity and time)	Uses comparative language to describe and compare measures (size, weight, capacity and time).	Uses comparative language to order/ sequence 3 events	Uses comparative language to order/ sequence 3 events
MULTIPLICAION AND DIVISION FACTS			
48mths	**54mths**	**60mths**	**66mths**
			To distribute quantities equally and represent double facts. ELG
POSITION, DIRECTION AND MOVEMENT			
48mths	**54mths**	**60mths**	**66mths**
			To talk about shape and patterns using vocabulary to describe position, direction and movement

ELG: Number

- Have a deep understanding of number to 10, including the composition of each number. Subitise (recognise quantities without counting) up to 5. Automatically recall (without reference to rhymes, counting or other aids) number bonds up to 5 (including subtraction facts) and some number bonds to 10, including double facts

ELG: Numerical Patterns

- Verbally count beyond 20, recognising the pattern of the counting system. Compare quantities up to 10 in different contexts, recognising when one quantity is greater than, less than or the same as the other quantity. Explore and represent patterns within numbers up to 10, including evens and odds, double facts and how quantities can be distributed equally.

Reception Overview

Autumn	Getting to know you!	Match, sort and compare	Talk about measure and patterns	It's me 1, 2, 3	Circles and Triangles	1,2,3,4,5	Shapes with 4 sides
Spring	Alive in 5	Mass and capacity	Growing 6, 7, 8	Length, height and time	Building 9 and 10		Explore 3-d shapes
Summer	To 20 and beyond	How many now?	Manipulate compose and decompose	Sharing and grouping	Visualise, build and map	Make connections	Consolidation

Y1 Overview

Autumn	**Number: Place value (within 10)**		**Number: Addition and subtraction (within 10)**		**Shape: Geometry**	
Spring	**Number: Place value (within 20)**	**Number: Addition and subtraction (within 20)**	**Number: Place value (within 50)**	**Measurement: Length and height**	**Measurement: Mass and Volume**	
Summer	**Number: Multiplication and division**	**Number: Fractions**	**Geometry: Position and direction**	**Number: Place value (within 100)**	**Measurement: Money**	**Measurement: Time**

Y2 Overview

Autumn	Number: Place value	Number: Addition and subtraction		Geometry: Shape
Spring	Measurement: Money	Number: Multiplication and division	Measurement: Length and height	Measurement: Mass, capacity and temperature
Summer	Number: Fractions	Measurement: Time	Statistics	Geometry: Position and direction

Y3 Overview

Autumn	Number: Place value	Number: Addition and subtraction		Number: Multiplication and division A	
Spring	Number: Multiplication and division B	Measurement: Length and perimeter	Number: Fractions A	Measurement: Mass and capacity	
Summer	Number: Fractions B	Measurement: Money	Measurement: Time	Geometry: Shape	Statistics

Y4 Overview

Autumn	**Number: Place value**	**Number: Addition and subtraction**		**Measurement: Area**	**Number: Multiplication and division A**	
Spring	**Number: Multiplication and division B**	**Measurement: Length and perimeter**	**Number: Fractions**	**Number: Decimals A**		
Summer	**Number: Decimals B**	**Measurement: Money**	**Measurement: Time**	**Geometry: Shape**	**Statistics**	**Geometry: Position and direction**

Y5 Overview

Autumn	**Number: Place value**	**Number: Addition and subtraction**		**Number: Multiplication and division A**	**Number: Fractions A**	
Spring	**Number: Multiplication and division B**	**Number: Fractions B**	**Number: Decimals and percentages**	**Number: Decimals and percentages**	**Measurement: Perimeter and area**	**Statistics**
Summer	**Geometry: Shape**	**Geometry: Position and direction**	**Number: Decimals**	**Number: Negative numbers**	**Measurement: Converting units**	**Measurement: Volume**

Y6 Overview

Autumn	**Number: Place value**	**Number: Addition, subtraction, multiplication and division**	**Number: Fractions A**	**Number: Fractions B**	**Measurement: Converting units**	
Spring	**Number: Ratio**	**Number: Algebra**	**Number: Decimals**	**Number: Fractions, decimals and percentages**	**Measurement: Area, perimeter and volume**	**Statistics**
Summer	**Geometry: Shape**	**Geometry: Position and direction**	**Themed projects – investigations, consolidation and problem solving**			