St Michael's CE Primary School

Cultivating Respect, Persevering, and Learning with Courage

Why This? Why Now?

Maths Curriculum

Year 1 – Place Value, Addition and Subtraction

Why this?
Count, compare and order numbers within 10
Know number bonds within 10

Why now?
Build on baseline counting to 10 in Reception
Introduce number bonds within 10

Year 1 – Addition and Subtraction, Shape, Place Value

Why this?
Know how to add and subtract within 10
Recognise and sort 2D and 3D shapes
Count, compare and order numbers within 20

Why now?
Build on number bonds within 10
Introduce 2D and 3D shapes
Build on previous place value

Year 1 – Addition and Subtraction, Place Value, Length and Height

Why this?
Know how to add and subtract within 20
Count, compare and order numbers within 50
Measure length and height in cm

Why now?
Build on adding and subtracting within 10 to 20
Build on previous place value
Introduce measuring in cm

Year 1 – Mass and Volume, Multiplication and Division

Why this?
Compare and measure mass, volume and capacity
Make equal groups and count in 2s, 5s and 10s

Why now?
Introduce measuring liquids
Introduce multiplication and division through grouping and sharing
Introduce counting in 2s, 5s and 10s

Year 1 – Fractions, Position and Direction, Place Value

Why this?
Recognise and find a half and a quarter
Describe position and direction
Count, compare and order numbers within 100

Why now?
Introduce fractions
Introduce geometry
Build on previous place value now within 100

Year 1 – Money, Time

Why this?
Recognise and count coins and notes
Months of the year, days of the week, hours, minutes and seconds and telling the time to the hour and half the hour

Why now?
Introduce money
Build on knowledge of time and different ways of measuring time

Year 2 – Place Value, Addition and Subtraction

Why this?
Count, partition and order numbers within 100
Number bonds within 100
Addition and subtraction across 10

Why now?
Build on place value
Build on addition and subtraction
Introduce adding and subtraction across 10

Year 2 – Addition and Subtraction, Shape, Money

Why this?
Column addition and subtraction with 2-digit numbers
Recognise and describe the features of 2D and 3D shapes
Find lines of symmetry

Why now?
Introduce formal written method for addition and subtraction
Build on shapes
Introduce lines of symmetry

Year 2 – Multiplication and Division, Length and Height

Why this?
Group and share amounts
Count in multiples of 2, 5 and 10
Measure in cm and m
Compare and order lengths and heights

Why now?
Build on multiplication and grouping
Introduce measuring in m
Build on length and height

Year 2 – Mass, Capacity and Temperature, Fractions

Why this?
Measure in g and kg, l and ml
Compare and order mass and capacity
Read temperature
Find, half, quarters and a third
Unit and non-unit fractions

Why now?
Build on measuring mass and liquids
Introduce temperature
Build on fractions and introduce unit and non-unit fractions

Year 2 – Time, Statistics, Addition and Subtraction

Why this?
Tell the time to 5 mins on analogue clock
Interpret and create tally charts and pictograms
Review and consolidate addition and subtraction

Why now?
Introduce telling the time
Introduce charts
Review and consolidate addition and subtraction

Year 2 – Position and Direction, Multiplication and Division

Why this?
Describe movements and turns
Review and consolidate multiplication and division

Why now?
Build on geometry knowledge
Review and consolidate multiplication and division

Year 3 – Place Value, Addition and Subtraction

Why this?
Represent, partition and order numbers within 1000
Add and subtract 1s, 10s and 100s

Why now?
Build on previous place value
Build on adding and subtracting count in 10s and 100s

Year 3 – Addition and Subtraction, Multiplication and Division

Why this?
Column addition and subtraction with 3-digit numbers
Make equal groups and count in multiples of 3, 4 and 8

Why now?
Build on formal written methods for addition and subtraction
Build on multiplication and division
Build times table knowledge for Year 4 times table check

Year 3 – Multiplication and Division, Length and Perimeter

Why this?
Multiply and divide a 2-digit number by a 1-digit number
Measure in m, cm, mm
Compare and convert lengths
Add and subtract lengths
Measure perimeter

Why now?
Introduce formal written methods for multiplication and division
Build on measurement
Introduce perimeter

Year 3 – Fractions, Mass and Capacity

Why this?
Identify, compare and order fractions
Find equivalent masses and capacity and volume

Why now?
Build on fractions knowledge
Build on using different units
Build on converting between units to find equivalent mass and volume

Year 3 – Fractions, Money, Time

Why this?
Add and subtract fractions
Find the fraction of a set of objects
Convert and add and subtract pounds and pence
Tell the time to the minute on analogue and digital clocks

Why now?
Link fractions and addition and subtraction
Build on money and link to converting and equivalence
Build on telling the time

Year 3 – Shape, Statistics

Why this?
Compare angles, identify parallel and perpendicular lines and draw, describe and make 2D and 3D shapes
Interpret and draw pictograms, bar charts and two-way tables

Why now?
Build on previous shape
Introduce new ways to collect data, links to Science

St Michael's CE Primary School

Cultivating Respect, Persevering, and Learning with Courage

Year 4 – Place Value, Addition and Subtraction

Why this?
Represent, partition and order within 10,000
Rounding numbers linked to estimating

Why now?
Build on previous place value
Build on formal written methods for addition and subtraction

Year 4 – Area, Multiplication and Division

Why this?
Calculate and compare the area of a shape
Count in multiples of 6, 7, 9, 11 and 12
Multiply and divide by 10 and 100
Multiply and divide a 3-digit number by a 1-digit number

Why now?
Introduce area
Year 4 times table check
Build on formal written methods for multiplication and division

Year 4 – Length and Perimeter, Fractions

Why this?
Compare and convert lengths
Calculate the perimeter of shapes
Convert between mixed number and improper fractions
Add and subtract mixed number fractions

Why now?
Builds on skill of converting
Builds on fractions
Reviews adding and subtracting fractions

Year 4 – Decimals, Money

Why this?
Identify and represent tenths and hundredths
Divide 1 or 2-digit numbers by 10 or 100
Convert, compare and solve problems with money as decimals

Why now?
Introduce decimals
Link decimals and money
Build on money and converting skills

Year 4 – Time, Shape, Multiplication and Division

Why this?
Convert between digital and analogue times
Tell the time on a 24-hour clock
Compare and classify shapes based on their properties
Review times tables for Year 4 check

Why now?
Build on telling time
Build on shapes
Year 4 times tables check

Year 4 – Multiplication and Division, Statistics, Position and Direction

Why this?
Review times tables for Year 4 check
Interpret and draw charts and line graphs
Describe and plot coordinates and describe translations of 2D shapes on a grid

Why now?
Year 4 times tables check
Build on different ways of representing data
Introduce coordinates

Year 5 – Place Value, Addition and Subtraction, Multiplication and Division

Why this?
Represent, partition and order numbers within 1,000,000
Formal written methods for addition and subtraction for more than 4-digits
Identify multiples, factors, prime numbers and squares

Why now?
Build on previous place value
Consolidate formal written methods for addition and subtraction
Introduce prime numbers and squares

Year 5 – Multiplication and Division, Fractions

Why this?
Multiply and divide by 10, 100 and 1,000
Identify and represent equivalent fractions
Convert between mixed number and improper fractions

Why now?
Build on multiplication and division reasoning and problem solving
Build on equivalent fractions knowledge and practice converting

Year 5 – Multiplication and Division, Fractions, Decimals

Why this?
Long multiplication and short division methods used
Multiply proper and mixed number fractions
Convert between decimals and percentages

Why now?
Build on formal written methods for multiplication and division
Build on fractions
Build on converting skills
Data links to Science

Year 5 – Decimals and Percentages, Perimeter and Area, Statistics, Shape

Why this?
Rounding to the nearest whole number and to 1 decimal place
Convert between percentages, fractions and decimals
Measure and calculate perimeter and area
Draw and interpret line graphs, two-ways tables and timetables

Why now?
Build on rounding and link to decimals
Build on converting
Link to representing data in Science

Year 5 – Position and Direction, Decimals

Why this?
Read and plot coordinates, identify and represent the position of shapes following a reflection or translation
Add and subtract decimals
Multiply and divide by 10, 100 and 1000

Why now?
Build on coordinates
Build on decimals and apply addition, subtraction, multiplication and division to working with decimals

Year 5 – Negative Numbers, Converting Units, Volume

Why this?
Interpret negative numbers and count forwards and backwards through zero
Understand and convert between metric units and imperial units
Measure, compare and estimate volume

Why now?
Introduce negative numbers
Consolidate converting between different units
Consolidate knowledge on volume

Year 6 – Place Value, Addition and Subtraction, Multiplication and Division

Why this?
Calculate intervals across zero
Solve addition and subtraction questions
Identify common factors, primes, squares and cubes
Use formal written methods for multiplication and division

Why now?
Consolidate knowledge to apply in SATs
Build on formal written methods for multiplication and division

Year 6 – Fractions, Converting Units, Ratio

Why this?
Identify and simplify fractions
Add and subtract mixed number fractions with multi step problems
Multiply and divide fractions
Convert units using values up to 3 decimal places
Solve problems involving unequal sharing and grouping

Why now?
Consolidate knowledge to apply in SATs
Introduce ratio

Year 6 – Ratio, Algebra, Decimals, Fractions and Percentages

Why this?
Use multiplication and division facts to solve ratio problems
Use simple formulae to solve missing number problems algebraically
Find pairs of numbers that satisfy an equation with unknowns
Calculate decimal fraction equivalents

Why now?
Consolidate knowledge to apply in SATs
Introduce algebra for solving for unknowns

Year 6 – Fractions, Decimals and Percentages, Area, Perimeter and Volume, Statistics, Shapes

Why this?
Review equivalence between fractions, decimals and percentages
Calculate area and volume of shapes
Interpret and draw graphs and calculate the mean
Calculate angles

Why now?
Consolidate knowledge to apply in SATs

Year 6 – Shape, Position and Direction

Why this?
Identify angles in triangles, quadrilaterals and polygons
Identify features of circles
Identify nets of 3D shapes
Describe positions on the full coordinate grid
Translate and reflect simple shapes on the coordinate grid

Why now?
Consolidate knowledge to apply in SATs

Year 6 – Consolidate, Projects and Problem-Solving

Why this?
Consolidate learning and apply it to projects and problem-solving
Chn have a chance to be more in charge of their learning and to work in groups

Why now?
Consolidate knowledge to apply in SATs
Projects and problem-solving in groups is an engaging and memorable way to end Year 6
Problem-solving to help transition to Year 7

Year 7