Maths Overview

Nursery
White Rose Maths

Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Comparison **More than, fewer than, same.** Collect objects to compare amounts Make simple comparisons of amounts Look for collections of large and small amounts Compare and talk about large and small amounts Make large and small collections Make collections the same **Shape, space and measure** **Explore and build with shapes and objects.** Explore and play with shapes Show interest in simple difference between shapes Put shapes and blocks into position Select shapes for a reason Begin to explore and describe natural shapes and objects Find and collect objects for a purpose **Pattern** **Explore repeats.** Listen to repeats in songs and stories Start to join in songs with repeats Start to join in with repeats from stories Clap along to songs Make line patterns with own sequences Choose blocks to build roads and towers.	**Comparison** **Compare and sort collections** Notice when two collections are the same Make collections of small objects the same Make collections of large objects the same Recognise two collections are the same using large and small objects Make collections the same using large and small objects Sort and talk about their own collections **Shape, space and measure** **Explore position and space** Respond to simple language of position Arrange blocks in a chosen position Select shapes for a space Recognise when 2 objects are the same shape Explore and describe shapes and objects Sort shapes and objects into simple categories **Pattern** **Join in with repeats** Join in with repeated actions in songs Join in with repeats in songs and stories Sing some refrains independently Have a sense of daily routines Say what happens next Make arrangements in art	**Comparison** **Match, sort and compare** Compare up to 5 different objects Compare by matching Make the same set by matching Match by type Recognise attributes of objects Begin to sort some objects to a type **Shape, space and measure** **Explore position and routes** Explore shape resources Explore more complex inset jigsaws Talk about simple positions Move into simple positions Move through positions Follow simple small-world routes **Pattern** **Explore own first patterns** Explain simple pattern arrangements Make roads and bridges with intent Choose blocks to copy simple creations Make simple line patterns with objects Make simple pattern arrangements Show an interest in patterns and shapes **Counting** **Move and label 1, 2, 3** Make actions when saying counting words Move fingers when saying counting words Count out up to 3 objects from rhymes Notice number symbols as labels	**Shape, space and measure** **Match, talk, push and pull** Match simple shapes Push some shapes and blocks together Make simple arrangements Talk about arrangements Follow simple routes outside Follow toys around a simple route **Pattern** **Lead on own repeats** Join in fully with sequences and songs Sing rhymes independently Lead sequences and songs Read on in familiar repeating stories Copy art-based simple patterns Explore own line and repeating patterns in art **Counting** **Take and give 1, 2, 3** Choose a group to count Take out 2 from a group Take out 3 from a group Give other 2 items Give others 3 items Count 3 objects with one-to-one correspondence **Subitising** **Make games and actions** Match dot patterns Be introduced to subitising games Play subitising games Copy sets of sounds	**Shape, space and measure** **Starting to puzzle** Complete shape-match puzzles Complete simple jigsaws Match objects to pictures Match objects to shadows Explore objects and small world from different positions Make simple routes in small world with lines and curves **Pattern** **Making patterns together** Sing their own sings independently Clap in time to a beat Make and talk about movement patterns Talk about objects in patterns and arrangements Copy AB patterns with support Continue AB patterns with support **Counting** **Show me 5** Sing rhymes to 5 and join in with movements Move props to 5 Move proper back from 5 Show fingers to 5 Begin to count 5 objects with one-to-one correspondence Match numerals to quantities when acting out songs	**Pattern** **My own pattern** Continue AB patterns Create their own AB patterns Notice an error in a pattern Build constructions with simple enclosures Copy simple repeated constructions Begin to sequence some events **Counting** **Stop at 1, 2, 3, 4, 5** Count out up to 5 objects from a larger group Explore counting to 5 in different ways Verbally count to a given number Label objects with numerals Independently show fingers to 5 Begin to make marks to represent quantities

	Counting **Hear and say number names.** Hear some numbers names Join in saying some number names Model saying number names in order Practise saying number names in order Join in stable order counting forwards Join in stable order counting backwards **Subitising** **I see 1, 2, 3** Notice images in books Respond to "I see 1, 2, 3" Copy "I see 1, 2, 3" Point to 1, 2, 3 Recognise 1, 2, 3 in well-known tales	**Counting** **Begin to order number names.** Model saying 1, 2 and 3 in play Copy the sequence of 1, 2 and 3 Copy fingers to represent 1, 2 and 3 Begin to count actions Say number names in order Begin to recognise that anything can be counted **Subitising** **Show me 1, 2, 3** Copy fingers to show 1 Copy fingers to show 2 Copy fingers to show 3 Show 1 finger when seeing 1 item in stories Show 2 or 3 fingers when seeing 2 or 3 in stories Show 1, 2, 3 on fingers when asked	Label amounts as 1 and not 1 Label amounts as 1, 2 or 3 **Subitising** **Talk about dots** Become familiar with dot patterns Say when there is 1 dot Say when there are 2 dots Recognise 1 and 2 in different arrangements Say when there are 3 dots Recognise 1, 2 and 3 in different arrangements	Listen to and represent sounds with fingers Listen to and represent sounds with resources		
Reception **Number- NCETM: Mastering Number**	Subitising within three. Focus on counting skills. Explore how all numbers are made of 1's. Focus on composition of 3 and 4 Subitise objects and sounds. Comparison of sets- 'just by looking'. Use the language of comparison: *more than and fewer than.*	Focus on counting skills. Focus on the 'five-ness of 5' using one hand and the die pattern for 5. Comparison of sets- by matching. Use the language of comparison: *more than, fewer than, an equal number.* Explore the concept of 'whole' and 'part'. Focus on the composition of 3, 4 and 5. Practise object counting and skills. Match numerals to quantities within 10. Verbal counting beyond 20.	Subitise within 5 focusing on die patterns. Match numerals to quantities within 5. Counting- focus on ordinality and the 'staircase' pattern. See that each number is one more than the previous number. Focus on 5. Focus on 6 and 7 as '5 and a bit'. Compare sets and use language of comparison: *more than, fewer than, an equal number to* Make unequal sets equal.	Focus on the 'staircase' pattern and ordering numbers. Focus on ordering of numbers to 8. Use language of *less than.* Focus on 7. Doubles- explore how some numbers can be made with 2 equal parts. Sorting number according to attributes- odd and even.	Counting- larger sets and things that cannot be seen. Subitising- to 6, including in structured arrangements. Composition- '5 and a bit' Composition- of 10. Comparison- linked to ordinality. Play track games.	Subitise to 5. Introduce the rekenrek. **Review and Assess:** Automatic recall of bonds to 5. Composition of numbers to 10. Comparison. Number patterns Counting

Reception White rose Maths	**Match, Sort and Compare** Match objects and pictures Identify and sort sets, exploring sorting techniques Create sorting rules Compare amounts **Measure and Pattern** Compare mass, size and capacity. Explore, copy, continue and create simple patterns **Circles and Triangles** Identify, name and compare circles and triangles Explore shapes in the environment Describe positions **Shapes with 4 Sides** Identify and name shapes with four sides Combine shapes with 4 sides Explore shapes in the environment Order and sequence familiar events		**Mass and Capacity** Compare mass Find a balance Explore capacity Compare capacity **Length, Height and Time** Explore and compare length and height Talk about time Order and sequence time **Explore 3-D Shapes** Recognise and name 3-D shapes Find 2-D shapes within 3-D shapes 3-D shapes in the environment Identify more complex patterns Copy and continue patterns Patterns in the environment		**Manipulate, compose and decompose** Select shapes for a purpose Rotate and manipulate shapes, explaining their arrangements Compose and decompose shapes Copy 2-D shape pictures Find 2-D shapes within 3-D shapes **Visulise, Build and Map** Identify units of repeating patterns Create and explore own pattern rules Replicate and build scenes and constructions Visulise from different positions Describe positions Give instructions to build Explore mapping **Make Connections** Patterns and relationships	
Year 1 White Rose Maths	**Place Value (within 10)** • Sort and count objects • Recognise numbers as words • Count on from any number • Identify one more and one less of a given • Count backwards within 10 • Compare groups by matching • Use the language of 'fewer, more, same, less than, greater than, equal to' • Compare numbers • Order objects and numbers • Use a number line **Number – Addition and Subtraction (within 10)** • Develop knowledge of part – whole models	**Number – Addition and Subtraction (within 10)** • Number bond facts within 10 • Number bond facts to 10 • Addition (add together, add more, addition problems) • Subtraction (find a part, take away, how many left?) • Subtract on a number line **Geometry – Shape** • Recognise and name common 2D and 3D shapes. • Make patterns with 2D and 3D shapes	**Place Value – (within 20)** • Read, write and understand number 10- 20. • Identify one more and one less than a given number. • Complete a number sequence (forwards and backwards) 0-20 • Estimate on a number line to 20 • Order numbers to 20 • Compare numbers to 20 **Addition and Subtraction – (within 20)** • Add within 20 • Number bond facts 20. • Double numbers • Near doubles • Subtract within 20 • Solve simple one-step problems involving addition and subtraction. • Solve missing number problems	**Place Value – (within 50)** • Count from 20 to 50 • Count in steps of 10 (20 to 50) • Recognise the place value of numbers beyond 20 (tens and ones) • Order numbers to 50 • 1 more than 1 less than **Measurement – Length and Height** • Compare lengths and heights • Measure length using objects • Measure length in cm **Measurement – Mass and Volume** • Use the language 'heavier, lighter, full and empty' • Compare and measure mass, volume and capacity using non-	**Number – Multiplication and Division** • Count in steps of 2, 5 and 10 • Make equal groups • Add equal groups • Make arrays • Make doubles • Make equal groups (grouping) • Make equal groups (sharing) **Number - Fractions** • Recognise, find and name a half as one of two equal parts of a quantity • Recognise, find and name a quarter as one of four equal parts of a quantity. **Geometry – Position and direction** • Describe position, direction and movements	**Number - Place Value (within 100)** • Count to 100 by making tens • Count forwards and backwards within 100 • Partition numbers within 100 (tens and ones) • Compare and order numbers within 100 • 1 more than 1 less than **Measurement – Money** • Recognise and know the value of different coins and notes. • Solve practical problems relating to money. **Measurement – Time** • Use the language 'before and 'after' • Sequence events in chronological order • Recognise and use language relating to

	• Read, write and interpret mathematical statements (+, - and =)			standard units of measure	using half, quarter and three-quarter turns.	dates, including days of the week, weeks, months and years. • Tell the time to the hour • Tell the time to half hour • Solve practical problems relating to time.
Year 2 White Rose Maths	**Number - Place Value** • Counting forwards and backwards to 20, 50 • Count numbers to 100 by making 10s • Recognise the place value of each digit in a 2-digit number (Tens/Ones) • Use a place value chart • Partition numbers to 100 • Read and write numbers to 100 in numerals and in words • Flexibly partition numbers to 100 • Write numbers to 100 in expanded form • Explore numbers to 100 on a number line • Estimate numbers on a number line • Use place value and number facts to solve problems • Compare objects and numbers to 100 • Count in multiples of 2, 5 and 10 • Count in multiples of 3 **Number - Addition and Subtraction** • Addition and subtraction to 10 (bonds) • Addition and subtraction to 20 (bonds) • Compare number sentences Bonds to 100 (tens) • Add and subtract 1 • Add by making 10 • Add three 1-digit numbers	**Number - Addition and Subtraction** • Add take away numbers not crossing 10 • Add and subtract numbers crossing 10 • 10 more than 10 less than • Add and subtract numbers using concrete objects, pictorial representations and mentally including: a 2-digit number and ones; a 2-digit number and tens; 2, 2-digit numbers • Compare number sentences • Missing number problems **Geometry – properties of shapes** • Recognise 2D and 3D shapes • Describe the properties of 2d shapes (including the number of sides and vertices) • Draw 2D shapes • Draw Lines of symmetry • Use lines of symmetry to complete shapes • Sort 2D shapes • Describe the properties of 3D shapes, including the number of edges, vertices and faces • Sort 3D shapes • Make patterns with 2D and 3D shapes	**Measurement – Money** • Recognise coins (p and £) • Recognise notes • Count money (coins and notes) • Add coins together • Make amounts/totals • Use p and £ sign • Compare money • Understand the value of coins • Find the difference/give change • 2 Step word problems **Number - Multiplication and Division** • Recognising, making and adding equal groups • Complete multiplication sentences • Use arrays • Making and sharing equal groups • 2 Times tables • Divide by 2 • Double numbers • Odd and even numbers • Times table 5, 10 • Divide 5, 10	**Measurement - Length and Height** • Measure length (cm and M) • Compare length and height • Order lengths and heights • Complete 4 operations (+, - , x /) with length and heights **Measurement – Mass, capacity and temperature** • Compare mass • Measure in g and kg • Complete 4 operations (+, - , x /) with mass • Compare volume and capacity • Measure in ml and l • Complete 4 operations (+, - , x /) with volume and capacity • Develop understanding of temperature • Measure and compare temperature in C	**Number – Fractions** • Work with parts and wholes • Make equal parts • Recognise and find half • Recognise and find a quarter • Recognise and find a third • Develop understanding of unit and non-unit fractions • Recognise equivalent fractions ½ and 2/4 • Find ¾ • Count in fractions • Solve problems including fractions **Measurement – Time** • Tell time to the hour • Tell time to half hour • Tell time to ¼ and ¼ to • Tell time to 5 minutes • Write the time • Understand hours and days • Compare durations of time	**Statistics -** • Making tally charts • Interpret tally charts • Draw and interpret pictograms 1-1 • Draw and interpret pictograms 2,5,10 • Complete block diagrams **Geometry – Position and Direction** • Use mathematical vocabulary to describe position, direction and movement, including movement in a straight line. (Position and movement) • Distinguish between rotation as a turn and in terms of right angles for quarter, half and ¾ turns (clockwise and anti-clockwise • Making patterns with shapes