



Maths

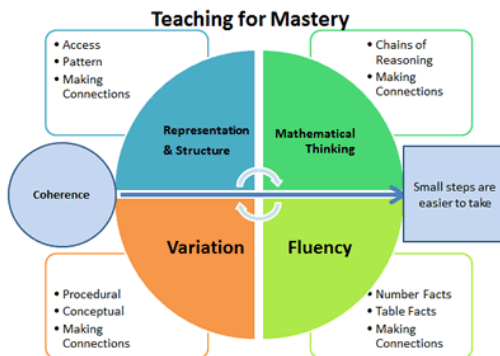
Rationale

At Raunds Park Infant School we embrace the Mastery approach to teaching mathematics. Our teachers ensure that mathematical skills are taught every day following the White Rose *Maths* Programme. Staff draw upon a wide range of resources and expertise to ensure that the children are challenged and motivated. Our pupils understand the importance of mathematics, are encouraged to be confident in numeracy and to apply the skills that they learn to simple problem solving.

The activities cover a wide range of mathematical knowledge, many with an emphasis on practical work. Before each lesson children have a developing number sense lesson using 'Mastery Number' 4 times a week. In each lesson there is a short and simple mental maths session. We build on skills and understanding in a step by step and progressive way and continue to develop place value with addition and subtraction.

National Curriculum Mathematics Programmes of Study:

<https://www.gov.uk/government/publications/national-curriculum-in-england-mathematics-programmes-of-study>



Intent

At Raunds Park Infant School our aim is to build confidence within mathematics, through teaching the curriculum in a structured, coherent order that allows for steady progression from EYFS through KS1 to year 2. We aim for children to feel skilled in problem solving so that when they encounter a challenge they see it as an opportunity - not a barrier. Our quality mathematics lessons allow children to cover the skills required to meet the aims of the National Curriculum and to encourage passion for the subject. As a school, we use the White Rose Maths Curriculum. Teachers will use White Rose Maths Schemes of Learning to plan lessons, choosing suitable resources from White Rose and other providers to help children take small steps to progression. The Schemes of learning make sure topics are introduced to children in a logical order and revisited throughout the year to encourage deep learning and ensure children have the foundational knowledge they need, before moving on to more advanced maths and concepts and tackling more challenging number problems.

We are also guided by a teaching and learning strategy. This teaching and learning strategy is based around a set of core pedagogies. These pedagogies, based on the work of Allison and Tharby and their text, 'Every Lesson Counts', outline the key elements that we would expect to see in high quality lessons. Expert teaching requires teachers to provide a high level of **challenge** for all children, and appropriate scaffolding to support this. From this starting point, detailed **explanations** and **models** should be used to demonstrate the learning that is expected. Once the knowledge and/or skill has been taught, children should be provided with opportunities to engage in **deliberate practice** to reinforce and establish the learning as well as apply their learning in a variety of situations. At all stages, **questioning** and **feedback** are utilised to check the level of understanding and support individual and groups of children in their learning

Our core aims are:

- lessons to incorporate a mixture of arithmetic, varied fluency and reasoning and problem-solving style work
- learners to be supported with a range of concrete, pictorial and abstract approaches to learning
- all children to feel they are capable within mathematics, and able to achieve their best in maths.



Implementation

- Daily lessons will include teacher input, modelling of examples and opportunities to discuss misconceptions.
- Children will be encouraged to use the appropriate mathematical language to communicate their learning.
- Clear reference made to STEM vocabulary development in each lesson with the new vocabulary displayed on the maths working walls.
- Books are developing - they are interactive and exciting.
- Children will complete tasks that helps to develop their fluency and reasoning.
- In the EYFS, children are taught using NCETM Mastering Number programme for 4 sessions a week, this links in to their continuous provision and play-based activities will provide children with opportunities to develop a strong grounding in number.
- In EYFS on 1 day a week they use Whiterose to provide teachings for shape, space and measure.
- There will be an appropriate level of challenge for all pupils.
- Manipulatives should be available for children to access.
- For children who are not working at the expected level for their age, teachers will provide targeted work to close gaps and ensure rapid progress
- Identify training needs for teachers and support staff (providing training for all the use of the CPA approach).
- Carry out subject monitoring through learning walks, pupil voice questionnaires and triangulation
- Support with planning to ensure consistency and challenge.



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Impact including assessment

- The following will be used to see the impact of the mathematics curriculum at Raunds Park Infants School:
- Termly White Rose Assessments with PIXL (3 times a year) to measure individual children's progress within each topic covered. This applies to years 1 and 2-previous SATs papers can be also used.
- EYFS continuously assesses using the EYFS framework as the children work towards GLD at the end of the year.
- KS 1 Teachers, use the end of topic assessments if they wish.
- Children to talk about mathematics positively
- Lessons to be varied and engaging
- Stem vocabulary is developed in each lesson
- Children are taught to answer in full sentences using precise vocabulary with the teachers support.



EYFS

In early years, mathematics is part of the continuous provision that is offered throughout the year and reflects learning laid out in Development Matters 2021.

By using the NCETM mastery number in EYFS it ensures all children gain a good understanding of number inline with the ELG.

Mathematics

Number ELG

Children at the expected level of development will:

- Have a deep understanding of number to 10, including the composition of each number;
- Subitise (recognise quantities without counting) up to 5;
- Automatically recall (without reference to rhymes, counting or other aids) number bonds up to 5 (including subtraction facts) and some number bonds to 10, including double facts.

Numerical Patterns ELG

Children at the expected level of development will:

- Verbally count beyond 20, recognising the pattern of the counting system;
- Compare quantities up to 10 in different contexts, recognising when one quantity is greater than, less than or the same as the other quantity;
- Explore and represent patterns within numbers up to 10, including evens and odds, double facts and how quantities can be distributed equally.



Mastering Number



This project aims to secure firm foundations in the development of good number sense for all children from Reception through to Year 1 and Year 2. The aim over time is that children will leave KS1 with fluency in calculation and a confidence and flexibility with number. Attention will be given to key knowledge and understanding needed in Reception classes, and progression through KS1 to support success in the future.

The role and purpose of the Mastering Number Programme

All children will:

- develop good number sense
- have automaticity in additive facts.

What does this look like at Raunds Park Infants?

EYFS and KS1 have specific timetabled 'mastering number' sessions, which are taught daily in addition to their daily maths lessons. The teachers across these classes have been part of the training programme delivered by the Maths Hubs, so staff have access to appropriate CPD, as well as resources.

Number sense is significant to our pupils and we want to support them as much as possible in developing this. Through using Mastering Number, our pupils are taught key skills, such as subitising and develop their composition of number. Stem sentences are used, which become familiar with children and enables them to engage in mathematical thinking. It provides opportunities for partner talk and to explain their reasoning.



Mastering Number

This is taught over 4 days at the start of every maths lesson. Day 5 may be used to revisit lessons if needed. (However at Raunds Park Infants in EYFS we use day five to teach shape, space and measure. Allowing for a well rounded maths curriculum.)

Throughout the lesson, teachers will use questioning to make sure children understand. The use of rekenreks and other manipulatives are used to support understanding in lessons where they support learning.

Teachers model STEM sentences and these are used so children can explain what they know in full sentences. i.e. 5 is more than 3

The lesson is made up of two parts:

Revisit – look at previous learning using key questions to make sure children understand and build on previous learning.

Teach and practise – teachers will have key resources and familiar representations for children to understand the learning.

Mastering Number: Overview of content – Reception

Subitising	Cardinality, ordinality and counting	Composition	Comparison
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Recognising numbers without counting.

Cardinality- the last number counted in a sequence i.e. the total when counting a group of objects.

Ordinality – each number is 1 more than the previous i.e. like on a number line.

Counting – counting objects by either pointing or moving objects.

Explore what numbers are made from.
i.e. all numbers are made of 1's or wholes and parts (number bonds).

Greater than
Less than
Equal to



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Strand/ Half-term	Subitising	Cardinality, ordinality and counting	Composition	Comparison
Autumn 1 Children will:	<ul style="list-style-type: none"> perceptually subitise within 3 identify sub-groups in larger arrangements create their own patterns for numbers within 4 practise using their fingers to represent quantities which they can subitise experience subitising in a range of contexts, including temporal patterns made by sounds. 	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> see that all numbers can be made of 1s compose their own collections within 4. 	<ul style="list-style-type: none"> understand that sets can be compared according to a range of attributes, including by their numerosity use the language of comparison, including 'more than' and 'fewer than' compare sets 'just by looking'.



Strand/ Half-term	Subitising	Cardinality, ordinality and counting	Composition	Comparison
Autumn 2 Children will:	<ul style="list-style-type: none"> continue from first half-term subitise within 5, perceptually and conceptually, depending on the arrangements. 	<ul style="list-style-type: none"> continue to develop their counting skills explore the cardinality of 5, linking this to dice patterns and 5 fingers on 1 hand begin to count beyond 5 begin to recognise numerals, relating these to quantities they can subitise and count. 	<ul style="list-style-type: none"> explore the concept of 'wholes' and 'parts' by looking at a range of objects that are composed of parts, some of which can be taken apart and some of which cannot explore the composition of numbers within 5. 	<ul style="list-style-type: none"> compare sets using a variety of strategies, including 'just by looking', by subitising and by matching compare sets by matching, seeing that when every object in a set can be matched to one in the other set, they contain the same number and are equal amounts.



Strand/ Half-term	Subitising	Cardinality, ordinality and counting	Composition	Comparison
Spring 1 Children will:	<ul style="list-style-type: none"> increase confidence in subitising by continuing to explore patterns within 5, including structured and random arrangements explore a range of patterns made by some numbers greater than 5, including structured patterns in which 5 is a clear part experience patterns which show a small group and '1 more' continue to match arrangements to finger patterns. 	<ul style="list-style-type: none"> continue to develop verbal counting to 20 and beyond continue to develop object counting skills, using a range of strategies to develop accuracy continue to link counting to cardinality, including using their fingers to represent quantities between 5 and 10 order numbers, linking cardinal and ordinal representations of number. 	<ul style="list-style-type: none"> continue to explore the composition of 5 and practise recalling 'missing' or 'hidden' parts for 5 explore the composition of 6, linking this to familiar patterns, including symmetrical patterns begin to see that numbers within 10 can be composed of '5 and a bit'. 	<ul style="list-style-type: none"> continue to compare sets using the language of comparison, and play games which involve comparing sets continue to compare sets by matching, identifying when sets are equal explore ways of making unequal sets equal.



Strand/ Half-term	Subitising	Cardinality, ordinality and counting	Composition	Comparison
Spring 2 Children will:	<ul style="list-style-type: none"> explore symmetrical patterns, in which each side is a familiar pattern, linking this to 'doubles'. 	<ul style="list-style-type: none"> continue to consolidate their understanding of cardinality, working with larger numbers within 10 become more familiar with the counting pattern beyond 20. 	<ul style="list-style-type: none"> explore the composition of odd and even numbers, looking at the 'shape' of these numbers begin to link even numbers to doubles begin to explore the composition of numbers within 10. 	<ul style="list-style-type: none"> compare numbers, reasoning about which is more, using both an understanding of the 'howmanyness' of a number, and its position in the number system.



Mastering Number: Overview of content – Reception

Strand/ Half-term	Subitising	Cardinality, ordinality and counting	Composition	Comparison
Summer 1 Children will:	<ul style="list-style-type: none"> continue to practise increasingly familiar subitising arrangements, including those which expose '1 more' or 'doubles' patterns use subitising skills to enable them to identify when patterns show the same number but in a different arrangement, or when patterns are similar but have a different number subitise structured and unstructured patterns, including those which show numbers within 10, in relation to 5 and 10 be encouraged to identify when it is appropriate to count and when groups can be subitised. 	<ul style="list-style-type: none"> continue to develop verbal counting to 20 and beyond, including counting from different starting numbers continue to develop confidence and accuracy in both verbal and object counting. 	<ul style="list-style-type: none"> explore the composition of 10. 	<ul style="list-style-type: none"> order sets of objects, linking this to their understanding of the ordinal number system.
Summer 2	In this half-term, the children will consolidate their understanding of concepts previously taught through working in a variety of contexts and with different numbers.			



White Rose

Shape Space and Measure

We are using White Rose to supplement the shape space and measure aspect of the EYFS.

Autumn



Week 1	Week 2	Week 3		Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Getting to Know You Opportunities for settling in, introducing the areas of provision and getting to know the children.			Measure, Shape and Spatial Thinking	Compare Size, Mass & Capacity Exploring Pattern			Circles and Triangles Positional Language			Shapes with 4 Sides. Time		

Spring



	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9
Measure, Shape and Spatial Thinking	Compare Mass (2) Compare Capacity (2)			Length & Height Time			3d-shapes Patterns		

Summer



	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Spatial Thinking	Spatial Reasoning (1) Match, Rotate, Manipulate			Spatial Reasoning (2) Compose and Decompose			Spatial Reasoning (3) Visualise and Build			Spatial Reasoning (4) Mapping		



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EYFS

Reception Maths Plan 22-23						
	Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
Week 1	Getting to know you	6	13	19	24	30 <i>Understanding Number Patterns</i>
Week 2		7	14	20	25	31 <i>Understanding Recall</i>
Week 3	1	8	15	21	26 <i>Roksnok</i>	Focus based on assessment
Week 4	2	9	16	22	27 <i>Understanding number to 10</i>	Focus based on assessment
Week 5	3	10	17	23	28 <i>Understanding Counting</i>	Focus based on assessment
Week 6	4	11	18	24	29 <i>Understanding Comparison</i>	Focus based on assessment
Week 7	5	12				Focus based on assessment
Friday focus	Pattern	Circles, Triangles & Shapes with 4 sides Revisit Pattern	Mass & Capacity Revisit 2d shape	Length & Height Revisit Mass & Capacity	3d shapes Revisit Length & Height	Match, rotate and manipulate Revisit 3d shape
Assessment Lessons against ELGs						
Schemes used:						
Number & Numerical Patterns (ELG) - Use 'Mastering Number' scheme which includes: Subitising, Cardinality, Ordinality and Counting, Composition, Comparison.						
Shape, Spatial Reasoning and Measure (Breadth & prepare for KS1) - Use 'White Rose' scheme: ('I see maths' - excellent for progression in pattern)						
Timetable:						
Mon-Thurs: Sessions 1-4 Mastering Number (or Tues-Fri if 4 day week)						
Fri: Focus on Shape, Spatial Reasoning & Measure (1 new learning per term & re-visit previous term's learning)						

Year 1

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Autumn term	<div>Number</div> <div>Place value (within 10)</div> <div>VIEW</div>					<div>Number</div> <div>Addition and subtraction (within 10)</div> <div>VIEW</div>				<div>Geometry Shape</div> <div>VIEW</div>	<div>Consolidation</div>	
Spring term	<div>Number</div> <div>Place value (within 20)</div> <div>VIEW</div>		<div>Number</div> <div>Addition and subtraction (within 20)</div> <div>VIEW</div>			<div>Number</div> <div>Place value (within 50)</div> <div>VIEW</div>		<div>Measurement</div> <div>Length and height</div> <div>VIEW</div>	<div>Measurement</div> <div>Mass and volume</div> <div>VIEW</div>			
Summer term	<div>Number</div> <div>Multiplication and division</div> <div>VIEW</div>		<div>Number</div> <div>Fractions</div> <div>VIEW</div>		<div>Geometry Position and direction</div> <div>VIEW</div>	<div>Number</div> <div>Place value (within 100)</div> <div>VIEW</div>		<div>Measurement Money</div> <div>VIEW</div>	<div>Measurement</div> <div>Time</div> <div>VIEW</div>		<div>Consolidation</div>	



Autumn Term

Number

Place value
(within 10)

[VIEW](#)

Step 1 Sort objects

Step 2 Count objects

Step 3 Count objects from a larger group

Step 4 Represent objects

Step 5 Recognise numbers as words

Step 6 Count on from any number

Step 7 1 more

Step 8 Count backwards within 10

Step 9 1 less

Step 10 Compare groups by matching

Step 11 Fewer, more, same

Step 12 Less than, greater than, equal to

Step 13 Compare numbers

Step 14 Order objects and numbers

Step 15 The number line

Number

Addition and subtraction
(within 10)

[VIEW](#)

Step 1 Introduce parts and wholes

Step 2 Part-whole model

Step 3 Write number sentences

Step 4 Fact families - addition facts

Step 5 Number bonds within 10

Step 6 Systematic number bonds within 10

Step 7 Number bonds to 10

Step 8 Addition - add together

Step 9 Addition - add more

Step 10 Addition problems

Step 11 Find a part

Step 12 Subtraction - find a part

Step 13 Fact families - the eight facts

Step 14 Subtraction - take away/cross out (How many left?)

Step 15 Subtraction - take away (How many left?)

Step 16 Subtraction on a number line

Step 17 Add or subtract 1 or 2

[VIEW](#)

Geometry
Shape

Step 1 Recognise and name 3-D shapes

Step 2 Sort 3-D shapes

Step 3 Recognise and name 2-D shapes

Step 4 Sort 2-D shapes

Step 5 Patterns with 2-D and 3-D shapes



Spring Term

Number

Place value
(within 20)

[VIEW](#)

Number

Addition and subtraction
(within 20)

[VIEW](#)

Number

Place value
(within 50)

[VIEW](#)

Measurement

Length and height

[VIEW](#)

Measurement

Mass and volume

[VIEW](#)

Step 1 Count within 20

Step 2 Understand 10

Step 3 Understand 11, 12 and 13

Step 4 Understand 14, 15 and 16

Step 5 Understand 17, 18 and 19

Step 6 Understand 20

Step 7 1 more and 1 less

Step 8 The number line to 20

Step 9 Use a number line to 20

Step 10 Estimate on a number line to 20

Step 11 Compare numbers to 20

Step 12 Order numbers to 20

Step 1 Add by counting on within 20

Step 2 Add ones using number bonds

Step 3 Find and make number bonds to 20

Step 4 Doubles

Step 5 Near doubles

Step 6 Subtract ones using number bonds

Step 7 Subtraction – counting back

Step 8 Subtraction – finding the difference

Step 9 Related facts

Step 10 Missing number problems

Step 1 Count from 20 to 50

Step 2 20, 30, 40 and 50

Step 3 Count by making groups of tens

Step 4 Groups of tens and ones

Step 5 Partition into tens and ones

Step 6 The number line to 50

Step 7 Estimate on a number line to 50

Step 8 1 more, 1 less

Step 1 Compare lengths and heights

Step 2 Measure length using objects

Step 3 Measure length in centimetres

Step 1 Heavier and lighter

Step 2 Measure mass

Step 3 Compare mass

Step 4 Full and empty

Step 5 Compare volume

Step 6 Measure capacity

Step 7 Compare capacity



Summer Term 1

Number

Multiplication and division

[VIEW](#)

Step 1 Count in 2s

Step 2 Count in 10s

Step 3 Count in 5s

Step 4 Recognise equal groups

Step 5 Add equal groups

Step 6 Make arrays

Step 7 Make doubles

Step 8 Make equal groups – grouping

Step 9 Make equal groups – sharing

Number

Fractions

[VIEW](#)

Step 1 Recognise a half of an object or a shape

Step 2 Find a half of an object or a shape

Step 3 Recognise a half of a quantity

Step 4 Find a half of a quantity

Step 5 Recognise a quarter of an object or a shape

Step 6 Find a quarter of an object or a shape

Step 7 Recognise a quarter of a quantity

Geometry
Position and direction

[VIEW](#)

Step 1 Describe turns

Step 2 Describe position – left and right

Step 3 Describe position – forwards and backwards

Step 4 Describe position – above and below

Step 5 Ordinal numbers



Summer Term 2

Number

Place value
(within 100)

[VIEW](#)

Step 1 Count from 50 to 100

Step 2 Tens to 100

Step 3 Partition into tens and ones

Step 4 The number line to 100

Step 5 1 more, 1 less

Step 6 Compare numbers with the same number of tens

Step 7 Compare any two numbers

Measurement
Money

[VIEW](#)

Step 1 Unitising

Step 2 Recognise coins

Step 3 Recognise notes

Step 4 Count in coins

Measurement

Time

[VIEW](#)

Consolidation

Step 1 Before and after

Step 2 Days of the week

Step 3 Months of the year

Step 4 Hours, minutes and seconds

Step 5 Tell the time to the hour

Step 6 Tell the time to the half hour



Year 2

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Autumn term	<div>Number</div> <div>Place value</div> <div>VIEW</div>				<div>Number</div> <div>Addition and subtraction</div> <div>VIEW</div>				<div>Geometry</div> <div>Shape</div> <div>VIEW</div>			
Spring term	<div>Measurement</div> <div>Money</div> <div>VIEW</div>	<div>Number</div> <div>Multiplication and division</div> <div>VIEW</div>				<div>Measurement</div> <div>Length and height</div> <div>VIEW</div>	<div>Measurement</div> <div>Mass, capacity and temperature</div> <div>VIEW</div>					
Summer term	<div>Number</div> <div>Fractions</div> <div>VIEW</div>			<div>Measurement</div> <div>Time</div> <div>VIEW</div>			<div>Statistics</div> <div>VIEW</div>		<div>Geometry</div> <div>Position and direction</div> <div>VIEW</div>		<div>Consolidation</div>	



Autumn Term

Autumn term

Number

Place value

[VIEW](#)

Step 1 Numbers to 20

Step 2 Count objects to 100 by making 10s

Step 3 Recognise tens and ones

Step 4 Use a place value chart

Step 5 Partition numbers to 100

Step 6 Write numbers to 100 in words

Step 7 Flexibly partition numbers to 100

Step 8 Write numbers to 100 in expanded form

Step 9 10s on the number line to 100

Step 10 10s and 1s on the number line to 100

Step 11 Estimate numbers on a number line

Step 12 Compare objects

Step 13 Compare numbers

Step 14 Order objects and numbers

Step 15 Count in 2s, 5s and 10s

Step 16 Count in 3s

Number

Addition and subtraction

[VIEW](#)

Step 1 Bonds to 10

Step 2 Fact families – addition and subtraction bonds within 20

Step 3 Related facts

Step 4 Bonds to 100 (tens)

Step 5 Add and subtract 1s

Step 6 Add by making 10

Step 7 Add three 1-digit numbers

Step 8 Add to the next 10

Step 9 Add across a 10

Step 10 Subtract across 10

Step 11 Subtract from a 10

Step 12 Subtract a 1-digit number from a 2-digit number (across a 10)

Step 13 10 more, 10 less

Step 14 Add and subtract 10s

Step 15 Add two 2-digit numbers (not across a 10)

Step 16 Add two 2-digit numbers (across a 10)

Step 17 Subtract two 2-digit numbers (not across a 10)

Step 18 Subtract two 2-digit numbers (across a 10)

Step 19 Mixed addition and subtraction

Step 20 Compare number sentences

Step 21 Missing number problems

Geometry

Shape

[VIEW](#)

Step 1 Recognise 2-D and 3-D shapes

Step 2 Count sides on 2-D shapes

Step 3 Count vertices on 2-D shapes

Step 4 Draw 2-D shapes

Step 5 Lines of symmetry on shapes

Step 6 Use lines of symmetry to complete shapes

Step 7 Sort 2-D shapes

Step 8 Count faces on 3-D shapes

Step 9 Count edges on 3-D shapes

Step 10 Count vertices on 3-D shapes

Step 11 Sort 3-D shapes

Step 12 Make patterns with 2-D and 3-D shapes

Spring Term

Spring term

Measurement

Money

[VIEW](#)

Step 1 Count money – pence

Step 2 Count money – pounds (notes and coins)

Step 3 Count money – pounds and pence

Step 4 Choose notes and coins

Step 5 Make the same amount

Step 6 Compare amounts of money

Step 7 Calculate with money

Step 8 Make a pound

Step 9 Find change

Step 10 Two-step problems

Number

Multiplication and division

[VIEW](#)

Step 1 Recognise equal groups

Step 2 Make equal groups

Step 3 Add equal groups

Step 4 Introduce the multiplication symbol

Step 5 Multiplication sentences

Step 6 Use arrays

Step 7 Make equal groups — grouping

Step 8 Make equal groups — sharing

Step 9 The 2 times-table

Step 10 Divide by 2

Step 11 Doubling and halving

Step 12 Odd and even numbers

Step 13 The 10 times-table

Step 14 Divide by 10

Step 15 The 5 times-table

Step 16 Divide by 5

Step 17 The 5 and 10 times-tables

Measurement

Length and height

[VIEW](#)

Step 1 Measure in centimetres

Step 2 Measure in metres

Step 3 Compare lengths and heights

Step 4 Order lengths and heights

Step 5 Four operations with lengths and heights

Measurement

Mass, capacity and temperature

[VIEW](#)

Step 1 Compare mass

Step 2 Measure in grams

Step 3 Measure in kilograms

Step 4 Four operations with mass

Step 5 Compare volume and capacity

Step 6 Measure in millilitres

Step 7 Measure in litres

Step 8 Four operations with volume and capacity

Step 9 Temperature



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Number

Fractions

VIEW

Step 1 Introduction to parts and whole

Step 2 Equal and unequal parts

Step 3 Recognise a half

Step 4 Find a half

Step 5 Recognise a quarter

Step 6 Find a quarter

Step 7 Recognise a third

Step 8 Find a third

Step 9 Find the whole

Step 10 Unit fractions

Step 11 Non-unit fractions

Step 12 Recognise the equivalence of a half and two quarters

Step 13 Recognise three-quarters

Step 14 Find three-quarters

Step 15 Count in fractions up to a whole

Measurement

Time

VIEW

Step 1 O'clock and half past

Step 2 Quarter past and quarter to

Step 3 Tell time past the hour

Step 4 Tell time to the hour

Step 5 Tell the time to 5 minutes

Step 6 Minutes in an hour

Step 7 Hours in a day

Statistics

VIEW

Step 1 Make tally charts

Step 2 Tables

Step 3 Block diagrams

Step 4 Draw pictograms (1-1)

Step 5 Interpret pictograms (1-1)

Step 6 Draw pictograms (2, 5 and 10)

Step 7 Interpret pictograms (2, 5 and 10)

Geometry

Position and direction

VIEW

Step 1 Language of position

Step 2 Describe movement

Step 3 Describe turns

Step 4 Describe movement and turns

Step 5 Shape patterns with turns



Supporting SEND

It is important that all of our pupils feel they can have a love of maths and access the curriculum. Therefore, for some pupils, scaffolds and resources (along with the CPA) approach within whole class learning is enough to support them. Group work and paired activities, where pupils can share their thoughts and reason, along with support from an adult is enough.

For some pupils, they may find it challenging to access the curriculum, due to them working below age related expectations. In these circumstances, additional measures are put into place to support them. Teachers need to look at the small steps relating to the learning in class but from previous year groups to see what is covered. That way, pupils can listen to input and key vocabulary but access questions based on their level.

What interventions can be used?

For working below ARE, they can access the 'Mastering Number' session done at the start of lessons 4 days a week. It is very representation and manipulative rich and this really support learning.

A good use of mathematical language along side teaching allows children to explain learning.

What do interventions look like?

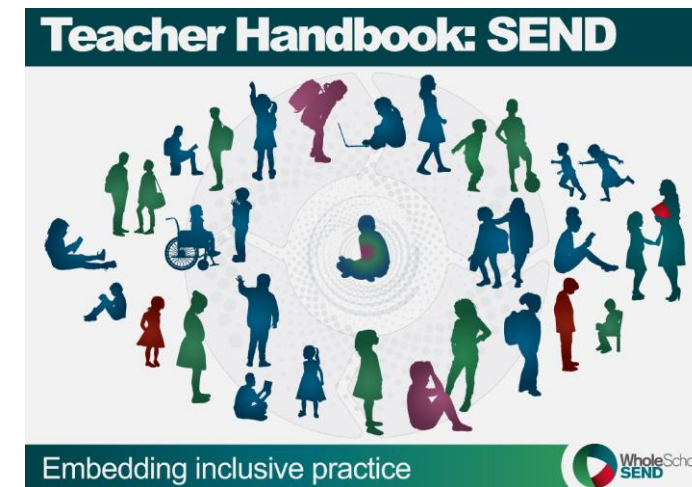
Interventions can happen during lessons. Teachers checking in to make sure children are on track with the learning. Children being supported during lessons on how to use manipulatives to gain and show understanding. Work may be adapted in lesson for children to access learning.

In EYFS during lessons children are assessed to see if they have grasped the learning. If not they create a rapid intervention for those children on the same day as much as possible.



- Where possible, the whole class should be working on the same material and tasks should not be differentiated, but instead increase in difficulty and depth. Learners will have increased self-esteem as they work on the same tasks as their peers, as well as a more secure understanding of a concept.
- Mastery includes the use of resources and representations to help learners see the structure of the maths; learners with SEND may require the support of these resources for a slightly longer period but should be scaffolded to develop independence in engaging with the mathematics without the resource.
- Before a concept is introduced to the whole class, take time to familiarise chosen learners with new vocabulary and its meaning. This will give those learners greater confidence, as they feel confident when this same idea is introduced to the whole class.
- Maths lessons should not be silent.
- It is good to encourage this productive discussion during lessons.
- Scaffolding such as sentence frames, visual support and/or peer partners.

This is taken from



All lessons where possible should include these aspects. If we are teaching to SEND then we are teaching to all.



CPD Opportunities

What CPD opportunities were there in 2021 – 2022?

- 3 teachers accessed the 'NCETM Mastering Number programme' course, which involved online training and support through the year
- The maths lead was part of the Maths Hub
- Maths lead support through Trust training

What CPD opportunities are there for 2022- 2023?

- Maths Improvement Team – Trust has appointed someone to work with each school within the Trust. Lee, who has been appointed, will come into Raunds Park Infants and will work with us to develop maths appropriate to our school.
- All teachers are accessing 'the Mastering Number programme', including an ECT and supported with the Maths lead.
- Maths Hub – Primary Teaching for Mastery Sustaining programme
- White Rose has guidance for teachers to have CPD before each unit they teach.
- Modelled lessons in Year 1 by Lee Coates.
- Staff meetings to support the use of Whiterose

