

“Each one of you is a child of God” Pope Francis



**All Saints is educating for Unity, Responsibility,
Courage, Wisdom and Generosity**

**MATHS CURRICULUM
REVISED SEPTEMBER 2020**

At All Saints we follow the [White Rose Maths](#) scheme for children in Key Stage One and Key Stage 2. The White Rose schemes of learning are designed to support a mastery approach to teaching and learning, as well as to support the aims and objectives of the [National Curriculum](#). The content of the scheme is outlined in this document.

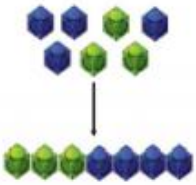
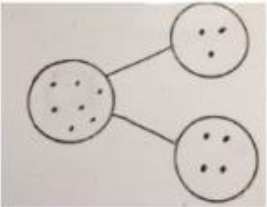
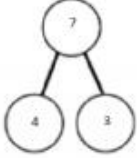
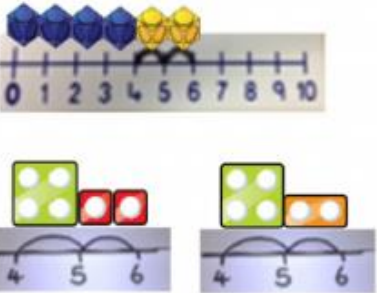
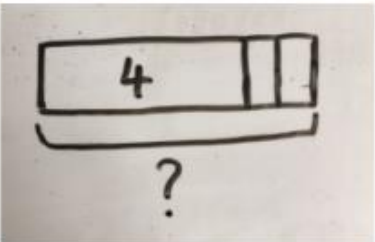
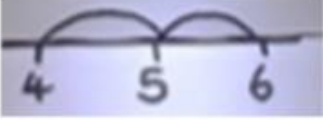
An in-depth understanding of number is prioritised through this scheme in order to build fluency and competency. Children are then provided with opportunities to develop their reasoning and problem solving skills.

When children are introduced to a concept, they have the opportunity to build on their prior knowledge by following a concrete-pictorial-abstract approach.

Concrete –using concrete objects to help them understand what they are doing.

Pictorial – using pictorial representations. These representations can then be used to help reason and solve problems.

Abstract – both concrete and pictorial representations should support children’s understanding of abstract methods.

Concrete	Pictorial	Abstract
<p>Combining two parts to make a whole (use other resources too e.g. eggs, shells, teddy bears, cars).</p> 	<p>Children to represent the cubes using dots or crosses. They could put each part on a part whole model too.</p> 	<p>$4 + 3 = 7$ Four is a part, 3 is a part and the whole is seven.</p> 
<p>Counting on using number lines using cubes or Numicon.</p> 	<p>A bar model which encourages the children to count on, rather than count all.</p> 	<p>The abstract number line: What is 2 more than 4? What is the sum of 2 and 4? What is the total of 4 and 2? $4 + 2$</p> 

Year 1 : Number & place value

White Rose Scheme Autumn Weeks 1-4 Numbers within 10

- Sort up to 10 objects
- Count up to 10 objects
- Represent up to 10 objects in different ways
- Count, read and write forwards from any number from 0-10
- Count, read and write backwards from any number from 0-10
- Count one more for numbers within 10
- Count one less for numbers within 10
- Compare groups using one to one correspondence
- Compare groups using language such as equal, more, greater, fewer, less
- Introduce $< > =$ symbols
- Compare numbers using the $< > =$ symbols and mathematical comparison language
- Order groups of objects correctly
- Order numbers from greatest to smallest and from smallest to greatest
- Use ordinal numbers first, second, third and last
- Use a number line effectively

White Rose Scheme Spring Weeks 5-7 Place Value within 50

- Count to fifty by making 10s
- Read and write numbers to 50
- Count forwards and backwards within 50
- Tens and ones within 50
- Represent numbers to 50
- One more or one less within 50
- Compare objects, groups and numbers within 50
- Order numbers within 50
- Count in 2s
- Count in 5s

White Rose Scheme Autumn Weeks 11-12 Place Value within 20

- Count and write numbers to 20
- Represent numbers 11-20 using concrete and pictorial representations
- Partition numbers into tens and ones
- One more and one less within 20
- Compare groups of objects to 20
- Compare numbers to 20
- Order groups of objects within 20
- Order numbers within 20

White Rose Scheme Summer Weeks 8-9 Place Value within 100

- Count to 100 making 10s
- Count forwards and backwards within 100
- Use a 100 square effectively
- Partition numbers to 100
- Compare numbers to 100
- Compare number sentences to 100
- Order numbers to 100

- Know one more and one less within a hundred crossing 10s

Year 1 : Addition and Subtraction

White Rose Schemes Autumn Weeks 5-9

- Use the part whole model
- Use and understand the addition symbol
- Addition fact families eg $3+2=5$ $5=3+2$
- Number bonds within 10 eg $6=3+3$. $6=5+1$
- Systematic number bonds eg $7+0=7$ $6+1=7$
- Number bonds to 10
- Compare number bonds and number sentences $5+5=10$ $10>8$ $5+5>8$
- Add using whole part model and the addition symbols
- Add more to a given number using the counting on method
- Find missing numbers in the part whole model
- Understanding how many are left in a subtraction story
- Subtract using partitioning
- Find all 8 fact families
- Count backwards to subtract
- Find the difference between 2 numbers or groups of objects
- Compare statements or number sentences using language of inequality and the symbols $<>=$

White Rose Schemes Spring Weeks 2-4

- Add by counting on within 20
- Add ones using number bonds
- Find and make number bonds to 20
- Add by making 10
- Subtract not crossing 10
- Subtract crossing 10
- Derive related number facts
- Compare number sentence to 20

Year 1 : Multiplication and Division

White Rose Scheme Summer Term Weeks 2 to 4

- Count in steps of 2
- Count in steps of 5
- Count in steps of 10
- Make equal groups
- Add equal groups
- Make arrays
- Make doubles
- Share objects equally into groups of 2
- Share objects equally into groups of 5
- Share objects equally into groups of 10

Year 1 : Fractions, decimals & %

White Rose Scheme Summer Term Weeks 5 to 6

- Make halves
- Make wholes
- Find half of a quantity
- Make a quarter

- Find a quarter

Year 1 : Measurement

White Rose Scheme Spring Weeks 8 and 9 Length and Height

- Compare lengths and heights
- Measure lengths using non-standard units
- Use a ruler to measure lengths
- Add lengths
- Subtract lengths

White Rose Scheme Spring Weeks 10 and 11 Weight and Volume

- Measure mass using scales
- Can use balance scales to compare the mass of objects
- Measure capacity
- Can compare capacity
- Can solve problems relating to weight and volume

White Rose Scheme Summer Week 10 Money

- Can identify coins by sorting them
- Can recognise the value of each coin and that some coins have a greater value than others
- Can recognise the value of each note and that some notes have a greater value than others
- Can add up small amounts of money and say how much altogether
- Can pay for items of a small value e.g. 3p, 5p, 7p, 9p using coins
- Can give change using 1p coins
- Can answer questions such as: Michael had £5. He spent £3. How much did he have left?

White Rose Scheme Summer Weeks 11-12 Time

- Before and after
- Dates
- Time to the hour
- Time to the half hour
- Writing time
- Comparing time

Year 1 : Shape

White Rose Scheme Autumn Week 10

- Recognise 3D shapes in a variety of orientations - cylinder, triangular prism, cone, cube, cuboid, pyramids and spheres
- Describe and sort 3D shapes according to their properties (type, size and colour)
- Recognise 2D shapes in a variety of orientations - rectangles (including squares), circles, triangles
- Describe and sort 2D shapes according to their properties (type, size and colour)
- Make simple patterns with 3D and 2D shapes

Year 1 : Geometry: Position & Direction

White Rose Scheme Summer Term Week 7

- Can distinguish between left and right
- Can describe turns

- Can describe position

Year 2 : Number & place value

White Rose Scheme Autumn Weeks 1-4 Numbers within 100

- Count forwards and backwards within 20
- Tens and ones within 20
- Count forwards and backwards within 50
- Tens and ones within 50
- Compare numbers within 50
- Count objects to 100
- Read and write numbers to 100 in numerals and words
- Represent numbers to 100
- Tens and ones using part whole models
- Tens and ones using addition
- Use a place value chart
- Compare groups of objects
- Compare numbers
- Order objects and numbers
- Count in 2s
- Count in 5s
- Count in 10s
- Count in 3s

Year 2 : Addition and Subtraction

White Rose Schemes Autumn Weeks 5-9

- Fact families -addition and number bonds to 20
- Compare number sentences
- Know number bonds to 20
- Related facts
- Bonds to 100 (tens)
- Add and subtract ones
- 10 more and 10 less
- Add and subtract 10s
- Add by making 10
- Add a 2-digit and 1-digit number crossing 10
- Subtraction crossing 10
- Subtract a 1-digit number from a 2-digit number crossing 10
- Add two 2-digit numbers not crossing 10
- Add two 2-digit numbers crossing 10
- Subtract a 2-digit number from a 2-digit number not crossing 10
- Subtract a 2-digit number from a 2-digit number crossing 10
- Mixed addition and subtraction problems
- Bonds to 100 (tens and ones)
- Add three 1-digit numbers

Year 2 : Multiplication and Division

White Rose Scheme Autumn Week 12

- Make equal groups
- Add equal groups
- Make arrays

White Rose Scheme Spring Weeks 1-4

- Recognise and make equal groups
- Add equal groups
- Multiplication sentences using the x symbol
- Multiplication sentences from pictures
- Use arrays
- Make doubles
- 2 x table
- 5 x table
- 10 x table
- Share to make equal groups
- Group to make equal groups
- Divide by 2
- Odd and even numbers
- Divide by 5
- Divide by 10

Year 2 : Fractions, decimals & %

White Rose Scheme Spring Weeks 10-12

- Make equal parts
- Recognise a half
- Find a half
- Recognise a quarter
- Find a quarter
- Recognise a third
- Find a third
- Unit fractions
- Non-unit fractions
- Equivalence of $\frac{1}{2}$ and $\frac{2}{4}$
- Find $\frac{3}{4}$
- Count in fractions
- Solve problems with fractions

Year 2 : Measurement

White Rose Scheme Autumn Weeks 10-11 - Money

- Recognise coins and notes
- Count coins
- Count notes
- Count a mix of coins and notes
- Select the correct money
- Make the same amount using different notes and coins
- Compare amounts of money
- Find a total
- Find the difference
- Give correct change
- Solve two-step money problems

White Rose Scheme Summer Weeks 1-2 Length

- Can compare lengths and heights
- Measure lengths using non-standard units
- Compare and order lengths
- Four operation and word problems with lengths

- Measure lengths in cm and m

White Rose Scheme Summer Weeks 7-8 Time

- Tell time to the hour
- Tell the time to the half hour
- Quarter past and quarter to
- Tell the time to 5 minutes
- Write the time
- Hours and days, minutes in the hour, hours in a day
- Find durations of time
- Compare durations of time

White Rose Scheme Summer Weeks 9-11 Weight and Volume

- Measure mass
- Compare mass
- Measure mass accurately in grams
- Measure mass accurately in kg
- Measure capacity
- Compare volume
- Measure in ml
- Measure in litres
- Solve mass and volume problems using the four operations
- Understand temperature

Year 2 : Geometry: Properties of shape

White Rose Scheme Spring Weeks 7-9

- Recognise 2D and 3D shapes, including quadrilaterals and polygons
- Count sides and vertices of 2D shapes
- Draw 2D shapes
- Recognise symmetry
- Complete a symmetrical shape
- Sort 2D shapes
- Make patterns with 2D shapes
- Count faces on 3D shapes
- Count vertices on 3D shapes
- Sort 3D shapes
- Make patterns with 3D shapes

Year 2 : Geometry: Position & Direction

White Rose Scheme Summer Weeks 3-4

- Describe position
- Problem solving with position
- Describe movement
- Describe turns
- Describe movement and turns
- Make patterns with shapes

Year 2 : Statistics

White Rose Scheme Spring Weeks 5-6

- Make tally charts
- Draw 1-1 pictograms
- Interpret 1-1 pictograms
- Draw pictograms with symbols representing 2, 5, 10
- Interpret pictograms with symbols representing 2, 5, 10
- Block diagrams

Year 3 : Number & place value

White Rose Autumn Weeks 1-3 Place Value

- Represent numbers to 100
- Tens and ones using addition
- Exploring 100s
- Numbers to 1000
- Hundreds, tens and ones
- Number line to 1000
- 1, 10, 100 more or less
- Compare objects pictorially
- Compare numbers up to 1000
- Order numbers up to 1000
- Count in 50s using 5x table pattern

Year 3 : Addition and Subtraction

White Rose Schemes Autumn Weeks 4-8

- Add and subtract multiples of 100
- Add and subtract ones
- Add and subtract 3-digit and 1-digit numbers not crossing 10
- Add a 2-digit and 1-digit number crossing 10
- Add 3-digit and 1-digit numbers crossing 10
- Subtract a 1-digit number from a 2-digit number crossing 10
- Subtract a 1-digit number from a 3-digit number crossing 10
- Add and subtract 3-digit and 2-digit numbers not crossing 100
- Add 3-digit and 2-digit numbers crossing 100
- Subtract a 2-digit number from a 3-digit number crossing 100
- Add and subtract hundreds
- Spot patterns in addition and subtraction
- Add two 2-digit numbers crossing 10 - add ones and add tens
- Subtract a 2-digit number from a 2-digit number crossing 10
- Add and subtract 2-digit and 3-digit numbers not crossing 10 or 100
- Add 2-digit and 3-digit numbers crossing 10 or 100
- Subtract a 2-digit number from a 3-digit number crossing 10 or 100
- Add two 3-digit numbers not crossing 10 or 100
- Add two 3-digit numbers crossing 10 or 100
- Subtract a 3-digit number from a 3-digit number - no exchange
- Subtract a 3-digit number from a 3-digit number with exchange
- Estimate answers to calculations
- Check answers

Year 3 : Multiplication and Division

White Rose Schemes Autumn Weeks 9-12

- Multiplication - equal groups
- Multiplying using the multiplication symbol
- Using arrays
- 2x table
- 5x table
- Make equal groups by sharing
- Make equal groups by grouping
- Divide by 2
- Divide by 5
- Divide by 10
- Multiply by 3
- Divide by 3
- 3x table
- Multiply by 4
- Divide by 4
- 4x table
- Multiply by 8
- Divide by 8
- 8x table

White Rose Schemes Spring Weeks 1-3

- 2x , 4x, 8x tables in and out of sequence
- Compare statements relating to multiplication and division
- Related calculations
- Multiply 2-digit by 1-digit numbers - no exchange
- Multiply 2-digit by 1-digit numbers with exchange
- Divide 2-digit numbers by a 1-digit number
- Divide a hundred into 2, 4, 5 and 10 equal parts
- Divide with remainders
- Scaling
- Finding a product using different multiplication facts

Year 3 : Fractions, decimals & %

White Rose Schemes Spring Weeks 9-11

- Working with wholes and parts
- Make equal parts
- Recognise a half
- Find a half
- Recognise a quarter
- Find a quarter
- Recognise a third
- Find a third
- Unit fractions
- Non-unit fractions
- Equivalence of $\frac{1}{2}$ and $\frac{2}{4}$
- Count in fractions

White Rose Schemes Summer Weeks 1-3

- Making the whole
- Understanding tenths
- Count in tenths
- Fractions on a number line
- Fractions of a set of objects
- Equivalent fractions
- Compare fractions
- Order fractions
- Add fractions with the same denominator
- Subtract fractions with the same denominator

Year 3 : Measurement

White Rose Schemes Spring Weeks 4-5 Money

- Count money in pence
- Count money in pounds
- Count in pounds and pence
- Convert pounds and pence
- Add money
- Subtract money
- Give correct change

White Rose Schemes Spring Weeks 7-9 - Length

- Measure length in m, cm and mm (KPI)
- Equivalent lengths - m and cm (KPI)
- Equivalent lengths mm and cm (KPI)
- Compare and order lengths (KPI)
- Add lengths (KPI)
- Subtract lengths (KPI)
- Measure perimeter (KPI)
- Calculate perimeter (KPI)

White Rose Schemes Summer Weeks 4-6 - Time

- Read o'clock and half past (KPI)
- Read quarter past and quarter to (KPI)
- Months and years (KPI)
- Hours in a day (KPI)
- Tell the time to 5 minutes (KPI)
- Tell the time to the minute (KPI)
- Use am and pm (KPI)
- 24 hour clock (KPI)
- Finding the duration of time (KPI)
- Comparing durations of time (KPI)
- Start and end times (KPI)
- Measuring time in seconds (KPI)
- Problem solving with time (KPI)

White Rose Schemes Summer Weeks 9-11 - Weight and Volume

- Measure mass accurately in grams and kg (KPI)

- Compare mass (KPI)
- Add and subtract mass (KPI)
- Measure capacity (KPI)
- Compare volume (KPI)
- Add and subtract capacity (KPI)
- Measuring temperature (KPI)

Year 3 Geometry: Properties of shape

White Rose Schemes Summer Weeks 7-8

- Turns and angles
- Right angles in shapes
- Compare angles
- Draw accurately
- Horizontal and vertical lines
- Parallel and perpendicular lines
- Recognise and describe 2-D shapes
- Recognise and describe 3D shapes
- Make 3D shapes

Year 3 : Statistics

White Rose Schemes Spring Week 5-6

- Make tally charts
- Draw 1-1 pictograms
- Interpret pictograms 1-1
- Draw bar charts
- Interpret bar charts
- Fill in and interpret tables

Year 4 : Number & place value

White Rose Autumn Weeks 1-4 Place Value

- Represent numbers to 1000
- Hundreds, tens and ones
- Number line to 1000
- Round to the nearest 10
- Round to the nearest 100
- Count in 1000s
- Thousands, hundreds, tens and ones
- Partitioning
- Number line to 10,000
- Find 10, 100 more or less
- Find 1000 more or less
- Compare numbers up to 10,000
- Order numbers up to 10,000
- Round to the nearest 1000
- Count in 25s
- Negative numbers
- Roman numerals to 100

Year 4 : Addition and Subtraction

White Rose Schemes Autumn Weeks 5-7

- Add and subtract 1s, 10s, 100s and 1000s
- Add two 3-digit numbers not crossing 10 or 100
- Add two 4-digit numbers - no exchange
- Add two 3-digit numbers crossing 10 or 100
- Add two 4-digit numbers - one exchange
- Add two 4-digit numbers with more than one exchange
- Subtract a 3-digit number from a 3-digit number - no exchange
- Subtract two 4-digit numbers - no exchange
- Subtract a 3-digit number from a 3-digit number with exchange
- Subtract two 4-digit numbers - one exchange
- Subtract two 4-digit numbers - more than one exchange
- Use efficient subtraction methods
- Estimate answers to calculations
- Use efficient checking strategies

Year 4 : Multiplication and Division

White Rose Schemes Autumn Weeks 10-12

- Multiply by 10
- Multiply by 100
- Divide by 10
- Divide by 100
- Multiply by 1 and 0
- Divide by 1 and itself
- Multiply and divide by 3
- 3x table and division facts
- Multiply and divide by 6
- 6 x table and division facts
- Multiply and divide by 9
- 9x table and division facts
- Multiply and divide by 7
- 7 x table and division facts

White Rose Schemes Spring Weeks 1-3

- 11 and 12 x tables
- Multiply 3 numbers
- Factor pairs
- Efficient multiplication methods
- Formal written methods
- Multiply 2-digits by 1-digit
- Multiply 3-digits by 1-digit
- Divide 2-digits by 1-digit
- Divide 3-digits by 1-digit
- Correspondence problems

Year 4 : Fractions, decimals & %

White Rose Schemes Spring Weeks 5-8 - Fractions

- Unit and non-unit fractions
 - Understand what a fraction is
 - Tenths
 - Count in tenths
 - Equivalent fractions
 - Fractions greater than one
 - Count in fractions
 - Add fractions
 - Add two or more fractions
 - Subtract fractions
 - Subtract two fractions
 - Subtract from whole amounts
 - Fractions of a set of objects
 - Calculate fractions of a quantity
 - Problem solving - calculate quantities
-

White Rose Schemes Spring Weeks 9-11 - Decimals

- Recognise tenths and hundredths
 - Tenths as decimals
 - Tenths on a place value grid
 - Tenths on a number line
 - Divide 1-digit by 10
 - Divide 2-digits by 10
 - Hundredths
 - Hundredths as decimals
 - Hundredths on a place value grid
 - Divide 1 or 2-digits by 100
-

White Rose Schemes Summer Weeks 1-2- Decimals

- Bonds to 10 and 100
 - Make a whole
 - Write decimals
 - Compare decimals
 - Order decimals
 - Round decimals
 - Halves and quarters
-

Year 4 : Measurement

White Rose Schemes Autumn Weeks 8-9 - Length and Perimeter

- Equivalent lengths - m and cm
- Equivalent lengths - mm and cm
- Convert to and from kilometres
- Add different lengths
- Subtract different lengths
- Measure perimeter
- Perimeter on a grid
- Perimeter of a rectangle

- Perimeter of rectilinear shapes

White Rose Schemes Spring Week 4 - Area

- Understanding area
- Find the area of a shape by counting squares
- Making shapes
- Comparing area

White Rose Schemes Summer Weeks 3-4 - Money

- Pounds and pence
- Ordering money
- Estimating money
- Convert pounds and pence
- Add money
- Subtract money
- Find the correct change
- Four operations with money

White Rose Schemes Summer -Weeks 5-6 - Time

- Tell the time to 5 minutes
- Tell the time to the minute
- Use am and pm
- 24 hour clock
- Hours, minutes and seconds
- Years, months, weeks and days
- Analogue to digital - 12 hour
- Analogue to digital -24 hour

Year 4 : Geometry: Properties of shape

White Rose Schemes Summer Weeks 8-10 - Angles, Shape and Symmetry

- Turns and angles
- Right angles in shapes
- Compare angles
- Identify angles
- Compare and order angles
- Recognise and describe 2D shapes
- Triangles
- Quadrilaterals
- Symmetry
- Horizontal and vertical lines
- Lines of symmetry

Year 4 : Geometry: Position & Direction

White Rose Schemes Summer Week 11

- Describe position
- Draw on a grid
- Move on a grid

- Describe movement on a grid Can describe position of a vertex of a 2D shape in the first quadrant using a pair of coordinates
- Can translate a shape using left/right and up/down

- Can explain how a shape has been translated once it has been moved

Year 4 : Statistics

White Rose Schemes Summer Week 7

- Interpret charts
- Comparison, sum and difference
- Line graphs

Year 5 : Number & place value

White Rose Scheme Autumn Weeks 1-3- Place Value

- Thousands, Hundreds, Tens and Ones
- Numbers to 10,000
- Rounding to the nearest 10
- Rounding to the nearest 100
- Rounding to the nearest 10,100 and 1000
- Numbers to 100,000
- Compare and order numbers to 100,000
- Round numbers within 100,000
- Numbers to 1,000,000
- Counting in 10s,100s,1000s,10,000s and 100,000s
- Compare and order numbers to 1 million
- Round numbers to 1 million
- Negative numbers
- Roman numerals to 1000

Year 5 : Addition and Subtraction

White Rose Schemes Autumn Weeks 4-5

- Add two 4-digit numbers with one exchange
- Add two 4-digit numbers with more than one exchange
- Add whole numbers with more than 4-digits
- Subtract two 4-digit numbers with one exchange
- Subtract two 4-digit numbers with more than one exchange
- Subtract whole numbers with more than 4-digits
- Round to estimate and approximate
- Inverse operations -addition and subtraction
- Multi-step addition and subtraction problems

Year 5 : Multiplication and Division

White Rose Schemes Autumn Weeks 8-10

- Identify multiples of a number
- Find factors and common factors
- Identify prime numbers
- Square numbers
- Cube numbers
- Multiply by 10
- Multiply by 100
- Multiply by 10,100 and 1000
- Divide by 10
- Divide by 100
- Divide by 10, 100 and 1000

- Multiples of 10, 100 and 1000

White Rose Schemes Spring Weeks 1-3

- Multiply 2-digits by 1-digit
- Multiply 3-digits by 1-digit
- Multiply 4-digits by 1-digit
- Multiply 2-digits -area model (grid method)
- Multiply 2-digits by 2-digits
- Multiply 3-digits by 2-digits
- Multiply 4-digits by 2-digits
- Divide 2-digits by 1-digit
- Divide 3-digits by 1-digit
- Divide 4-digits by 1-digit
- Divide with remainders

Year 5 : Fractions, decimals & %

White Rose Schemes Spring Weeks 4-9 - Fractions

- Understand what a fraction is
- Equivalent fractions
- Fractions greater than one
- Convert improper fractions to mixed numbers
- Convert mixed numbers to improper fractions
- Number sequences involving fractions
- Compare fractions less than one
- Order fractions less than one
- Compare fractions greater than one
- Order fractions greater than one
- Add and subtract fractions
- Add fractions within one
- Add three or more fractions
- Add mixed numbers
- Subtract fractions
- Subtract mixed numbers
- Subtraction - breaking the whole
- Subtract two mixed numbers
- Multiply unit fractions by an integer
- Multiply non-unit fractions by an integer
- Multiply mixed numbers by integers
- Calculate fractions of a quantity
- Fraction of an amount
- Using fractions as operators
- Fraction problem solving

White Rose Scheme Spring Weeks 10-11 - Decimals, Percentages and Fractions

- Decimals up to two decimal places
- Decimals as fractions
- Understand thousandths
- Thousandths as decimals
- Rounding decimals
- Order and compare decimals
- Understand percentages
- Percentages as fractions and decimals
- Equivalent fractions, decimals and percentages

White Rose Scheme Summer Weeks 2-4 - Decimals

- Add decimals within one
- Subtract decimals within one
- Complements to one
- Adding decimals - crossing the whole
- Add decimals with the same number of decimal places
- Subtract decimals with the same number of decimal places
- Adding and subtracting decimals with the same number of decimal places - problem solving
- Adding decimals with a different number of decimal places
- Subtract decimals with a different number of decimal places
- Adding and subtracting decimals with a different number of decimal places - problem solving
- Adding and subtracting wholes and decimals
- Decimal sequences
- Multiplying decimals by 10, 100 and 1000
- Dividing decimals by 10, 100 and 1000

Year 5 : Measurement

White Rose Scheme Autumn Weeks 11-12 - Perimeter and Area

- Measure perimeter
- Perimeter on a grid
- Perimeter of rectangles
- Perimeter of rectilinear shapes
- Calculate perimeter
- Counting squares
- Area of rectangles
- Area of compound shapes
- Area of irregular shapes

White Rose Scheme Summer Weeks 10-11 - Units of measure and time

- Kilometres
- Kilograms and kilometres
- Millimetres and millilitres
- Metric units
- Imperial units
- Converting units of time
- Timetables

White Rose Scheme Summer Week 12 - Volume and Capacity

- Understand volume
- Compare volume
- Estimate volume
- Estimate capacity

Year 5 : Geometry: Properties of shape

White Rose Scheme Summer Weeks 5-7 - Angles

- Identify angles
- Compare and order angles
- Measuring angles in degrees

- Measure with a protractor
- Drawing lines and angles accurately
- Calculating angles on a straight line
- Calculating angles around a point
- Triangles
- Quadrilaterals
- Calculate length and angles in shapes
- Regular and irregular polygons
- Reasoning about 3D shapes

Year 5 : Geometry: Position & Direction

White Rose Scheme Summer Weeks 8-9

- Describe position
- Draw shapes on a grid
- Position in the first quadrant
- Translation
- Translation with co-ordinates
- Lines of symmetry
- Complete a symmetric figure
- Reflection
- Reflection with co-ordinates

Year 5 : Statistics

White Rose Schemes Autumn Weeks 6-7 - Graphs and Tables

- Interpret charts
- Comparison, sum and difference using charts
- Read and interpret line graphs
- Draw line graphs
- Use line graphs to solve problems
- Read and interpret tables
- Two-way tables
- Read timetables

Year 6 : Number & place value

White Rose Scheme Autumn - Weeks 1-2 Place Value

- Numbers up to 10,000
- Numbers up to 100,000
- Numbers to 1,000,000
- Numbers to ten million
- Compare and order any number
- Round numbers to 10, 100 and 1000
- Round any number
- Negative numbers

Year 6 : Addition and Subtraction

White Rose Scheme Autumn Week 3

- Add whole numbers with more than 4-digits
- Subtract whole numbers with more than 4-digits
- Inverse operations using addition and subtraction
- Solve multi-step addition and subtraction problems

- Add and subtract integers

Year 6 : Multiplication and Division

White Rose Schemes Autumn Weeks 4-7

- Multiply 4-digits by 1-digit
- Multiply by 2-digits using area model (grid method)
- Multiply 2-digits by 2-digits
- Multiply 2-digits by 3-digits
- Multiply up to a 4-digit number by a 2-digit number
- Divide 4-digits by 1-digit
- Divide with remainders
- Use short division
- Division using factors
- Long division without remainders (3-digit numbers divided by 2-digits)
- Long division without remainders (4-digit numbers divided by 2-digits)
- Long division with remainders (3-digit numbers divided by 2-digits)
- Long division with remainders (4-digit numbers divided by 2-digits)
- Find factors of numbers
- Find common factors
- Find common multiples
- Prime numbers to 100
- Square numbers
- Cube numbers
- Order of operations
- Mental calculations and estimation
- Reason from known facts

Year 6 : Fractions, decimals & %

White Rose Schemes Autumn Weeks 8-12 - Fractions

- Equivalent fractions
- Simplify fractions
- Convert improper fractions to mixed numbers
- Convert mixed numbers to improper fractions
- Order fractions on a number line
- Compare and order denominators to find the value of fractions
- Compare and order numerators to compare the value of fractions
- Add and subtract fractions
- Add mixed numbers
- Add fractions with different denominators
- Subtract mixed numbers
- Subtract fractions
- Mixed addition and subtraction of fractions
- Multiply fractions by integers
- Multiply fractions by fractions
- Divide fractions by integers
- Use the four operations effectively with fractions
- Find a fraction of an amount
- Knowing the fraction of an amount, find the whole

White Rose Scheme Spring Weeks 1-2 - Decimals

- Decimals up to two decimal places
- Understand thousandths
- Decimals up to three decimal places
- Multiply by 10, 100 and 1000

- Divide by 10, 100 and 1000
- Multiply decimals by integers
- Divide decimals by integers
- Division to solve problems
- Decimals as fractions
- Convert fractions to decimals

White Rose Scheme Spring Weeks 3-4 - Percentages

- Understand percentages
- Convert fractions to percentages
- Equivalent fractions, decimals and percentages
- Order fractions, decimals and percentages
- Find the percentage of an amount
- Percentages missing value problems

Year 6 : Measurement

White Rose Schemes Spring Week 7 - Metric and imperial measures

- Metric measures
- Convert metric measures
- Calculate with metric measures
- Miles and kilometres
- Imperial measures

Revision of Time

- Read analogue time accurately
- Read digital time accurately
- Convert from analogue to digital time and vice versa
- Calculate lengths of time
- Solve time problems including reading timetables

Year 6 : Geometry: Properties of shape

White Rose Schemes Spring Weeks 8-9 - Area and Volume

- Investigating shapes with the same area
- Area and perimeter
- Area of a triangle
- Area of a parallelogram
- Understand volume
- Calculate volume with cubes
- Volume of a cuboid

White Rose Schemes Summer Weeks 1-3 - Angles and Nets

- Measure angles with a protractor
- Draw lines and angles accurately
- Angles on a straight line
- Angles around a point
- Calculate angles
- Recognise vertically opposite angles
- Angles in a triangle
- Find missing angles in a triangle
- Angles in special quadrilaterals

- Angles in regular polygons
- Draw shapes accurately
- Draw nets of 3D shapes

Year 6 : Geometry: Position & Direction

White Rose Schemes Autumn Week 13 - Translations and reflections

- The first quadrant
- Four quadrants
- Translate shapes in all four quadrants
- Reflections in all four quadrants

Year 6 : Statistics

White Rose Schemes Spring Week 12

- Line graphs
- Circles
- Read and interpret pie charts
- Draw pie charts
- Find the mean

Year 6 : Ratio & Proportion

White Rose Schemes Spring Weeks 10-11

- Use the language of ratio (for every...)
- Ratio and fractions
- Use the ratio symbol
- Calculate ratio
- Use scale factors
- Calculate scale factors
- Ratio and proportion problems

Year 6 : Algebra

White Rose Scheme Spring Weeks 5-6

- Find a rule (one step)
- Find a rule (2 step)
- Form expressions
- Substitution
- Formulae
- Forming equations
- Solve simple 1-step equations
- Solve 2-step equations
- Find pairs of values