

Long-Term Planning

At Stanhope, we follow the White Rose Curriculum in Key Stages 1 and 2, and Mastering Number in Early Years. The number of small steps in White Rose does not always correlate to the number of maths lessons over the year – allowing teachers to use their professional judgement to decide when to spend longer than a single lesson on a particular small step. Teachers should refer to the LTP regularly, to ensure they are making timely progress through the curriculum.

	Autumn A	Autumn B	Spring A	Spring B	Summer A	Summer B
N	Number	Number	Number	Number	Number	Number
R	Reasoning	Reasoning	Reasoning	Reasoning	Reasoning	Reasoning
1	Place Value	Place Value	Place Value	Place Value	Place Value	Place Value
2	Place Value	Place Value	Place Value	Place Value	Place Value	Place Value
3	Place Value	Place Value	Place Value	Place Value	Place Value	Place Value
4	Place Value	Place Value	Place Value	Place Value	Place Value	Place Value
5	Place Value	Place Value	Place Value	Place Value	Place Value	Place Value
6	Place Value	Place Value	Place Value	Place Value	Place Value	Place Value
	Place Value	Place Value	Place Value	Place Value	Place Value	Place Value

If teachers wish to change the order that units are taught, or significantly alter the time spent on a given unit, they should discuss with the maths lead before doing so.

Medium Term Planning

KS1&2

The Medium-Term Plan is designed to ensure that teachers have an overview of the unit they are about to teach. By completing this, teachers will identify the prior knowledge that children should already have, what they will learn during the unit, and what this build to in the following unit/year (and therefore should not be taught now). It also allows the teacher to identify the key vocabulary and representations they will be using in lessons.



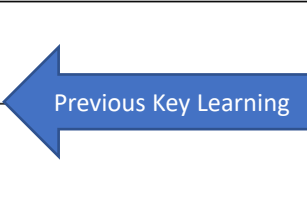
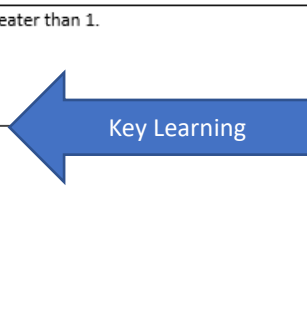
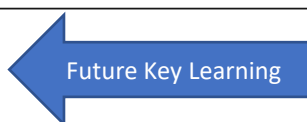
Maths Medium Term Plan

The 5 Big Ideas for Teaching for Mastery			
Coherence Lessons are broken down into small, connected steps that gradually unfold the concept, providing access for all children and leading to a generalisation of the concept and the ability to apply the concept to a range of contexts.	Representation and Structure Representations used in lessons expose the mathematical structure being taught, the aim being that students can do the maths without recourse to the representation.	Mathematical Thinking If taught ideas are to be understood deeply, they must not merely be passively received but must be worked on by the student - thought about, reasoned with, and discussed with others.	Fluency Quick and efficient recall of facts and procedures and the flexibility to move between different contexts and representations of mathematics/ Variation Variation is twofold. It is firstly about how the teacher represents the concept being taught, often in more than one way, to draw attention to critical aspects, and to develop deep and holistic understanding. It is also about the sequencing of the episodes, activities and exercises used within a lesson and follow up practice, paying attention to what is kept the same and what changes, to connect the mathematics and draw attention to mathematical relationships and structure.
Year Group	5	Start Date	11.05.26
Unit Name	Decimals		
Key Learning	To know how to add and subtract decimals within 1. To know how to find complementary decimals to make 1. To know how to add and subtract decimals with the same number of decimal places. To know how to add and subtract decimals with a different number of decimal places. To know how to add and subtract wholes and decimals. To know to continue decimal sequences. To know how to solve problems involving addition and subtraction of decimals. To know how to multiply and divide decimals and whole numbers by 10, 100 and 1,000.		
Previous Key Learning	To know the concept of tenths and hundredths. To know how to write tenths and hundredths as decimals. To know how to represent tenths and hundredths on a place value grid and number line. To know how to divide 1 and 2 digits by 10 and 100. To know how to make a whole. To know how to write, compare and order decimals. To know how to partition decimals. To know how to round decimals to the nearest whole number. To know how to express halves and quarters as decimals.		
Future Key Learning	To know the value of each digit in a decimal number. To know how to round decimals. To know how to add and subtract decimals. To know how to multiply and divide decimals by 10, 100 and 1,000. To know how to multiply and divide decimals by integers.		

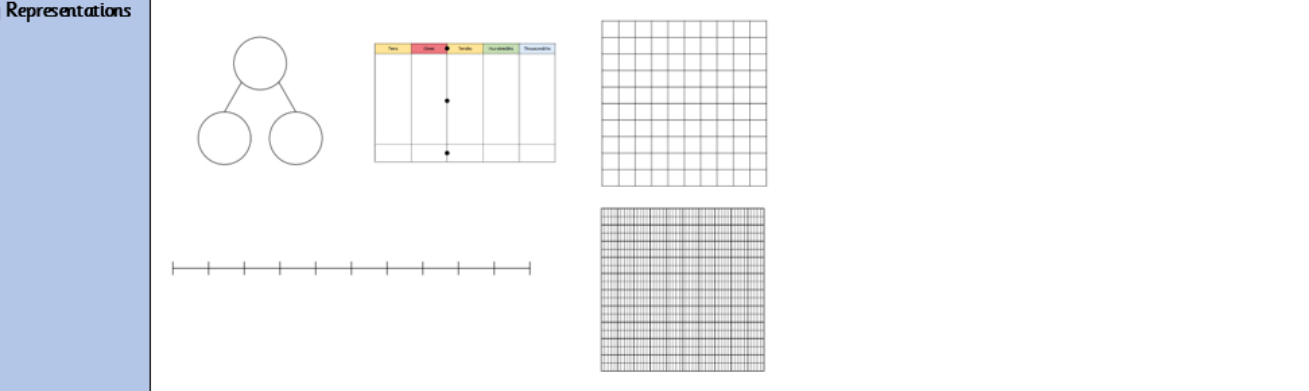
Above is an example of a medium-term plan for the Year 5 unit 'Decimals'. The year group, start date and unit name are all self-explanatory. All key learning is taken from the White Rose KKPDs, as highlighted below:



White Rose Key Knowledge Progression Document

4	Sp4 - Decimals	To know the concept of tenths and hundredths. To know how to write tenths and hundredths as decimals. To know how to represent tenths and hundredths on a place value grid and number line. To know how to divide 1 and 2 digits by 10 and 100.	
	Su1 - Decimals	To know how to make a whole. To know how to write, compare and order decimals. To know how to partition decimals. To know how to round decimals to the nearest whole number. To know how to express halves and quarters as decimals.	
5	Sp3 – Decimals & Percentages	To know how to read and write decimals up to three decimal places, including numbers greater than 1. To know how to round decimals to nearest whole number and to one decimal place. To know how to order and compare decimal numbers up to three decimal places. To know how to write percentages as fractions and as decimals. To know how to find equivalent fractions, decimals and percentages.	
	Su3 - Decimals	To know how to add and subtract decimals within 1. To know how to find complementary decimals to make 1. To know how to add and subtract decimals with the same number of decimal places. To know how to add and subtract decimals with a different number of decimal places. To know how to add and subtract wholes and decimals. To know to continue decimal sequences. To know how to solve problems involving addition and subtraction of decimals. To know how to multiply and divide decimals and whole numbers by 10, 100 and 1,000.	
6	Sp3 – Decimals	To know the value of each digit in a decimal number. To know how to round decimals. To know how to add and subtract decimals. To know how to multiply and divide decimals by 10, 100 and 1,000. To know how to multiply and divide decimals by integers.	

The key vocabulary and representations are identified by the teacher, from the White Rose scheme of work. Vocabulary should be either new language, or important language for the unit that is not deemed to be secure. Every word identified here should be explicitly introduced during lessons and added to the working wall (see below). Similarly, the key representations are the important models and images that will be referred to regularly throughout the unit. There is no expectation that these are included on the working wall, but they will appear in the teaching slides and on independent activities.

	Maths Medium Term Plan	
Key Vocabulary	ones, tenths, hundredths, thousandths, partition, sequence	
Key Representations		

The final piece of medium-term planning to complete at the start of the unit is the sequence of learning. At the start of the unit, teachers may just choose to copy the small steps across from the White Rose scheme of learning. If teachers wish to make any amendments, such as changing the order of lessons, or adding any steps, they are encouraged to do so. This can be done at the start of a unit, or as they plan on a weekly basis. So, at the start of a unit, the MTP may look like this:



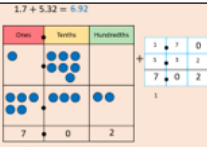
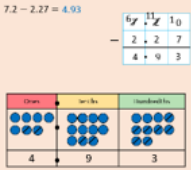
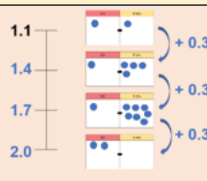
Maths Medium Term Plan

Date	Learning Sequences	Notes and Scaffolds
	To know how to use known facts to add and subtract within 1.	
	To know how to find complementary decimals to make 1.	
	To know how to add and subtract decimals across 1.	
	To know how to add decimals with the same number of decimal places.	
	To know how to subtract decimals with the same number of decimal places.	
	To know how to add decimals with different numbers of decimal places.	
	To know how to continue decimal sequences.	
	To know how to subtract decimals with different numbers of decimal places.	
	To know how to multiply by 10, 100 and 1000.	
	To know how to divide by 10, 100 and 1000.	
	To know how to multiply and divide with missing values.	

As the unit progresses, and lessons are planned on a weekly basis, more detail should be added to the plan. The notes and scaffolds section should contain any notes pertinent to the teaching of the lesson to the whole class in black or a screenshot of how their working wall will look, **any scaffolds and support available to specific children in blue**, and **any changes to the planned sequence in red**. These changes to the sequence may either be proactive (i.e. the teacher has identified that a small step may require more than one lesson, and the learning has been split over two or more sessions), or reactive (when the children haven't secured the learning). As lessons are taught, the date should be added to the plan. A completed MTP should look like this:



Maths Medium Term Plan

18.06.26	To know how to add decimals with different numbers of decimal places.	 WW: Wallet: place value grid
19.06.26	To know how to subtract decimals with different numbers of decimal places.	 WW: Wallet: place value grid
20.06.26	Whole class adding and subtracting decimals intervention	Children revisit adding and subtracting decimals – fluency practice focusing on place value layout, decimal point always in line, lining up the correct place value columns
21.06.26	To know how to continue decimal sequences.	 WW: The rule is + 0.3 Wallet: number line and place value grid

Early Years

The curriculum in Nursery follows the Flying High Trust Medium Term plan. Our long and medium-term plans for Nursery are designed to help teachers in to break down the learning outcomes for the year into smaller steps, so

Approach to Maths – Teacher Guide

they can start to think about the opportunities they need to provide for their children. This is not a scheme designed to tell teachers what to do.

National Curriculum Strands					
Place Value		Addition & Subtraction	Multiplication & Division	Geometry	Measure
Autumn Term					
Checkpoints	by the end of this term the children will be able to...				
Number	- Take part in finger rhymes with numbers - Begin to use fast recognition to identify a number without counting it. Knowing securely 1. (subitising) - To become confident in the principle of 1-to-1 counting - To be able to make collections of 1 - To recognise the digit 1 and link to an amount - Have an awareness of numbers beyond 3, through counting songs and resources within the provision. - To know that anything can be counted e.g.: claps, jumping (abstraction principle) - To know how to represent 1 in different ways				
Numerical Patterns	- With support, begins to quantify small groups or collections through everyday routines e.g. "we have three oranges." (cardinality) - Engages in daily routines, register, snack time, tidy up time. Using mathematical talk to begin showing an awareness of order. - Begin to explore making a group. - Explore sorting within a basic group e.g.: colour. - Are able to copy and continue an AB pattern. - To join in with the repeated patterns in stories and rhymes - With support from visual prompts begin to consider routines and understanding what they are doing 'now'. – Not directly taught				
Shape, Space and Measure	- Talk about shapes that they can see using informal language. - Uses silhouettes/ shadowing to develop knowledge of shape. - To begin more familiar with sequencing of events using language such as first, then- not directly taught - Can complete simple inset and jigsaw puzzles.				
Autumn 1	Block	Content	Guidance	Books	KRPDs
Week One WB:	Baseline	Setting classroom routines to assess current knowledge: - Mathematical snack time - Tidy up/lining routines - Planning for CP - Mathematical stories	Mathematical Snack Video Mathematical Snack Document Setting up a Mathematically Rich Number Environment EEF- Improving Mathematics in the Early Years and Key Stage 1 EEF- Using High Quality Storybooks		
Week Two WB:	Baseline	Setting classroom routines to assess current knowledge: - Mathematical snack time - Tidy up/lining up routines - Planning for CP - Mathematical stories	Importance of Number Rhymes Math at Your Fingertips: Songs and Fingerplays for Preschoolers EEF- Prompting Fluency with number and sequence EEF- Association between number and quantity	- Five Little Ducks - Five Little Monkeys - Five Speckled Frogs - Five Currant buns - Five Little Men in a Flying Saucer	- Know how to count to 5 - Know numbers belong in a sequence. - To know how to spot patterns in stories and rhymes
Week Three WB:	Number Rhymes	- Encouraging participation in group sessions through repetitive rhymes that count in a sequence. - Use of props/visual representations to introduce counting up to 5. - Introduction to accurate counting - Representing numbers in rhymes on fingers.			
Week Four WB:	Number Rhymes	- Encouraging participation in group sessions through repetitive rhymes that count in a sequence. - Use of props/visual representations to introduce counting up to 5. - Introduction to accurate counting - Representing numbers in rhymes on fingers.			- Know how to count to 5 - Know numbers belong in a sequence. - To know how to spot patterns in stories and rhymes
Week Five WB:	Matching and sorting	- Begin to explore making groups. - Explore matching to make pairs or to find items that are the same. - Match objects to shadows - Explore sorting using a basic criterion e.g. by colour	Learning Trajectories-Simple Sorter Learning Trajectories- Sorter by Similar Attributes Erikson Early Math- Sets	- A Pair of Socks - Stuart Murphy - Simon Sock - Sue Hendra - The Button Box - Margarette Reid - We Go Together- Todd Dunn	- To know how to make a group - To know that a group can be split into smaller groups through sorting.
Week Six WB:	Pattern	- Exploring everyday patterns- spotty/stripy (What makes them a pattern?) - Musical patterns - Develop an understanding of what an 'AB' pattern is (unit of repeat) - Continuing AB patterns - Copying AB patterns - Copying AB patterns using different resources but same colour.	NCTM Pattern Progression Chart New! Developing Pattern Awareness with Young Children DfE Pattern and Connections Learning Trajectories: Patterns Recognizer Learning Trajectories: Patterns AB Erikson Early Math- pattern	- Beep, Beep, Vroom, Vroom - Stuart Murphy - Pattern Fish - Trudy Harris - Pattern Bug - Trudy Harris	- To know how to describe patterns they see (such as spotty and stripy) - To know how to copy and continue an AB pattern

The curriculum in Reception follows NCETMs Mastering Number. This has been mapped out and augmented to include the entirety of the Early Years curriculum in the Reception Maths MTP document. This includes the content covered and key learning for each week (as included in the KKPD document). In Early Years, all teachers need to do at the medium-term planning phase is add in the dates on which each weekly unit was taught:

National Curriculum Strands					
Place Value	Addition & Subtraction	Multiplication & Division	Geometry	Measure	Fractions
Autumn Term					
Checkpoints	By the end of this term children should be able to...				
Number	- Subitising to 5. - Building numbers out of 1's. - Cardinality of 5 using fingers and dice patterns to recognise and represent numbers. - Compare using amounts for comparison within their play and everyday experiences. - Begin to have an awareness of the composition of 5. - Say one number for each item in order: 1,2,3,4,5. (Stable-order counting) and recognise the numeral.				
Numerical Pattern	- Are able to count aloud in order to 5 and beyond. - Begin to understand the order of numbers 5-10 - Begin to know the days of the week - Copy, continue and create an AB pattern. - Notice and correct an error in an AB pattern. - Use language to describe the relationship between quantities (e.g. 'more than, less than and equal to)				
Shape, Space and Measure	- Can correctly name the 2D shapes. - Combine building blocks to make complex shapes (e.g. arches, crosses) - Engage with capacity activities and share what they can see happening, knowing when something is empty or full. - Begin to understand the concept of time through past, present and future events. - Know how to identify different elements of measure such as heavy and light, big and small, long and short.				
Autumn 1	Block	Content	KKPDs		
Friday Maths	Shape	- Can correctly name the 2D shapes. - Combine building blocks to make complex shapes (e.g. arches, crosses)	- To know how to identify and describe a range of common 2D shapes (squares, triangles, rectangles, circles) - To know how to copy structures from pictures using construction blocks		
MN Week One WB: 04/09/23	Subitising	- perceptually subitise within 3 - identify sub-groups in larger arrangements - practise using their fingers to represent quantities which they can subitise	Know how to subitise to 5 (ELG)		
MN Week Two WB: 11/09/23	Counting, cardinality and ordinality	- relate the counting sequence to cardinality, seeing that the last number spoken gives the number in the entire set - have a wide range of opportunities to develop their knowledge of the counting sequence, including through rhyme and song - have a wide range of opportunities to develop 1:1 correspondence, including by coordinating movement and counting - have opportunities to develop an understanding that anything can be counted, including actions and sounds - explore a range of strategies which support accurate counting.	Know how to identify the size of group of up to 10 items (cardinal principle)		
MN Week Three WB: 18/09/23	Composition	- see that all numbers can be made of 1s - compose their own collections within 4.	To know how to compose numbers to 10		

Short Term Planning

KS1&2

Whilst there is no expectation of written short-term planning in key stages 1 and 2, there should be evidence of well-planned lessons – through PowerPoint slides saved on Teams, and the independent work in children's books. As with all subjects, the Trust lesson design model should be used to ensure a consistency of approach. The maths planning guidance document provides practical support for teachers in triangulating the mastery approach, the White Rose resources and the Trust lesson design model. When planning maths, it is especially important to think about the live modelling that will take place during the lesson, not just what appears on the PowerPoint slides.

Early Years

Maths planning in reception should be recorded on a weekly short-term plan, known as their indoor and outdoor provision plan.

Maths specific enhancements are planned in advance. These are activities in the environment that have been specifically set up for children to practice their new learning. The rationale for these should be either that they are practicing the content learnt last week, or the learning from this week. There is also the opportunity to record any mathematical opportunities in other, non-maths specific, enhancements. Teachers should choose the best day on which to do a recorded activity – i.e. which lesson lends itself best to being recorded.

Mathematics		
Core focus for the term: ☐ Subitising to 5 ☐ Counting objects with 1:1 correspondence to 5 ☐ Recognising and matching numerals to 5 ☐ Comparing quantities ☐ Exploring composition of numbers to 5 ☐ Identifying and creating simple patterns		Key Vocabulary for the term: Number, count, counting, numeral, more, fewer, same, equal, subitise, altogether, how many, pattern, compare, group, sort, amount, total
Resources and Layout	Rationale & Core Document Links	Scaffold Up / Challenge
Resources: Number cards 0-5 Dot cards Numicon Counting bears Peg boards Loose parts (buttons, gems, pinecones) Dice Five frames Natural objects for counting Number puzzles Number books Pattern strips Linking cubes Sorting trays Tuff tray counting challenges Maths challenge cards Mini whiteboards and pens Layout Top Shelf	KKPD's and Development Matters statements: KKPDs Know how to subitise to 5 (ELG). Know the numerals to 10 and link these to amounts. Know how to identify the size of a group of up to 10 items (cardinal principle). Know how to compare quantities of up to 10 using more than, less than and equal to. To know how to compose numbers to 10. To know how to copy, continue and create an AB pattern. Development Matters / Checkpoint Links Subitising to 5. Building numbers out of 1s. Cardinality of 5 using fingers and dice patterns to recognise and represent numbers. Compare using amounts for comparison within play. Begin to have an awareness of the composition of 5. Say one number for each item in order and recognise the numeral. Copy, continue and create an AB pattern. Rationale: Number cards, dice and dot cards have been included to develop children's ability to recognise numerals and subitise amounts to 5 independently. These resources reflect learning introduced during whole-class maths sessions and provide opportunities for repeated practice.	Children Requiring Additional Support Real objects and familiar resources used for counting and comparison. Smaller number ranges (e.g. numbers to 3 before progressing to 5). Adult-supported counting opportunities. Visual prompts and number lines. Large-scale outdoor counting activities. Songs, rhymes and finger games to support number recognition. Additional subitising practice using dice patterns and dot cards. Sorting and matching activities using children's interests. Repeated opportunities to count, compare and represent quantities through play.

SEND

Every measure should be taken to ensure all children can access the expectations of the curriculum. Scaffolds should be planned in advance of the lesson and recorded on the medium-term plan. The SEND Maths Guidance document sets out some ways in which pupils may be supported during maths lessons, but this is far from an exhaustive list and teachers are encouraged to make adaptations as they see fit.

Independent Work

KS1&2

Independent work should be on a printed sheet, that takes up the left-hand side of the page. Children should record their working-out and their answers on the right-hand side of the page. In Key Stage one, the date and learning objective should be printed on the sheet, in Key Stage two, the learning objective should be printed on the sheet and the children write the date for themselves. There is no expectation that any part of the lesson, except the independent practice, should be recorded in books. Whilst the White Rose materials are a good starting point,

questions and tasks should be carefully chosen by the teacher. For each lesson, there should be two worksheets prepared.

The first sheet covers the key (ARE) learning for the lesson. Getting these correct (potentially with the odd error, but not misconception) would result in a green LO. If the LO is pink, intervention based around work on key learning question, or a similar question should be recorded in the child's book. This first sheet should be very accessible to start, enabling all children to experience success and build confidence. Questions should be carefully chosen, with scaffolds faded throughout, to allow children sufficient unaided practice of the key learning by the end of the sheet.

Not all children will get on to the second sheet, and most won't finish. Teachers should consider a sensible sequence of accessibility and depth. These questions will have a more reasoning and problem-solving focus, but that's not to say there is no problem solving and reasoning on the first strip, nor that there won't be any fluency on this one.

Although we aim for a consistent approach, it is still important to apply common sense where appropriate. For example, when teaching number lines, or interpreting graphs, it is acceptable to veer away from the half page layout to support the children's reading or recording.

EYFS

It is recommended, in Reception, that children have some aspect of their maths learning recorded once per week. This is not to say that they should be completing a worksheet or writing in a book. However, it is important that children are given ample opportunity to develop their mathematical mark making (including number formation), and collecting examples of this mark making, as well as other mathematical activity, can help capture evidence to measure children's development and the impact of the curriculum.

Working Walls

Maths Working Walls should contain three sections:

- Vocabulary – this should be cleared at the end of each unit and updated and added to during lessons. This should be referred to during teaching. In KS2, all vocabulary should have an explanation and image.
- Modelling – As part of every lesson, the modelling that will be recorded on the flip chart should be specifically planned for and captured during the lesson. This should be displayed on the working wall during the following lesson, to support children with their learning. Teachers should consider what are the image(s) that convey the most meaning with the fewest words. If a child was away yesterday, can they learn from the working wall today? Modelling from 'prior learning' and 'today's learning' should be on display.

Daily Practice

In addition to the maths lessons, children should be doing daily practice as set out below:

- Year 1 – Mastering Number, 15 minutes after lunch.
- Year 2 – Mastering number, 15 minutes after lunch
- Year 3 – Mastering number, 15 minutes after lunch
- Year 4 – 10 in 10 after lunch; times table practice Fridays after lunch
- Year 5 – 10 in 10 after lunch
- Year 6 – Arithmetic practice, 15 minutes after lunch

Assessment

In addition to formative assessment, that constantly feeds into all planning and lessons, all children are tested termly from years 1 to 6. Children sit NTS tests (with the exception of year 6, who sit previous SATs tests). As a result of this, teachers assess children at being either working towards the expected standard, achieving the expected standard, or exceeding the expected standard.

In addition to the teacher assessments based on results from the NTS test, teachers should also assess children's times table knowledge at each data drop. Children should be tested using a digital test, 25 questions, 6 seconds per question, to simulate the MTC. Scores out of 25 should be recorded on Arbor. Which times tables should be tested are shown in the table below:

Year	Autumn	Spring	Summer
3	2, 5 and 10	2, 3, 4, 5, 8 and 10	2, 3, 4, 5, 8 and 10
4	2, 3, 4, 5, 8 and 10	All times tables	All times tables

Appendices:

- a) Long-term plan.
- b) KKPDs.
- c) Blank medium-term plan.
- d) Example medium-term plan.
- e) EYFS MTP
- f) EYFS Short term planning
- g) SEND guidance.
- h) Daily practice overview.