# Curriculum Intent \& Progression Document Mathematics 

St. Mary's Catholic Voluntary Academy, Grantham

2023-24


Subject Leader: Miss Steeples

## Mission Statement

Christ is at the centre of St. Mary's as we strive to nurture and care for all our community members by encouraging them to Believe, Succeed and Soar within God's love, to achieve the very best that they can, in all areas.

## Our Vision

We are disciples who put our faith into action in all that we do.
We are role models who encourage others to shine and be the best version of themselves that they can be.
We are investigators who ask questions about the past, the present and the future.
We are artists who show our creativity and talents with flair and imagination.
We are storytellers who have a passion for reading and are able to communicate in many ways.
We are problem solvers who tackle tasks with an open mind and a positive approach.
We are team players who work together to achieve our goals.
We are explorers who learn new skills, embrace other cultures and value our locality and the wider world.
We Believe. We Succeed. We Soar.

## Our Gospel Virtues

To achieve our full Christian potential, we all need to live out our Gospel Virtues: -

## Love

A Christ-like love respects the talent of each person in our school.

## Faith

Faith helps us to do God's will in this world.
Hope
Hope helps us to see a new life beyond our present one.
Peace
We know that if we love one another, peace will be all around us.
Mercy
We believe that mercy will be shown by the way we forgive others.
Community
We believe our community here unites us all as followers of Jesus.

## Curriculum Intent General Principles:

Below, the General Principles of our whole school curriculum intention are in black print, along with what this translates to as regards Mathematics in red:

## The General Principles of our curriculum are that children:

- Meet Jesus through all aspects of their work. It is our intention that the children will encounter Jesus through elements of their Maths work. Children are encouraged to demonstrate the Gospel Virtues (love, faith, hope, peace, mercy \& community) within Maths whilst believing, succeeding and soaring in their learning.
- Experience the challenge and enjoyment of learning. Our children are encouraged to become fluent in the fundamentals of mathematics, reason mathematically by following a line of enquiry and solve problems by applying their mathematics to a variety of routine and non-routine problems. As you walk around our school and talk to our children, you will see them enjoying learning experiences that demonstrate the love our children have for Mathematics. Our Maths lessons follow a very practical-based approach because we have adopted Teaching for Mastery across the whole school. This is underpinned by the NCETM's 5 Big Ideas ${ }^{1}$, which includes representation and structure, mathematical thinking, variation, fluency and coherence. Children thrive on the challenge that Maths presents them, both within lessons and outside of the classroom in real-life contexts. They tackle diving, deeper and deepest activities, which provides a personalised approach to their learning. The Concrete Pictorial Abstract (CPA) approach is used when teaching children key mathematical skills and this helps to support children's mathematical understanding. As a result, the teaching of Maths takes on a very visual, auditory and hugely kinaesthetic approach to learning (VAK) ensuring that it is accessible to all learners.
- Learn within a coherent and progressive framework. As a school, in conjunction with the Mastery approach to our curriculum, which is taught from EYFS through to Year 6, we use the White Rose Maths Schemes of Learning. This is a starting point in order to develop a coherent and comprehensive conceptual pathway with the focus on the whole class advancing together. It is a progressive framework that provides opportunities for each mathematical concept to be taught in small, connected steps, building on from what pupils already know. The journey begins in EYFS, where children explore mathematical concepts through active exploration and their everyday play-based learning. It is achievable for all - we have high expectations and encourage a positive 'can do' mindset towards Mathematics in all pupils, creating learning experiences which develop children's resilience in the face of a challenge and carefully scaffolding learning so everyone can make progress.
- See clear links between different aspects of their learning. Mathematics is an interconnected subject in which the children need to be able to move fluently between representations of mathematical ideas and make rich connections across mathematical ideas to develop fluency, mathematical reasoning and competence in solving increasingly sophisticated problems. Therefore, Maths is not a stand-alone subject and is used, applied and developed through activities in other areas of the curriculum, where appropriate, for example in History (chronology and counting systems), Geography (directions, distances and time zones), English (speaking and listening), Science (STEM approach), PE (statistics and measurements), Music (timing and beat counting), Computing (coding instructions and calculators), Art (shape and patterns), Design Technology (baking, cooking and measurements) and MFL (vocabulary based) as well as a child's outdoor learning in the WOW area.
- Understand the purpose and value of their learning and see its relevance to their past, present and future. We aim to equip our pupils with the knowledge, skills and understanding to apply what they have learnt in the past to the present and the future. Children are encouraged to make connections between the history of our counting system (past) and its evolvement to the present day. They also consider the future of Mathematics and how it might develop in the years to come. Mathematics in the early years provides children with a solid foundation that will enable them to develop skills as they progress through their schooling and ensures children are ready for the National Curriculum across all key stages both within primary and secondary education. Mathematical concepts, are revisited, built upon and further developed. All units of work are carefully planned so that all of our children have the relevant opportunities to apply the principles of Rosenshine.
- Explore the breadth and depth of the national curriculum. The intention is that the learning goes beyond that of the National Curriculum and that areas of learning are more clearly defined. It is intended that when children leave St Mary's Catholic Voluntary Academy, they will be able to continue to develop their competence in a broad range of mathematical concepts. They will be engaged and prepared to continue mathematical learning at secondary school and beyond.
${ }_{1}$ This document has been created using content provided by the NCETM/Maths Hub Mastery Specialist Programme.

Cathy Steeples
St. Mary's Catholic Voluntary Academy, Grantham

## Curriculum Intent: MATHEMATICS (2022-23)

| EYFS |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ADVENT 1 | ADVENT 2 | LENT 1 | LATHEMATICS |  |  |  |
| Children will... | Children will... | Children will... | Children will... | PENTECOST 1 | Children will... |  |


| Year 1 MATHEMATICS |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| ADVENT 1 | ADVENT 2 | LENT 1 | LENT 2 | PENTECOST 1 | PENTECOST 2 |
| Number: Place Value (within 10) [5 weeks] <br> Step 1: Sort objects <br> Step 2: Count objects <br> Step 3: Count objects from a larger group <br> Step 4: Represent objects <br> Step 5: Recognise numbers as words <br> Step 6: Count on from any number <br> Step 7: 1 more <br> Step 8: Count <br> backwards within 20 <br> Step 9: 1 less <br> Step 10: Compare groups by matching <br> Step 11: Fewer, more, same <br> Step 12: Less than, greater than, equal to Step 13: Compare numbers <br> Step 14: Order objects and numbers <br> Step 15: The number line <br> Number: Addition and Subtraction (within 10) [1 week] | Number: Addition and Subtraction (within 10) [4 weeks] <br> Step 4: Fact families addition facts <br> Step 5: Number bonds within 10 <br> Step 6: Systematic number bonds within 10] <br> Step 7: Number bonds to 10 <br> Step 8: Addition - add together <br> Step 9: Addition - add more <br> Step 10: Addition problems <br> Step 11: Find a part <br> Step 12: Subtraction find a part <br> Step 13: Fact families the eight facts <br> Step 14: Subtraction take away/ cross out (How many left?) <br> Step 15: Subtraction take away (How many left?) <br> Step 16: Subtraction on a number line <br> Step 17: Add or subtract 1 or 2 | Number: Place Value (within 20) [3 weeks] <br> Step 1: Count within 20 <br> Step 2: Understand 10 <br> Step 3: Understand 11, <br> 12 and 13 <br> Step 4: Understand 14, <br> 15 and 16 <br> Step 5: Understand 17, <br> 18 and 19 <br> Step 6: Understand 20 <br> Step 7: 1 more and 1 less <br> Step 8: The number line to 20 <br> Step 9: Use a number line to 20 <br> Step 10: Estimate on a number line to 20 <br> Step 11: Compare numbers to 20 <br> Step 12: Order numbers to 20 <br> Number: Addition and Subtraction (within <br> 20) [3 weeks] <br> Step 1: Add by counting on within 20 <br> Step 2: Add ones using number bonds <br> Step 3: Find and make number bonds to 20 | Number: Place Value (within 50) [2 weeks] <br> Step 1: Count from 20 <br> to 50 <br> Step 2: 20, 30, 40 and <br> 50 <br> Step 3: Count by making groups of tens <br> Step 4: Groups of tens and ones <br> Step 5: Partition into tens and ones <br> Step 6: The number line to 50 <br> Step 7: Estimate on a number line to 50 <br> Step 8: 1 more, 1 less <br> Measurement: Length and Height [2 weeks] <br> Step 1: Compare lengths and heights Step 2: Measure length using objects <br> Step 3: Measure length in centimetres <br> Measurement: Mass and Volume [2 weeks] <br> Step 1: Heavier and lighter <br> Step 2: Measure mass <br> Step 3: Compare mass | Number: <br> Multiplication and <br> Division [3 weeks] <br> Step 1: Count in 2s <br> Step 2: Count in 10s <br> Step 3: Count in 5s <br> Step 4: Recognise <br> equal groups <br> Step 5: Add equal <br> groups <br> Step 6: Make arrays <br> Step 7: Make doubles <br> Step 8: Make equal <br> groups - grouping <br> Step 9: Make equal <br> groups - sharing <br> Number: Fractions [2 weeks] <br> Step 1: Recognise a half of an object or a shape <br> Step 2: Find a half of an object or a shape <br> Step 3: Recognise a half of a quantity <br> Step 4: Find a half of a quantity <br> Step 5: Recognise a quarter of an object or a shape | Number: Place Value (within 100) [2 weeks] <br> Step 1: Count from 50 to 100 <br> Step 2: Tens to 100 <br> Step 3: Partition into tens and ones <br> Step 4: The number line to 100 <br> Step 5: 1 more, 1 less <br> Step 6: Compare numbers with the same number of tens <br> Step 7: Compare any two numbers <br> Measurement: Money [1 week] <br> Step 1: Unitising <br> Step 2: Recognise coins <br> Step 3: Recognise notes <br> Step 4: Count in coins <br> Measurement: Time [2 weeks] <br> Step 1: Before and after <br> Step 2: Days of the week <br> Step 3: Months of the year |

Step 1: Introduce parts and wholes
Step 2: Part-whole model
Step 3: Write number sentences

## Geometry: Shape [1

 week]Step 1: Recognise and name 3-D shapes
Step 2: Sort 3-D shapes Step 3: Recognise and name 2-D shapes Step 4: Sort 2-D shapes Step 5: Patterns with 2-
D and 3-D shapes

## Consolidation and

 Assessment [1 week]Step 4: Doubles
Step 5: Near doubles Step 6: Subtract ones using number bonds Step 7: Subtraction counting back
Step 8: Subtraction finding the difference Step 9: Related facts Step 10: Missing number problems

Step 4: Full and empty Step 5: Compare volume
Step 6: Measure capacity
Step 7: Compare
capacity

YEAR 1 VOCABULARY

## Number: Place Value (within 10)

One, two, three, four, five, six, seven, eight, nine, ten, one more, one less, first ( $\left.1^{\text {st }}\right)$, second ( $\left.2^{\text {nd }}\right)$, third ( $3^{\text {rd }}$ ), fourth ( $\left.4^{\text {th }}\right)$, equals, less than, greater than, most, fewest

## Number: Addition and Subtraction (within 10)

## Number: Addition and

 Subtraction (within 10)One, two, three, four, five, six, seven, eight, nine, ten, add, subtract, equals, count on, count back, number bond

## Geometry: Shape Side, corner, vertices, vertex, curved, face,

| YEAR 1 VOCABULARY |  |  |
| :--- | :--- | :--- |
| Number: Place Value |  |  |
| (within 20) | Number: Place Value <br> (within 50) |  |
| One, two, three, four, |  |  |
| five, si, seven, eight, | Tens, ones, one more, <br> one less, less than, <br> nine, ten, eleven, <br> twelve, thirteen, <br> fourteen, fifteen, |  |
| equal to, more than |  |  |
| sixteen, seventeen, |  |  |
| eighteen, nineteen, |  |  |
| twenty, least, smallest, |  |  |
| most, greatest, first, |  |  |
| second, third, one |  |  |
| more, one less |  |  |
| Number: Addition and <br> Subtraction (within <br> 20) | Measurement: Length <br> and Height |  |

Step 6: Find a quarter of an object or a shape Step 7: Recognise a quarter of a quantity Step 8: Find a quarter of a quantity

## Geometry: Position

 and Direction [1 week]Step 1: Describe turns Step 2: Describe position - left and right Step 3: Describe position - forwards and backwards
Step 4: Describe position - above and below
Step 5: Ordinal numbers

Step 4: Hours, minutes and seconds
Step 5: Tell the time to the hour
Step 6: Tell the time to the half hour

## Consolidation and

 Assessment [1 week]
## Number: Multiplication and <br> Division

Count, equal groups, array, double, group equally, share equally

## Number: Fractions

 Half, equal parts, whole, quarter
## Number: Place Value

 (within 100)Tens, ones, one more, one less, smallest, greatest, less than, equal to, more than

Measurement: Money Coin, note, pound, pence, penny

| One, two, three, four, five, six, seven, eight, nine, ten, add, subtract, equals, count on, count back, number bond | straight, 2D, 3D, pattern, square, circle, rectangle, triangle, cube, cuboid, sphere, cylinder, cone | One, two, three, four, five, six, seven, eight, nine, ten, eleven, twelve, thirteen, fourteen, fifteen, sixteen, seventeen, eighteen, nineteen, twenty, number bond, first, then, now, partition, add, subtract, equals | Taller, shorter, longer, tallest, shortest, longest, same, scale, length, height |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Measurement: Mass and Volume <br> Weight, mass, scales, heavier, lighter, balanced, capacity, volume, liquid, amount, empty, nearly empty, half full, nearly full, full | Geometry: Position and Direction <br> Quarter turn, half turn, three-quarter turn, full turn, left, right, front, behind, below, above, top, middle, bottom, between, forwards, backwards, | Measurement: Time <br> First, next, finally, before, after, Monday, Tuesday, Wednesday, Thursday, Friday, Saturday, sundae, January, February, March, April, May, June, July, August, September, October, November, December |


| Year 2 MATHEMATICS |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| ADVENT 1 | ADVENT 2 | LENT 1 | LENT 2 | PENTECOST 1 | PENTECOST 2 |
| Number: Place Value [4 weeks] <br> Step 1: Numbers to 20 <br> Step 2: Count objects to 100 by making 10s <br> Step 3: Recognise tens and ones <br> Step 4: Use a place value chart <br> Step 5: Partition numbers to 100 <br> Step 6: Write numbers to 100 in words <br> Step 7: Flexibly partition numbers to 100 <br> Step 8: Write numbers to 100 in expanded form <br> Step 9: 10s on the number line to 100 Step 10: 10s and 1s on the number line to 100 Step 11: Estimate numbers on a number line <br> Step 12: Compare objects <br> Step 13: Compare numbers <br> Step 14: Order objects and numbers <br> Step 15: Count in 2s, 5 s and 10 s | Number: Addition and Subtraction [3 weeks] <br> Step 9: Add across a <br> 10 <br> Step 10: Subtract <br> across 10 <br> Step 11: Subtract from <br> a 10 <br> Step 12: Subtract a 1 digit number from a 2digit number (across a 10) <br> Step 13: 10 more, 10 less <br> Step 14: Add and <br> subtract 10s <br> Step 15: Add two 2-digit numbers (not across a 10) <br> Step 16: Add two 2-digit numbers Add two 2- <br> digit numbers (across a <br> 10) <br> Step 17: Subtract two <br> 2-digit numbers (not <br> across 10) <br> Step 18: Subtract two <br> 2-digit numbers (across <br> a 10) <br> Step 19: Mixed addition and subtraction <br> Step 20: Compare <br> number sentences | Measurement: Money [2 weeks] <br> Step 1: Count money pence <br> Step 2: Count money pounds (notes and coins) <br> Step 3: Count money pounds and pence <br> Step 4: Choose notes and coins <br> Step 5: Make the same amount <br> Step 6: Compare amounts of money <br> Step 7: Calculate with money <br> Step 8: Make a pound <br> Step 9: Find a change <br> Step 10: Two-step problems <br> Number: <br> Multiplication and <br> Division [4 weeks] <br> Step 1: Recognise <br> equal groups <br> Step 2: Make equal <br> groups <br> Step 3: Add equal groups <br> Step 4: Introduce the multiplication symbol | Number: <br> Multiplication and <br> Division [1 week] <br> Step 15: The 5 times- <br> table <br> Step 16: Divide by 5 <br> Step 17: The 5 and 10 times-tables <br> Measurement: Length and Height [2 weeks] <br> Step 1: Measure in centimetres <br> Step 2: Measure in metres <br> Step 3: Compare lengths and heights Step 4: Order lengths and heights <br> Step 5: Four operations with lengths and heights <br> Measurement: Mass, Capacity and Temperature [3 weeks] <br> Step 1: Compare mass Step 2: Measure in grams <br> Step 3: Measure in kilograms | Number: Fractions [3 weeks] <br> Step 1: Introduction parts and wholes <br> Step 2: Equal and unequal parts <br> Step 3: Recognise a half <br> Step 4: Find a half Step 5: Recognise a quarter <br> Step 6: Find a quarter <br> Step 7: Recognise a third <br> Step 8: Find a third <br> Step 9: Find the whole <br> Step 10: Unit fractions <br> Step 11: Non-unit fractions <br> Step 12: Recognise the equivalence of a half and two quarters <br> Step 13: Recognise three quarters <br> Step 14: Find three quarters <br> Step 15: Count in fractions up to a whole <br> Measurement: Time [3 weeks] <br> Step 1: O'clock and half past | Statistics [2 weeks] <br> Step 1: Make tally <br> charts <br> Step 2: Tables <br> Step 3: Block diagrams <br> Step 4: Draw <br> pictograms (1-1) <br> Step 5: Interpret <br> pictograms (1-1) <br> Step 6: Draw <br> pictograms (2,5 and <br> 10) <br> Step 7: Interpret <br> pictograms (2,5 and <br> 10) <br> Geometry: Position and Direction [2 <br> weeks] <br> Step 1: Language of position <br> Step 2: Describe movement <br> Step 3: Describe turns <br> Step 4: Describe movement and turns <br> Step 5: Shape patterns with turns <br> Consolidation and Assessment [2 weeks] |

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## Step 16: Count in 3s

## Number: Addition and

 Subtraction [2 weeks]Step 1: Bonds to 10
Step 2: Fact families addition and subtraction bonds within 20 Step 3: Related facts Step 4: Bonds to 100 (tens)
Step 5: Add and subtract 1s
Step 6: Add by making 10
Step 7: Add three 1 digit numbers Step 8: Add to the next 10

Step 21: Missing number problems

## Geometry: Properties

 of Shape [3 weeks]Step 1: Recognise 2-D and 3 -D shapes
Step 2: Count sides on
2-D shapes
Step 3: Count vertices
on 2-D shapes
Step 4: Draw 2-D
shapes
Step 5: Lines of symmetry on shapes Step 6: Use lines of symmetry to complete shapes
Step 7: Sort 2-D shapes Step 8: Count faces on 3-D shapes
Step 9: Count edges on 3-D shapes Step 10: Count vertices on 3-D shapes Step 11: Sort 3-D shapes
Step 12: Make patterns with 2-D and 3-D shapes

Step 5: Multiplication sentences
Step 6: Use arrays
Step 7: Make equal groups - grouping Step 8: Make equal groups - sharing Step 9: The 2 times table
Step 10: Divide by 2
Step 11: Doubling and halving
Step 12: Odd and even numbers
Step 13: The 10 timestable
Step 14: Divide by 10

YEAR 2 VOCABULARY
Number: Place Value
Hundreds, tens, ones, zero, place value, greater than, less than, order, partition, digit

Geometry: Properties of Shape
Two-dimensional (2D), three-dimensional (3D), flat, solid, corner, apex, vertex, vertices, side,

## Step 4: Four operations

 with massStep 5: Compare volume and capacity
Step 6: Measure in millilitres
Step 7: Measure in litres
Step 8: Four operations with volume and capacity Step 9: Temperature

Step 2: Quarter past and quarter to Step 3: Tell time past the hour
Step 4: Tell time to the hour
Step 5: Tell the time to 5 minutes
Step 6: Minutes in an hour
Step 7: Hours in a day

## Number: Fractions

 Fraction, part, whole, equal, share, half, quarter, third, equivalent, numerator, denominator
## Statistics

Data, interpret, key, tally chart, pictogram, block diagram, table, total, compare, symbol

|  | edge, face, curved, <br> straight, round, line of <br> symmetry, vertical, <br> pattern, pentagon, <br> hexagon, quadrilateral, <br> triangular prism, <br> square-based pyramid |  | (cm), metre (m), <br> compare, order |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Number: Addition and Subtraction <br> Add, total, make, plus, sum, more, altogether, <br> difference, leave, subtract, difference between, <br> less, minus, take away, mentally, orally, column <br> addition, column subtraction, estimate, inverse <br> operation, solve problems, number facts | Number: <br> Multiplication and <br> Division <br> Groups, equal groups, <br> lots of, arrays, repeated <br> addition, multiplication, <br> times tables | Measurement: Mass, <br> Capacity and <br> Temperature <br> lighter, heavier, <br> capacity, volume, <br> millilitre, litre, <br> temperature, Celsius, <br> degrees | Measurement: Time <br> Time, clock, hours, <br> minutes, hand, o'clock, <br> half past, quarter past, <br> quarter to, five minutes, <br> duration, shorter, longer | Geometry: Position <br> and Direction <br> Forwards, backwards, right, north, south, <br> east, west, quarter turn, <br> half turn, three-quarter, <br> turn, clockwise, <br> anticlockwise, pattern, <br> sequence |


| Year 3 MATHEMATICS |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| ADVENT 1 | ADVENT 2 | LENT 1 | LENT 2 | PENTECOST 1 | PENTECOST 2 |
| Number: Place Value [3 weeks] <br> Step 1: Represent numbers to 100 Step 2: Partition numbers to 100 Step 3: Number line to 100 <br> Step 4: Hundreds <br> Step 5: Represent numbers to 1,000 <br> Step 6: Partition numbers to 1,000 <br> Step 7: Flexible partitioning of numbers to 1,000 <br> Step 8: Hundreds, tens and ones <br> Step 9: Find 1, 10 or 100 more or less <br> Step 10: Number line to 1,000 <br> Step 11: Estimate on a number line to 1,000 Step 12: Compare numbers to 1,000 Step 13: Order numbers to 1,000 Step 14: Count in 50s <br> Number: Addition and Subtraction [3 weeks] | Number: Addition and Subtraction [2 weeks] <br> Step 10: Make connections <br> Step 11: Add two numbers (no exchange) Step 12: Subtract two numbers (no exchange) Step 13: Add two numbers (across a 10) Step 14: Add two numbers (across a 100) Step 15: Subtract two numbers (across a 10) Step 16: Subtract two numbers (across a 100) Step 17: Add 2-digit and 3 -digit numbers Step 18: Subtract a 2 digit number from a 3digit number Step 19: Complements to 100 <br> Step 20: Estimate answers <br> Step 21: Inverse operations <br> Step 22: Make decisions <br> Number: <br> Multiplication and Division A [4 weeks] | Number: <br> Multiplication and Division B [3 weeks] <br> Step 1: Multiples of 10 <br> Step 2: Related <br> calculations <br> Step 3: Reasoning about multiplication <br> Step 4: Multiply a 2-digit <br> by 1 -digit number - with <br> exchange <br> Step 5: Multiply a 2-digit number by a 1 -digit <br> number - with <br> exchange <br> Step 6: Link <br> multiplication and division <br> Step 7: Divide a 2-digit number by a 1 -digit number - no exchange Step 8: Divide a 2 -digit number by a 1 -digit number - flexible partitioning <br> Step 9: Divide a 2-digit number by a 1 -digit number - with remainders <br> Step 10: Scaling <br> Step 11: How many ways? | Number: Fractions A [3 weeks] <br> Step 1: Understand the denominators of unit fractions <br> Step 2: Compare and order unit fractions <br> Step 3: Understand the numerators of non-unit fractions <br> Step 4: Understand the whole <br> Step 5: Compare and order non-unit fractions <br> Step 6: Fractions on a number line <br> Step 7: Fractions on a number line <br> Step 8: Count in fractions on a number line <br> Step 9: Equivalent fractions on a number line <br> Step 10: Equivalent fractions as bar models <br> Measurement: Mass and Capacity [3 weeks] <br> Step 1: Use scales <br> Step 2: Measure mass in grams | Number: Fractions B [2 weeks] <br> Step 1: Add fractions <br> Step 2: Subtract <br> fractions <br> Step 3: Partition the whole <br> Step 4: Unit fractions of <br> a set of objects <br> Step 5: Non-unit <br> fractions of a set of objects <br> Step 6: Reasoning with fractions of an amount <br> Measurement: Money <br> [2 weeks] <br> Step 1: Pounds and pence <br> Step 2: Convert pounds <br> and pence <br> Step 3: Add money <br> Step 4: Subtract money <br> Step 5: Find change <br> Measurement: Time [2 weeks] <br> Step 1: Roman <br> numbers to 12 <br> Step 2: Tell the time to <br> 5 minutes <br> Step 3: Tell the time to the minute | Measurement: Time [1 week] <br> Step 9: Hours and minutes - use durations Step 10: Minutes and seconds <br> Step 11: Units of time <br> Step 12: Solve <br> problems with time <br> Geometry: Shape [2 weeks] <br> Step 1: Turns and angles <br> Step 2: Right angles <br> Step 3: Compare angles <br> Step 4: Measure and draw accurately <br> Step 5: Horizontal and vertical <br> Step 6: Parallel and perpendicular <br> Step 7: Recognise and describe 2-D shapes <br> Step 8: Draw polygons Step 9: Recognise and describe 3-D shapes Step 10: Make 3-D shapes <br> Statistics [2 weeks] |

Step 1: Apply number bonds within 10
Step 2: Add and subtract 1s
Step 3: Add and subtract 10s Step 4: Add and subtract 100s Step 5: Spot the pattern Step 6: Add 1s across a 10
Step 7: Add 10s across a 100
Step 8: Subtract 1 s across a 10
Step 9: Subtract 10s across a 100

Step 1: Multiplication equal groups
Step 2: Use arrays
Step 3: Multiples of 2
Step 4: Multiples of 5 and 10
Step 5: Sharing and grouping
Step 6: Multiply by 3
Step 7: Divide by 3
Step 8: The 3 times-
table
Step 9: Multiply by 4
Step 10: Divide by 4
Step 11: The 4 timestable
Step 12: Multiply by 8
Step 13: Divide by 8
Step 14: The 8 times-
tables
Step 15: The 2, 4 and 8 times-tables

Measurement: Length and Perimeter [3 weeks]
Step 1: Measure in metres and centimetres Step 2: Measure in millimetres
Step 3: Measure in centimetres and millimetres
Step 4: Metres, centimetres and millimetres
Step 5: Equivalent lengths (metres and centimetres)
Step 6: Equivalent lengths (centimetres and millimetres)
Step 7: Compare lengths
Step 8: Add lengths Step 9: Subtract lengths Step 10: What is perimeter?
Step 11: Measure perimeter Step 12: Calculate perimeter

YEAR 3 VOCABULARY

## Number: Place Value

 Hundreds, tens, ones, zero, greater than, less than, order, more, less partition, digitStep 3: Measure mass in kilograms and grams Step 4: Equivalent masses (kilograms and grams)
Step 5: Compare mass
Step 6: Add and subtract mass Step 7: Measure capacity and volume in millimetres
Step 8: Measure
capacity and volume in litres and millilitres Step 9: Equivalent capacities and volumes (litres and millilitres) Step 10: Compare capacity and volume Step 11: Add and subtract capacity and volume

## Number: Fractions

 Numerator, denominator, unit fraction, non-unit fraction, equivalent, halves, thirds, quarters,Step 4: Read time on a digital clock Step 5: Use a.m. and p.m.

Step 6: Years, months and days
Step 7: Days and hours Step 8: Hours and minutes - use start and end times

Step 1: Interpret pictograms Step 2: Draw pictograms Step 3: Interpret bar charts
Step 4: Draw bar charts Step 5: Collect and represent data Step 6: Two-way tables

Consolidation and Assessment [1 week]

|  | column subtraction, exchange, estimate, inverse operation, solve problems, number facts, place value |  | fifths, sixths, eighths, tenths, decimal tenths | fifths, sixths, eighths, tenths, decimal tenths | quarter past, quarter to, midday, midnight, noon |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Number: Addition and Subtraction <br> Add, total, plus, sum, more, altogether, difference, subtract, less, minus, take away, column addition, column subtraction, exchange, estimate, inverse operation, solve problems, number facts, place value | Number: <br> Multiplication and Division <br> Times tables, multiply by, divide by, array, fact families, regrouping | Measurement: Perimeter Metre (m), centimetre (cm), millimetre (mm), height, length, width, perimeter, further, furthest, higher, highest, longer, longest, shorter, shortest, taller, tallest | Measurement: Mass and Capacity Mass, gram, kilogram, capacity, volume, millilitre, litre, lighter, heavier | Measurement: Money Amount, change, coin, combinations, convert, note, pence, penny, pounds, value | Geometry: Shape Quarter turn, half turn, three-quarter turn, angle, right angle, acute, obtuse, horizontal, vertical, parallel, perpendicular, polygon, twodimensional, threedimensional, flat face, curved surface, edge, curved edge, vertex, vertices, apex, heptagon, octagon, tetrahedron |
|  |  |  |  | Measurement: Time 12-hour time, 24-hour time, roman numerals, analogue, digital, hours, minutes, seconds, o'clock, half past, quarter past, quarter to, midday, midnight, noon | Statistics Data, pictogram, symbol, bar chart, horizontal axis, vertical axis, axes, scale, intervals, table, interpret |


| Year 4 MATHEMATICS |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| ADVENT 1 | ADVENT 2 | LENT 1 | LENT 2 | PENTECOST 1 | PENTECOST 2 |
| Number: Place Value [4 weeks] <br> Step 1: Represent numbers to 1,000 <br> Step 2: Partition numbers to 1,000 <br> Step 3: Number line to 1,000 <br> Step 4: Thousands <br> Step 5: Represent numbers to 10,000 <br> Step 6: Partition <br> numbers to 10,000 <br> Step 7: Flexible <br> partitioning of numbers <br> to 10,000 <br> Step 8: Find 1, 10, 100, <br> 1,000 more or less <br> Step 9: Number line to 10,000 <br> Step 10: Estimate on a number line to 10,000 <br> Step 11: Compare <br> numbers to 10,000 <br> Step 12: Order <br> numbers to 10,000 <br> Step 13: Roman numerals <br> Step 14: Round to the nearest 10 <br> Step 15: Round to the nearest 1000 | Number: Addition and <br> Subtraction [1 week] <br> Step 8: Efficient subtraction <br> Step 9: Estimate answers <br> Step 10: Checking strategies <br> Measurement: Area [1 week] <br> Step 1: What is area? <br> Step 2: Count squares <br> Step 3: Make shapes <br> Step 4: Compare areas <br> Number: <br> Multiplication and <br> Division A [3 weeks] <br> Step 1: Multiples of 3 <br> Step 2: Multiply and divide by 6 <br> Step 3: 6 times-table and division facts <br> Step 4: Multiply and divide by 9 <br> Step 5: 9 times-table and division facts <br> Step 6: The 3, 6 and 9 times-tables <br> Step 7: Multiply and divide by 7 | Number: <br> Multiplication and Division B [3 weeks] <br> Step 1: Factor pairs <br> Step 2: Use factor pairs <br> Step 3: Multiply by 10 <br> Step 4: Multiply by 100 <br> Step 5: Divide by 10 <br> Step 6: Divide by 100 <br> Step 7: Related facts - <br> multiplication and <br> division <br> Step 8: Informal written methods for <br> multiplication <br> Step 9: Multiply a 2-digit number by a 1 -digit number <br> Step 10: Multiply a 3- <br> digit number by a 1 -digit <br> number <br> Step 11: Divide a 2-digit <br> number by a 1 -digit <br> number (1) <br> Step 12: Divide a 2-digit <br> number by a 1 -digit <br> number (2) <br> Step 13: Divide a 3-digit number by a 1 -digit <br> number <br> Step 14: <br> Correspondence <br> problems | Number: Fractions [3 weeks] <br> Step 5: Compare and order mixed numbers Step 6: Understand improper fractions Step 7: Convert mixed numbers to improper fractions <br> Step 8: Convert improper fractions to mixed numbers Step 9: Equivalent fractions on a number line <br> Step 10: Equivalent fraction families Step 11: Add two or more fractions Step 12: Add fractions and mixed numbers Step 13: Subtract two fractions <br> Step 14: Subtract from whole amounts Step 15: Subtract from mixed numbers <br> Number: Decimals [3 weeks] <br> Step 1: Tenths as fractions | Number: Decimals B [2 weeks] <br> Step 1: Make a whole with tenths <br> Step 2: Make a whole with hundredths <br> Step 3: Partition decimals <br> Step 4: Flexibly partition decimals <br> Step 5: Compare decimals <br> Step 6: Order decimals <br> Step 7: Round to the nearest whole number Step 8: Halves and quarters as decimals <br> Measurement: Money [2 weeks] <br> Step 1: Write money using decimals <br> Step 2: Convert between pounds and pence <br> Step 3: Compare amounts of money Step 4: Estimate with money <br> Step 5: Calculate with money <br> Step 6: Solve problems with money | Consolidation and Assessment [1 week] <br> Geometry: Shape [2 weeks] <br> Step 1: Understand angles as turns <br> Step 2: Identify angles <br> Step 3: Compare and order angles <br> Step 4: Triangles <br> Step 5: Quadrilaterals <br> Step 6: Polygons <br> Step 7: Lines of symmetry <br> Step 8: Complete a symmetric figure <br> Statistics [1 week] <br> Step 1: Interpret charts <br> Step 2: Comparison, sum and difference <br> Step 3: Interpret line graphs <br> Step 4: Draw line graphs <br> Geometry: Position and Direction [2 weeks] <br> Step 1: Describe position using coordinates |

Step 16: Round to the nearest 1,000
Step 17: Round to the nearest 10, 100 or 1,000

## Number: Addition and

## Subtraction [2 weeks]

Step 1: Add and
subtract 1s, 10s, 100s and 1,000 s
Step 2: Add up to two 4-digit numbers - no exchange
Step 3: Add two 4-digit numbers - one exchange
Step 4: Add two 4-digit numbers - more than one exchange
Step 5: Subtract two 4 digit numbers - no exchange
Step 6: Subtract two 4 digit numbers - one exchange
Step 7: Subtract two 4digit numbers - more than one exchange

Step 8: 7 times-table and division facts Step 9: 11 times-table and division facts Step 10: 12 times-table and division facts Step 11: Multiply by 1 and 0
Step 12: Divide a number by 1 and itself Step 13: Multiply three numbers

## Consolidation and

 Assessment [1 week]Step 15: Efficient multiplication

## Measurement: Length and Perimeter [2 weeks]

Step 1: Measure in kilometres and metres Step 2: Equivalent lengths (kilometres and metres)
Step 3: Perimeter on a grid
Step 4: Perimeter of a rectangle
Step 5: Perimeter of rectilinear shapes Step 6: Find missing lengths in rectilinear shapes
Step 7: Calculate the perimeter of rectilinear shapes
Step 8: Perimeter of regular polygons Step 9: Perimeter of polygons

## Number: Fractions [1

 week]Step 1: Understand the whole
Step 2: Count beyond 1 Step 3: partition a mixed number Step 4: Number lines with mixed numbers

## Step 2: Tenths as

 decimalsStep 3: Tenths on a place value chart Step 4: Tenths on a number line
Step 5: Decide a 1-digit number by 10 Step 6: Divide a 2-digit number by 10
Step 7: Hundredths as fractions
Step 8: Hundredths as decimals
Step 9: Hundredths n a place value chart Step 10: Divide a 1 - or 2-digit number by 100

Measurement: Time [2 weeks]
Step 1: Years, months, weeks and days
Step 2: Hours, minutes and seconds
Step 3: Convert
between analogue and digital times
Step 4: Convert to the 24 hour clock Step 5: Convert from the 24 hour clock

Step 2: Plot coordinates Step 3: Draw 2-D shapes on a grid Step 4: Translate on a grid
Step 5: Describe translation on a grid

| YEAR 4 VOCABULARY |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Number: Place Value <br> Thousands, hundreds, tens, ones, zero, greater than, less than, order, round, rounded to, negative number, partition, digit, roman numeral | Measurement: Area Kilometres, metres, centimetres, millimetres, squares, space, length, width, rectilinear | Number: <br> Multiplication and Division <br> Multiply, groups of, lots of, times, divide, share, remainder, factor, multiple, product, short multiplication, short division | Number: Fractions <br> Numerator, denominator, unit fraction, non-unit fraction, equivalent, quantities, whole, halves, thirds, quarters, fifths, sixths, sevenths, eighths, ninths, tenths, elevenths, twelfths | Number: Decimals <br> Tenths, hundredths, decimal tenths, decimal hundredths, decimal equivalents, part-whole model, rounding, decimal point, place value | Geometry: Shape Angle, right angle, acute, obtuse, horizontal, vertical, diagonal, parallel, perpendicular, twodimensional, polygon, line of symmetry, reflection, mirror line, isosceles, equilateral, scalene, quadrilateral, rhombus, parallelogram, trapezium |
| Number: Addition and Subtraction Add, total, plus, sum, more, altogether, difference, subtract, less, minus, take away, mentally, orally, column addition, column subtraction, exchange, estimate, inverse operation, solve problems | Number: <br> Multiplication and Division <br> Multiply, groups of, lots of, times, divide, share, remainder, factor, multiple, product, short multiplication, short division | Measurement: Length and Perimeter Kilometres, metres, centimetres, millimetres, distance, length, width, rectilinear, right angle | Number: Decimals Tenths, hundredths, decimal tenths, decimal hundredths, decimal equivalents, part-whole model, rounding, decimal point, place value | Measurement: Money Amount, change, combinations, estimate, decimal, pence, penny, pounds, round, value, convert | Statistics <br> Bar chart, pictogram, frequency table, tally chart, discrete data, continuous data, time graph, sum, difference, comparison, interpret |
|  |  | Number: Fractions Numerator, denominator, unit fraction, non-unit fraction, equivalent, quantities, whole, halves, thirds, quarters, fifths, sixths, sevenths, eighths, ninths, tenths, elevenths, twelfths |  | Measurement: Time 12-hour time, 24-hour time, roman numerals, analogue, digital, hours, minutes, seconds, o'clock, half past, quarter past, quarter to, midday, midnight, noon, a.m., p.m. | Geometry: Position and Direction Coordinate, quadrant, $x$-axis, $y$-axis, translation, vertex, vertices |

Year 5
MATHEMATICS

| ADVENT 1 | ADVENT 2 | LENT 1 | LENT 2 | PENTECOST 1 | PENTECOST 2 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Number: Place Value [3 weeks] <br> Step 1: Roman numerals to 1,000 <br> Step 2: Numbers to 10,000 <br> Step 3: Numbers to 100,000 <br> Step 4: Numbers to 1,000,000 <br> Step 5: Read and write numbers to $1,000,000$ <br> Step 6: Powers of 10 <br> Step 7: 10/ 100/ 1,000/ <br> 10,000/ 100,000 more or less <br> Step 8: Partition numbers to 1,000,000 <br> Step 9: Number line to 1,000,000 <br> Step 10: Compare and order numbers to 100,000 <br> Step 11: Compare and order numbers to 1,000,000 <br> Step 12: Round to the nearest 10, 100 or 1,000 <br> Step 13: Round within 100,000 <br> Step 14: Round within 1,000,000 | Number: <br> Multiplication and Division A [3 weeks] <br> Step 4: Common factors <br> Step 5: Prime numbers <br> Step 6: Square numbers <br> Step 7: Cube numbers Step 8: Multiply by 10, 100 and 1,000 <br> Step 9: Divide by 10, 100 and 1,000 <br> Step 10: Multiples of 10,100 and 1,000 <br> Number: Fractions [3 weeks] <br> Step 1: Find fractions equivalent to a unit fraction <br> Step 2: Find fractions equivalent to a non-unit fraction <br> Step 3: recognise equivalent fractions Step 4: Convert improper fractions to mixed numbers Step 5: Convert mixed numbers to improper fractions | Number: <br> Multiplication and Division B [3 weeks] <br> Step 1: Multiply up to a 4-digit number by a 1 digit number <br> Step 2: Multiply a 2-digit number by a 2 -digit number (area model) <br> Step 3: Multiply a 2-digit number by a 2 -digit number <br> Step 4: Multiply a 3-digit number by a 2 -digit number <br> Step 5: Multiply a 4-digit number by a 2 -digit number <br> Step 6: Solve problems with multiplication <br> Step 7: Short division <br> Step 8: Divide a 4-digit number by a 1 -digit number <br> Step 9: Divide with remainders <br> Step 10: Efficient division <br> Step 11: Solve problems with multiplication and division | Number: Decimals and Percentages [2 weeks] <br> Step 6: Thousandths as decimals <br> Step 7: Thousandths on a place value chart Step 8: Order and compare decimals (same number of decimal places) <br> Step 9: Order and compare any decimals with up to 3 decimal places <br> Step 10: Round to the nearest whole number <br> Step 11: Round to 1 decimal place <br> Step 12: Understand percentages <br> Step 13: Percentages as fractions <br> Step 14: Percentages as decimals <br> Step 15: Equivalent fractions, decimals and percentages <br> Measurement: <br> Perimeter and Area [2 weeks] | Geometry: Shape [3 weeks] <br> Step 1: Understand and use degrees <br> Step 2: Classify angles <br> Step 3: Estimate angles <br> Step 4: Measure angles up to 180 <br> Step 5: Draw lines and angles accurately Step 6: Calculate angles around a point Step 7: Calculate angles on a straight line Step 8: Lengths and angles in shapes Step 9: Regular and irregular polygons Step 10: 3-D shapes <br> Geometry: Position and Direction [2 weeks] <br> Step 1: Read and plot coordinates <br> Step 2: Problem solving with coordinates <br> Step 3: Translation <br> Step 4: Translation with coordinates <br> Step 5: Lines of symmetry | Number: Decimals [2 weeks] <br> Step 5: Subtract decimals with the same number of decimal places <br> Step 6: Add decimals with different numbers of decimal places Step 7: Subtract decimals with different numbers of decimal places <br> Step 8: Efficient strategies for adding and subtracting decimals <br> Step 9: Decimal sequences <br> Step 10: Multiply by 10 , 100 and 1,000 <br> Step 11: Divide by 10 , 100 and 1,000 <br> Step 12: Multiply and divide decimals missing values <br> Number: Negative Numbers [1 week] Step 1: Understand negative numbers Step 2: Count through zero in 1 s |



| YEAR 5 VOCABULARY |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Number: Place Value Millions, thousands, hundreds, tens, ones, zero, greater than, less than, order, round, rounded, negative number, partition, digit, interval, sequence, linear sequence | Number: <br> Multiplication and Division <br> Multiply, groups of , lots of, times, divide, share, remainder, factor, multiple, product, squared, cubed, short multiplication, short division | Number: <br> Multiplication and Division <br> Multiply, groups of , lots of, times, divide, share, remainder, factor, multiple, product, short multiplication, long multiplication, short division, short multiplication, short division | Number: Decimals and Percentages Decimal place, decimal fraction, equivalent fraction, tenth, sharing, partitioning, exchanging, hundredth, thousandth, equal to, remainder, grouping, per cent (\%) = out of 100, equivalent fraction, equivalent decimal, convert, compare, order, the whole | Geometry: Shape Angle, right angle, acute, obtuse, reflex, protractor, horizontal, vertical, parallel, perpendicular, polygon, regular, irregular, twodimensional, threedimensional, flat face, curved surface, edge, curved edge, vertex, apex, net, pentagonal prism, hexagonal prism, octagonal prism, octahedron | Number: Decimals Tenths, hundredths, decimal tenths, decimal hundredths, decimal equivalents, part-whole model, rounding, decimal point |
| Number: Addition and Subtraction Add, total, make, plus, sum, more, altogether, difference, subtract, less, minus, take away, column addition, column subtraction, estimate, inverse operation, number facts, complex |  |  |  |  | Number: negative Numbers <br> Negative number, positive, zero, minus, below, number line, sequence |
|  | Number: Fractions <br> Numerator, denominator, unit fraction, non-unit fraction, whole, equivalent, mixed number, improper fraction, simplest form, multiple, common | Number: Fractions <br> Numerator, denominator, unit fraction, non-unit fraction, whole, equivalent, mixed number, improper fraction, simplest form, multiple, common | Measurement: Perimeter and Area Metre kilometre, length, width, rectangle, rectilinear, dimensions, Squared units ( $\mathrm{m}^{2}$ ) | Geometry: Position and Direction Coordinate, quadrant, $x$-axis, $y$-axis, reflection, mirror line, translation, horizontal, vertical |  |
|  | denominator, common numerator | denominator, common numerator | Statistics <br> Axis, continuous data, horizontal, data, interpret, label, line graph, maximum value, |  | Measurement: Volume <br> Cubed, area, crosssection, prism, cube, cuboid, face, length, height, width, depth |
|  |  |  | minimum value, pattern, predict, relationship, represent, scale, survey, table, tally, timetable, vertical, $x$ axis, $y$-axis | Number: Decimals Tenths, hundredths, decimal tenths, decimal hundredths, decimal equivalents, part-whole model, rounding, decimal point | Measurement: Converting Units Mass, gram, kilogram, capacity, volume, millilitre, centilitre, litre, millimetre, centimetre, kilometre |


| Year 6 MATHEMATICS |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| ADVENT 1 | ADVENT 2 | LENT 1 | LENT 2 | PENTECOST 1 | PENTECOST 2 |
| Number: Place Value <br> [2 weeks] <br> Step 1: Numbers to <br> 1,000,000 <br> Step 2: Numbers to <br> 10,000,000 <br> Step 3: Read and write <br> numbers to $10,000,000$ <br> Step 4: Powers of 10 <br> Step 5: Number line to <br> 10,000,000 <br> Step 6: Compare and <br> order any integers <br> Step 7: Round any <br> integer <br> Step 8: Negative <br> numbers <br> Number: Addition, <br> Subtraction, <br> Multiplication and <br> Division [4 weeks] <br> Step 1: Add and <br> subtract integers <br> Step 2: Common <br> factors <br> Step 3: Common <br> multiples <br> Step 4: Rules of divisibility <br> Step 5: Primes to 100 <br> Step 6: Square and <br> cube numbers | Number: Addition, Subtraction, Multiplication and Division [1 week] Step 15: Order of operations <br> Step 16: Mental calculations and estimation Step 17: Reason from known facts <br> Number: Fractions A [2 weeks] <br> Step 1: Equivalent fractions and simplifying Step 2: Equivalent fractions on a number line] <br> Step 3: Compare and order (denominator) <br> Step 4: Compare and order (numerator) <br> Step 5: Add and subtract simple fractions <br> Step 6: Add and subtract any two fractions <br> Step 7: Add mixed numbers <br> Step 8: Subtract mixed numbers | Number: Ratio [2 weeks] <br> Step 1: Add or multiply? <br> Step 2: Use ratio <br> language <br> Step 3: Introduction to the ratio symbol <br> Step 4: Ratio and fractions <br> Step 5: Scale drawing <br> Step 6: Use scale <br> factors <br> Step 7: Similar shapes <br> Step 8: Ratio problems <br> Step 9: Proportion <br> problems <br> Step 10: Recipes <br> Number: Algebra [2 <br> weeks] <br> Step 1: 1-step function machines <br> Step 2: 2-step function machines <br> Step 3: Form <br> expressions <br> Step 4: Substitution <br> Step 5: Formulae <br> Step 6: Form equations <br> Step 7: Solve 1-step equations <br> Step 8: Solve 2-step equations | Number: Fractions, Decimals and Percentages [2 weeks] <br> Step 1: Decimal and fraction equivalents Step 2: Fractions as division <br> Step 3: Understand percentages <br> Step 4: Fractions to percentages <br> Step 5: Equivalent fractions, decimals and percentages <br> Step 6: Order fractions, decimals and percentages <br> Step 7: Percentage of an amount - one step Step 8: Percentage of an amount - multi step Step 9: Percentages missing values <br> Measurement: <br> Perimeter, Area and Volume [2 weeks] Step 1: Shapes - same area <br> Step 2: Area and perimeter | Geometry: Shape [3 weeks] <br> Step 1: Measure and classify angles <br> Step 2: Calculate <br> angles <br> Step 3: Vertically opposite angles <br> Step 4: Angles in a triangle <br> Step 5: Angles in a triangle - special cases Step 6: Angles in a triangle - missing angles <br> Step 7: Angles in a quadrilateral <br> Step 8: Angles in a polygon <br> Step 9: Circles Step 10: Draw shapes accurately <br> Step 11: Nets of 3-D shapes <br> Geometry: Position and Direction [1 week] <br> Step 1: The first quadrant <br> Step 2: Read and plot points in four quadrants Step 3: Solve problems with coordinates | Consolidation and Themed Projects [6 weeks] |

Step 7: Multiply up to a 4-digit number by a 2digit number
Step 8: Solve problems with multiplication Step 9: Short division Step 10: Division using factors
Step 11: Introduction to long division Step 12: Long division with remainders Step 13: Solve problems with division Step 14: Solve multistep problems

Step 9: Multi-step problems

## Number: Fractions B

[2 weeks]
Step 1: Multiply
fractions by integers
Step 2: Multiply
fractions by fractions
Step 3: Divide a fraction by an integer
Step 4: Divide any fraction by an integer Step 5: Mixed questions with fractions Step 6: Fraction of an amount
Step 7: Fraction of an amount - find the whole

## Measurement:

Converting Units [1

## week]

Step 1: Metric
measures
Step 2: Convert metric

## measures

Step 3: Calculate with metric measures Step 4: Miles and kilometres Step 5: Imperial measures

Step 9: Find pairs of values
Step 10: Solve problems with two unknowns

## Number: Decimals [2

## weeks]

Step 1: Place value within 1
Step 2: Place value integers and decimals
Step 3: Round decimals
Step 4: Add and subtract decimals Step 5: Multiply by 10, 100 and 1,000 Step 6: Divide by 10, 100 and 1,000
Step 7: Multiply decimals by integers Step 8: Divide decimals by integers
Step 9: Multiply and divide decimals in context

Step 3: Area of a triangle - counting squares
Step 4: Area of a rightangled triangle Step 5: Area of any triangle
Step 6: Area of a parallelogram Step 7: Volume counting cubes Step 8: Volume of a cuboid

## Statistics [2 weeks]

Step 1: Line graphs Step 2: Dual bar charts] Step 3: Read and interpret pie charts Step 4: Pie charts with percentages
Step 5: Draw pie charts Step 6: The mean

Step 4: Translations Step 5: Reflections

Consolidation and Assessment [2 weeks]

## YEAR 6 VOCABULARY

## Number: Place Value

Ten million, millions, thousands, hundreds, tens, ones, zero, greater than, less than, order, round, rounded, negative number, partition, digit, interval, sequence, linear sequence

Number: Fractions
Numerator, denominator, proper fraction, improper fraction, factor, highest common multiple, lowest common multiple, equivalents, common numerator, common denominator, decimal equivalent, simplify, simplest form, mixed number, whole number

## Number: Addition, Subtraction, Multiplication

 and DivisionAdd, total, make, plus, sum, more, altogether, difference, leave, subtract, difference between, less, minus, take away, mentally, orally, column addition, column subtraction, estimate, inverse operation, solve problem, number facts, complex, multiply, groups of, lots of, times, divide, share, remainder, factor, multiple, product, squared, cubed, prime, short multiplication, long multiplication, short division, brackets, BODMAS

## Measurement:

## Converting Units

Mass, gram, kilogram, capacity, volume, millilitre, litre, millimetre, centimetre, metre, kilometre, foot, inch, ounce, pound, stone, pint, gallon

## Number: Percentages

Per cent (\%) = out of
100, discount,
equivalent fraction, equivalent decimal, convert, compare, order, the whole

## Measurement:

 Perimeter, Area and VolumeSquared units ( $\mathrm{m}^{2}$ ),
Cubic units ( $\mathrm{cm}^{3}$ ),
cuboid, width, length, rectangle, rectilinear, parallelogram,
perpendicular height

## Statistics

Bar chart, pictogram, frequency table, tally chart, pie chart, discrete data, continuous data, line graph, sum, difference, comparison, interpret, mean average

