Greenhill Academy Maths Long term plan 2023-2024

	P-S/Nursery	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Autumn Term	White rose maths scheme Autumn 1 **Week 1** – Colour recognition (Primary) **Week 2** – Colour. Recognition (Secondary) **Week 3** – Matching colours and objects. **Week 4**- Matching number, shapes and patterns. **Week 5** – Sorting (Colours, shapes and size). **Week 6** – Sorting – Reasoning and guessing. **Week 7** – Number 1 (Subitiising) **Week 8** – Number 2 Subtitling dice pattern / different sized. **Week 9**– Counting, and numerals. Week 10 – Patterns (Extending colours, outdoor patterns ans movement.	White rose maths scheme **Weeks 1 – 3 Getting to know you** • Opportunities for settling in, introducing area of provision. • Key times of day/ classroom routines. • Positional language **Weeks 4 – 6 Just like me** • ***Number*** – Match and sort/ compare amounts. • ***Measure, Shape and spatial thinking*** – Compare Size, Mass and Capacity. • Exploring Pattern. **Weeks 7 – 9 It's me 1 2 3!** • ***Number*** - Representing 1, 2 and 3. • Comparing 1, 2 and 3 • Composition of 1, 2 and 3. • **Measure, Shape and spatial thinking** – Circles and Triangles. • Positional language.	Autumn 1 **Weeks 1 – 3** **Number and Place Value to 10** • sort, count • and represent objects, count forwards and • backwards from any number, one more and • one less, 1:1 correspondence, compare • groups and numbers, order objects and • numbers, ordinal numbers, number line **Week 4 – Addition-** • part-whole model, symbols, • fact families, number bonds, compare • number bonds, adding together/more **Week 5 Subtraction** – • Finding a part, taking • away- crossing out, symbols, breaking	Autumn 1 **Week 1 - Number and place value** Counting to 100 Representing numbers to 100 Count in 2 5 10 and 3s **Week 2 - Number and place value** Tens and ones Part part whole Place value addition Place value charts **Week 3-Number and place value** Compare objects and numbers Ordering numbers **Week 4-. Addition** Partitioning **Week 5-. Addition** Partitioning **Week 6-. Subtraction** Partitioning **Week 7-. Subtraction** Partitioning Autumn 2 **Week 1 - Number** Multiplication **Week** 2-. Number Division	Autumn 1 **Week 1 – 3 - Number and place value** – 3 Hundreds, represent numbers to 1000, 100s 10s 1s Number line to 1000, find 1, 10, 100 more or less than, compare objects to 1000, order numbers, count in 50s Addition – column and bridging- 2 (1) -Add multiples of 100, add 3 digit and 1 digit numbers not crossing 10 then crossing 10, add 3 digit and 2 digit not crossing 100 then crossing 100 (2) **Week 4 and 5 - Addition** - Add 100s, spot the pattern, add 2 and 3 digit numbers not crossing 10 or 100, then crossing 10 or 100, Subtraction – column and exchanging – 2 (1)	Autumn 1 **Week 1 - Number Place Value** – working up to 4 digit numbers **Week 2 - Place Value** – 1000 more and less, number problems to include money **Week 3 - Addition** – formal written methods up to 4 digits **Week 4 -Subtraction** – formal written method up to 4 digits **Week 5 - Multiplication** – grid method, up to 3 digit by 1 digit. **Week 6 - Division** – bus stop, up to 3 digit by 1 digit. **Week 7 - Measure Time -** read timer and convert between 24hour, digital and analogue Autumn 2	Autumn 1 **Week 1 -Number Place Value -** Identify the place value in numbers up to 7 digits **Week 2** - formal written methods of column addition **Week 3** -Formal written methods of column subtraction **Week 4 -** Practice and extend their use of the formal written methods of short multiplication. **Week 5 -** Practice and extend their use of the formal written methods of short multiplication. **Week 6** - Mentally add and subtract tenths, and one-digit whole numbers and tenths. **Week 7** - Geometry Drawing lines with a ruler to the nearest mm • Properties of common 2d	Autumn 1 **Week 1 - Number** – Formal methods – Addition and Subtraction Rising Stars **Week2 - Number –** Formal methods (Multiplication and Division) **Week 3 - Number –** Number and Place Value (Fractions) **Week 4 - Number –** Number and Place Value – Percentages **Week 5 - Number** – Algebra **Week 6 - Number –** Fractions (including decimals and percentages) **Week 7 - Number –** Fractions (including decimals and percentages) Autumn 2

	Week 11 – Fix my pattern/ Extend ABC/ Extend ABC outdoor patterns. **Week 12 –** Consolidation and winter activity week.	**Weeks 10 – 12 – Light and Dark** • **Number** – Representing Numbers to 5. • One more and one less • **Measure, Shape and spatial thinking –** Shapes with 4 sides. • Time	• apart, fact families, counting back **Week 6/7** – Place value consolidation. **Autumn 2** **Week. 1 -** Addition and Subtraction **Week 2** - Measure- Length and Height (1)- compare lengths and heights, measure. **Week 3** - Addition and subtraction. **Week 4** - Measure- Time Before and after, dates, time to the hour **Week 5 -** Shape recognise and name 2D, sort 2D. recognise **Week 6** – name, make and 3D, sort , patterns. **Week 7** - Number-Place Value to 20 Count forwards and backwards in numerals and words, TO, one more and one less, compare groups and numbers, order groups and numbers	**Week 3-.** Measurement - Money Recognising coins, notes etc. Counting amounts Adding/Subtracting amounts Change **Week 4- Measurement - Money** Recognising coins, notes etc. Counting amounts Adding/Subtracting amounts Change **Week 5-. Geometry** Properties of 3D shape **Week 6-. Geometry** Properties of 2D shape **Week 7 - Data Handling** Statistics	**Weeks 6 and 7- Subtraction** Subtract multiples of 100, subtract 3 digit and 1 digit numbers not crossing 10, then crossing 10, subtract 3 digit and 2 digit not crossing 100 then crossing 100 (2) Subtract a 2 digit number from 3 digit, subtract 100s, spot the pattern, subtract 2 and 3 digit numbers crossing 10 or 100, subtract 3 digit from 3 digit no exchange, **Autumn 2** **Week 1 and. 2- Multiplication** – 2 sets, number lines, bar models, calc policy **Week 3 and 4 - Division** – 2 sets, number lines, bar models, calc policy (1&2)Equal groups, multiply by 3, by 4, by 8. and their times tables facts. Divide by alongside multiplication to see connection. (3&4) Comparing statements, related statements, multiply 2 digit by 1 digit, divide 2 digits by	**Week 1 - Number** • **Fractions** – equivalent fractions, fractions of shapes, ½ and ¼ **Week 2 - Fractions** – equivalent fractions, simplifying, unit fractions **Week 3 and 4 - Measure Money** – amounts, adding, subtracting, word problems **Week 5 - Geometry Shape** -2D shapes up to 10 sides. Names – acute, right, obtuse and reflex angles **Week 6 - Shape** – symmetry, shapes and patterns	shapes • Properties of regular polygons. **Autumn 2** **Week 1** - Measure • Measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres **Week 2 and 3 -** Number • Adding and subtracting fractions Statistics **Week 4** - Complete, read and interpret information in tables, including timetables Measure **Week 5** - Read the time **Week 6 -** Convert between different units	**Week 1 -Number – formal** methods – - Multiplication and Division **Week 2 - Geometry** – 3D and 2D **Week 3 - Measurement** – Angles **Week 4- Measurement** – Angles **Week 5 - - Geometry** – Circles **Week 6 - Measurement –** Conversions Rising Stars

					1 digit, scaling, how many ways – reasoning. **Week 5 and 6 - Money** – 2 pounds and pence, converting, add, subtract, change. Include adding, subtracting, multiplying and dividing amounts. Coins equalling the same amount **Week 7 - Statistics** - 1 Pictograms, bar charts, tables			
Spring Term	<u>White rose maths scheme</u> **Week 1** – Number 3 (Subitising) **Week 2** – Number 3 – 3 little pigs, 1:1 counting, Numerals/ triangles. **Week 3** – Number 4 – 1:1 counting, numerals, Squares/ rectangles. **Week 4** -Number 4 – Composition of 4. **Week 5** – Number 5 – 1:1 counting, Numerals, Pentagon. **Week 6** – Number 5 – Composition of 5 **Week 7** – Consolidate Number 5.	<u>White rose maths scheme</u> **Weeks 1 – 3 – Alive in 5!** • **Number** - Introducing zero • Comparing numbers to 5 • Composition of 4 & 5 • **Measure, Shape and spatial thinking** - Compare Mass (2) • Compare Capacity (2) **Weeks 4 – 6 Growing 6,7, 8** • ***Number*** *– 6,7&8* • *Combining 2 amounts* • *Making pairs* • ***Measure, Shape and spatial thinking*** - Length & Height • Time	<u>Spring 1</u> **Week 1 - 2.** - Number- Addition and Subtraction to 20 (2)- add by counting on, find and make number bonds, add by making 10, subtraction not crossing 10, crossing 10, related facts, compare number sentences **Week 3-** Measurement- Weight (1)- introduce weight and mass, measure and compare mass **Week 4** - Number- Place Value (1) (PV to 50)- numbers to 50, TO, represent numbers, 1more 1 less, compare objects and numbers, order numbers, **Week 5 and 6 -** Multiplication (2) - count in	<u>Spring 1</u> **Week 1-. Number** Addition **Week 2-. Number** Subtraction **Week 3-. Number** Multiplication **Week 4 -Number** Division **Week 5-. Measurement** Fractions **Week 6 - Measurement** Time <u>Spring 2</u> **Week 1-. Measurement x2** Length and Height Capacity and Temperature Weight and Mass	<u>Spring 1</u> **Weeks 1 and- 2 - Measurement –** length and perimeter – 2. Read scales in divisions of ones twos fives and tens. Measure length, equivalent lengths m and cm, mm and cm, compare lengths, add lengths, add lengths, subtract lengths, perimeter – measure and calculate. **Weeks 3 and 4 - Fractions** – 2 Unit and non-unit fractions, making the whole, tenths, count in tenths, tenths as decimals, fractions on a number line, fractions of sets of objects.	<u>Spring 1</u> **Week 1 - Place Value** – multiplying and dividing by 10 and 100, including tenths and hundredths. **Week 2 - Addition – money** **Week 3 - Subtraction** – money Statistics **Week 4 - Statistics** – tally charts, pictograms, bar chart **Week 5- Number Decimals** – rounding and Ordering **Week 6 - Decimals** – adding and Subtracting <u>Spring 2</u>	<u>Spring 1</u> **Week 1 -** Number Formal written methods for column addition and subtraction **Week 2 -** Formal methods of Multiplication **Week 3** - Formal methods of division **Week 4 -** Negative numbers **Week 5 -** Mixed number and improper fractions <u>Spring 2</u> **Week 1 -** Number Fractions, decimals and percentages.	<u>Spring 1</u> **Week 1 - Number** – Multiplication and Division **Week 2 - Number** – Number and Place Value **Week 3 - Geometry** – Translation, Rotation, Reflection Ratio and Proportion **Week 4 – Algebra** **Week 5 Statistics** <u>Spring 2</u> **Week 1 - Number –** Addition, Subtraction, Multiplication and Division

	Week 8 – Number 6 – Introduce 10 frame. **Week 9** – Height and length (Tall and short, Long and short) **Week 10** – Mass (Relate to books – 3 little pigs and Goldilocks) **Week 11** – Capacity Week 12 - Consolidation	**Weeks 7 – 9 Building 9 & 10** • ***Number*** - Counting to 9 & 10 • Comparing numbers to 10 • Bonds to 10 • **Measure, Shape and spatial thinking** – 3D-shapes • Patterns	2s, 5s, 10s Number- Place value **Spring 2** **Week 1 and 2** -Number - Division (2)- grouping, sharing **Week 3 -**Mix Multiplication and division consolidation (1) **Week 4 -** Fractions- halves and quarters (1) **Week 5** - Money (1)- recognising coins and notes, counting in coins **Week 6** -Consolidation week	**Week 2-** Measurement Time **Week 3-. Geometry** Position and Direction **Week 4-. Number** Addition and Subtraction **Week 5 - Numbe**r Multiplication, division and fractions	Recognising and find and name fractions and fractions of a length, shape, set of objects or quantity. Know all parts must be equal parts of the whole. **Week 5 - Time** - 1 months and years, hours in a day, time to 5 minutes time to the minute, am and pm, 24 hour clock, finding duration, comparing duration, start and end times, time in seconds Retell the time to nearest 15 mins More 2 step word problems **Spring 2** **Week 1 - Time** - 1 months and years, hours in a day, time to 5 minutes time to the minute, am and pm, 24 hour clock, finding duration, comparing duration, start and end times, time in seconds **Weeks 2 and 3** - Shape – angles and turns – 2 Turns and angles, right angles, compare angles, draw, horizontal and vertical, parallel and perpendicular,	**Week 1 - Measure** Area and perimeter **Week 2 - Geometry Shape** - acute, right, obtuse and reflex angles **Week 3 - Number Multiplication** – grid method, moving to short method, multiplying 3 numbers **Week 4 - Division** – bus stop, with remainders, moving to decimal answers Statistics **Week 5 - Statistics** – pictogram, bar chart, time line graph	Week 2 - Geometry Properties of 3D shapes **Week 3** - Parallel and Perpendicular lines • Identify different types of angles. **Week 4** - Number • Ratio and Proportion **Week 5** - Fractions, decimals and percentages. Measure • Reading timetables.	**Week 2-** Measurement – Area and Perimeter **Week 3**- Geometry Measurement **Week 4**– Geometry **Week 5** - -Volume Roman numerals (Year 5 revision and consolidation.) **Week 6 P**lace Value (Consolidation)

					Lines of symmetry **Week 4 - Addition –** 1 add 2 3 digit numbers not crossing 10 or 100, then crossing 10 or 100 **Week 5 - Subtraction** – 1 subtract 3 digit from 3 digit no exchange recap, then exchange, INVERSE NEED TO D MISSING NUMBER PROBLEMS More 2 step word problem			
Summer Term	**White rose maths scheme** **Week 1** – More than/ fewer than **Week 2** – One more **Week 3** – One less **Week 4** – Shape (2D) Revisit pattern from Autumn **Week 5** – Shape (3D) Revisit pattern from Autumn. **Week 6**- Consolidation (Fewer than/ one more / one less. **Week 7** – Number composition 1 – 5 revision **Week 8** – Night and Day – Order events in their day at nursery/	**White rose maths scheme** **Weeks 1 – 3 To 20 and beyond** • ***Number*** *– Building Numbers Beyond 10* • *Counting Patterns Beyond 10* • ***Measure, Shape and spatial thinking*** –Spacial reasoning • *March, rotate, Manipulate* **Weeks 4 – 6 First, Then, Now** • ***Number*** *– Adding More* • *Taking Away* • ***Measure, Shape and spatial thinking*** – Spacial reasoning • *Compose and decompose*	**Summer 1** **Week 1 and 2**- Place Value within 100 (2)- counting to 100, partitioning, comparing numbers, ordering, one more, one less **Week 3 -**Money (1) recognising coins and notes, counting in coins (revision) **Weeks 4 and 5 -**Addition and Subtraction (partitioning methods – no bridging or exchanging) (2) **Week 6** - Time (1) Half past, writing time, comparing time **Summer 2** **Week 1** - Addition and Subtraction – revision (1) **Week 2** - Measurement- Volume and	**Summer 1** **Week 1-. Number** Place Value **Week 2-. Number** Addition **Week 3 - Number** Subtraction **Week 4 - Number** Multiplication **Week 5 - Number** Division **Week 6- Number** Applying number knowledge to games In starters - recap - Time - Shape - Money – Symmetry **Summer 2** **Week 1- Measurement** Capacity and Temperature	**Summer 1** **Week 1 -** Multiplication – 1 **Week 2 - Division** – 1 INVERSE NEED TO D MISSING NUMBER PROBLEMS **Weeks 3 and 4 - Fractions** – 2. From pg 77 WRH Spring Term – Fractions of Amounts Equivalent fractions, compare fractions, order fractions, add fractions, subtract fractions, - NEED TO D MISSING NUMBER PROBLEMS **Weeks 5 and 6 -** Shape – 2D and 3D shapes (inc recap of Spring 2) –2 2D 3D shapes – 2 Recognise and describe 2D and	**Summer 1** **Week 1 - Geometry Co-ordinates** – identifying and plotting co-ordinates, direction **Week 2 and 3- Number** Addition and subtraction – range of contexts, decimals, measure, money **Week 4 -** Multiplication and division – distributive law, factor pairs, short method **Week 5 - Multiplication and division** – grid method up to 3 digit by 2 digit, bus stop	**Summer 1** **Week 1** - Number • Place value **Week 2** - Written methods Multiplication **Week 3** - Written methods Division **Week. 4- Measure** Length **Week 5** - Mass **Summer 2** **Week 1 -** Measure • Capacity **Week 2 -** Number • Roman Numerals **Week 3 - • Converting** Fractions	**Summer 1** **Week1** - Roman numerals (Year 5 revision and consolidation. **Week 2** - Rising Stars **Week 3** - Place Value (Consolidation) **Week 4** – Algebra **Week 5** - Number - Fractions ,decimals and percentages **Summer 2** **Week 1** - Number - multiplication and division **Week 2** - Geometry - position and direction **Week 3**- Number - multiplication and division

	What happens day/night. **Week 9** – Positional language **Week 10** – Positional language **Week 11** – Consolidation Activity **Week 12** – Consolidation Activity.	**Weeks 7 – 9 Find my pattern** • ***Number*** - Doubling • Sharing & Grouping • Even & Odd • **Measure, Shape and spatial thinking** – Spatial Reasoning (3) • Visualise and Build **Weeks 10 – 12 – On the move** • **Number** – Deepening • Understanding Patterns and Relationships • **Measure, Shape and spatial thinking -** Spatial Reasoning (4) • Mapping	Capacity (1)- Introduce capacity and volume, measure and compare capacity **Week 3** - Multiplication and Divisionrevision (1) **Week 4** - Position and Direction (1)- describe turns, describe position **Week 5** - Statistics (1) Revision on any gaps in learning . **Week 6** - Consolidation	**Week 2- Measurement - Money** Adding/Subtracting amounts Change **Week 3-. Measurement - Money** Adding/Subtracting amounts Change **Week 4- Measurement – Time** O'clock and Half Past Quarter to and Quarter Past **Week 5- Measurement – Time** 5 minute intervals Sequencing events Sequencing times in a full day **Week 6- Investigations** Applying number knowledge to game	3D shapes, make 3D shapes Properties of shapes **Summer 2** **Weeks 1 and 2 - Mass and capacity –** 2 Measure mass, compare mass, add and subtract mass, measure capacity, compare capacity, add and subtract capacity Scales in 1s, 2s, 5s, 10s. **Week 3 - Time –** 1 Starting with duration in WRH Week 4-6 Summer Time. Possibly from pg 11. Children would like more help with writing digital time and 5 minute intervals. **Week 4 Money –** 1 **Weeks 5 and 6 –** Calculations Place value	with decimal remainders, correspondence problems **Week 6 - Fractions –** equivalents, fractions of amounts, converting fractions to decimals **Summer 2** **Week 1 - Measure Capacity –** estimating, measuring, ml to l **Week 2 - Mass -** estimating, measuring, g to kg **Week 3 -Number Fractions** – adding and subtracting fractions **Week 4 - Measure Time** - read timer and convert between 24hour, digital and analogue, word problems **Week 5 - Geometry Shape** – angles and symmetry **Week 6 - Position and direction** - plotting co-ordinates, direction. Translating shapes	**Week 4 -Fraction**s, decimals and percentages **Week 5** - Round decimals **Week 6 -** Geometry • Reflection • Rotation • Translation • Coordinates	**Week 4 -** Measurement **Week 5** Measurement