



Year 1 Maths Curriculum Meeting

Wednesday 5th October 2022



Primary Stars Maths

- * This year we have chosen to implement Primary Stars Maths as a programme of study across Year 1 and Year 2.
- * It follows White Rose Maths (a scheme designed to make maths accessible for all, regardless of skill or understanding) which is in line with the National Curriculum targets and objectives.
- * This scheme allows us to follow the mastery approach to teaching, which originates from Singapore. Singapore continues to rank amongst the highest in the world in maths due to this approach.
- * The main positives around this scheme is that it allows and encourages team work, problem solving, reasoning and important discussions around maths.



CPA

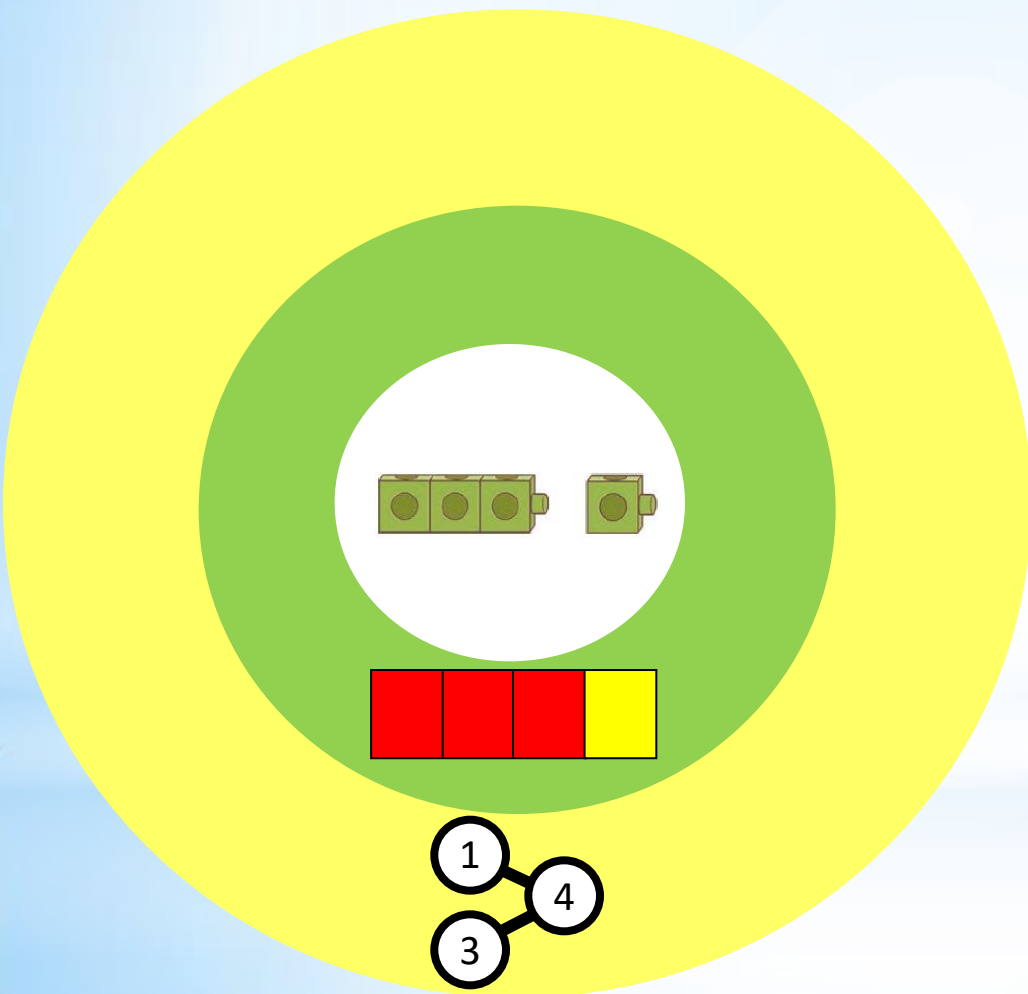
(Concrete, Pictorial and Abstract)

- * Most of all, this mathematical approach allows us to use CPA within each lesson. It should be recognised that all children have different learning styles.
- * We believe that all children are capable of achieving the same learning objectives and understanding within maths as long as they are given the correct tools and resources.





* The CPA approach



Concrete:

resources such as cubes, counters and shapes

Pictorial:

pictures, drawings

Abstract:

numbers and symbols

CPA in action



What will my child learn?

Topic Yearly Overview

Year 1 – Yearly Overview

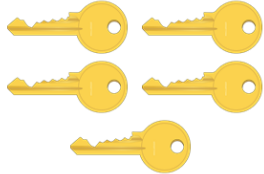
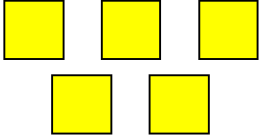
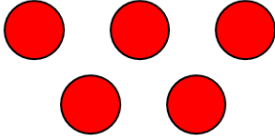
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Autumn	Number: Place Value (within 10)				Number: Addition and Subtraction (within 10)					Geometry: Shape	Number: Place Value (within 20)	
Spring	Consolidation	Number: Addition and Subtractions (within 20)			Number: Place Value (within 50)			Measurement: Length and Height		Measurement: Weight and Volume		Consolidation
Summer	Consolidation	Number: Multiplication and Division			Number: Fractions		Geometry: Position and Direction	Number: Place Value (within 100)		Measurement: Money	Measurement: Time	

Small steps for each lesson

White Rose Maths Small Steps		<ul style="list-style-type: none"> Sort objects. Count objects. Represent objects. Count, read & write forwards from any number 0-10. Count, read & write backwards from any number 0-10. Count one more. Count one less. One to one correspondence to start to compare groups. Compare groups using language such as equal, more/greater, less/fewer. Introduce =, > and < symbols. Compare numbers. Order groups of objects. Order numbers. Ordinal numbers (1st, 2nd, 3rd ...). The number line. 	<ul style="list-style-type: none"> Part whole model. Addition symbol. Fact families – Addition facts. Find number bonds for numbers within 10. Systematic methods for number bonds within 10. Number bonds to 10. Compare number bonds. Addition: Adding together. Addition: Adding more. Finding a part. Subtraction: Taking away, how many left? Crossing out. Subtraction: Taking away, how many left? Introducing the subtraction symbol. Subtraction: Finding a part, breaking apart. Fact families – 8 facts. Subtraction: Counting back. Subtraction: Finding the difference. Comparing addition and subtraction statements $a + b > c$. Comparing addition and subtraction statements $a + b > c + d$. 	<ul style="list-style-type: none"> Recognise & name 3D shapes. Sort 3D shapes. Recognise & name 2D shapes. Sort 2D shapes. Patterns with 3D & 2D shapes. 	<ul style="list-style-type: none"> Count forwards and backwards and write numbers to 20 in numerals and words. Numbers from 11 to 20. Tens and ones. Count one more and one less. Compare groups of objects. Compare numbers. Order groups of objects. Order numbers.
	National Curriculum Link	<ul style="list-style-type: none"> Count to ten, forwards and backwards, beginning with 0 or 1, or from any given number. Count, read and write numbers to 10 in numerals and words. Given a number, identify one more or one less. Identify and represent numbers using objects and pictorial representations including the number line, and use the language of: equal to, more than, less than (fewer), most, least. 	<ul style="list-style-type: none"> Represent and use number bonds and related subtraction facts within 10. Read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs. Add and subtract one digit numbers to 10, including zero. Solve one step problems that involve addition and subtraction, using concrete objects and pictorial representations and missing number problems. 	<ul style="list-style-type: none"> Recognise and name common 2-D shapes, including: (e.g. rectangles (including squares), circles and triangles). Recognise and name common 3-D shapes, including: (e.g. cuboids (including cubes), pyramids and spheres). 	<ul style="list-style-type: none"> Count to twenty, forwards and backwards, beginning with 0 or 1, from any given number. Count, read and write numbers to 20 in numerals and words. Given a number, identify one more or one less. Identify and represent numbers using objects and pictorial representations including the number line, and use the language of: equal to, more than, less than (fewer), most, least.
TAF Statements 2018 – 2019 onwards	WT	<ul style="list-style-type: none"> Read and write numbers in numerals (to 10). 	<ul style="list-style-type: none"> Add and subtract (one digit numbers) explaining their method verbally in pictures or using apparatus. Recall at least four of the six number bonds for 10 and reason about associated facts. 	<ul style="list-style-type: none"> Name some common 2D and 3D shapes from a group of shapes or from pictures of the shapes and describe some of their properties. 	<ul style="list-style-type: none"> Read and write numbers in numerals (to 20). Partition a two-digit number into tens and ones and demonstrate understanding of place value, though they may use structured resources to support them.
	WA	<ul style="list-style-type: none"> Read scales in divisions (of ones). 	<ul style="list-style-type: none"> Recall all the number bonds to and within 10. and use these to reason with. 	<ul style="list-style-type: none"> Name and describe properties of 2D and 3D shapes. 	<ul style="list-style-type: none"> Partition two digit numbers into different combinations of tens and ones, explaining their thinking verbally, in pictures or using apparatus.
	GD	<ul style="list-style-type: none"> Read scales where not all numbers on the scale are given and estimate points in between. Solve unfamiliar word problems that involves more than one step. Use reasoning about numbers and relationships to solve more complex problems and explain their thinking. 	<ul style="list-style-type: none"> Use reasoning about numbers and relationships to solve more complex problems and explain their thinking. Solve unfamiliar word problems that involves more than one step. 	<ul style="list-style-type: none"> Describe the similarities and differences of 2D and 3D shapes, using their properties. 	<ul style="list-style-type: none"> Use reasoning about numbers and relationships to solve more complex problems and explain their thinking. Solve unfamiliar word problems that involve more than one step.

Lesson Structure

Complete the table.

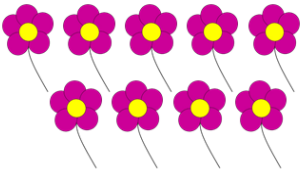
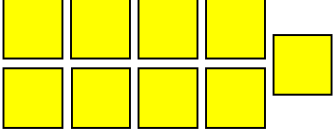
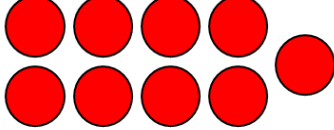
Picture 	Number 5
	Word Five
Draw it 	Show it (use counters) 

Fluency

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* Each lesson has a dedicated, child friendly PowerPoint that progressively builds upon a concept. This ensures a greater understanding. The children are encouraged to see numbers represented in many different ways.

Complete the tables.

Picture 	Number 9
	Word Nine
Draw it 	Show it (use counters) 

Fluency

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* The first part of the lesson focuses on basic fluency which is an essential skill for the children to have. This understanding ensures they can then apply their learning when problem solving and reasoning.

Fluency

- * Children will then move to their maths journals to complete a lesson related to the teaching PowerPoint. They will again initially focus on fluency as their task, which can be shown here.
- * Children can access this lesson objective using CPA, as we discussed earlier, whatever best suits their learning style. They are able to choose on a daily basis how they would like to learn.
- * We have an excellent standard of presentation within school and encourage children to consistently do this, this will help with place value in the future, placing numbers in the correct column.
- * Another focus is also number formation, which is practised throughout the beginning of Year 1.

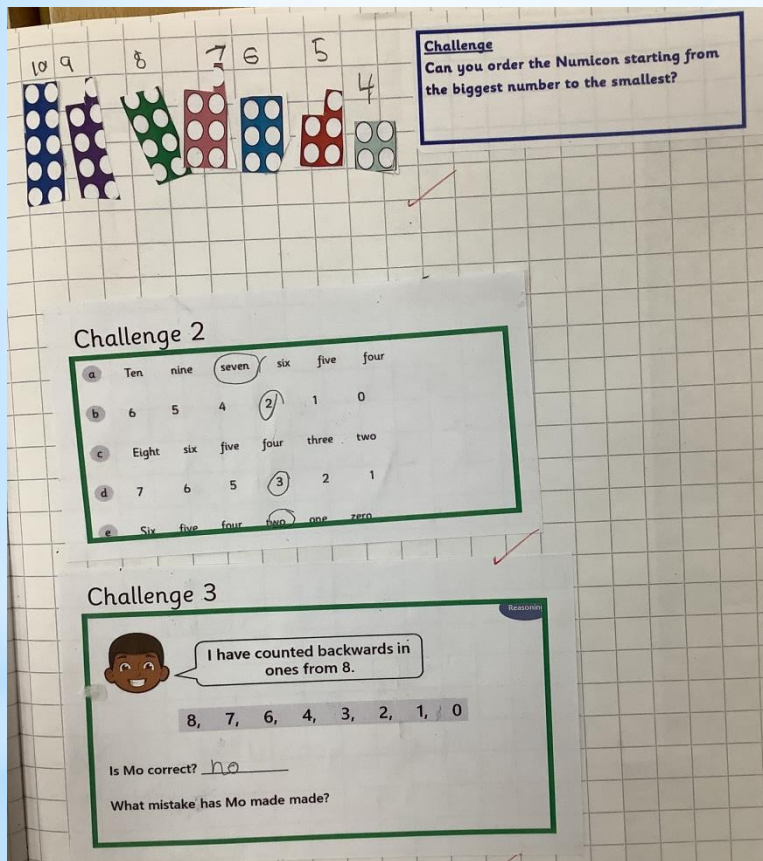
Number bonds to 10

1 2 . 9 . 2 2

Good ✓

	$5 + 5 = 10$
	$4 + 6 = 10$
	$8 + 2 = 10$
	$9 + 1 = 10$
	$3 + 7 = 10$

Problem solving and reasoning



Throughout the year children will be encouraged to explain WHY and answer in a sentence.

- * If a child excels within the fluency part of the lesson and is confident with the concept they have just learned, we will provide them with a problem solving and reasoning challenge.
- * This allows them to take the concept they have learned and explore it further using different skills and knowledge.
- * They enjoy talking and discussing different possibilities.
- * All children are exposed to challenges as we use them as a lesson plenary, to ensure that all children in class are accessing problem solving and reasoning. We clearly discuss different strategies and which one was the most efficient.

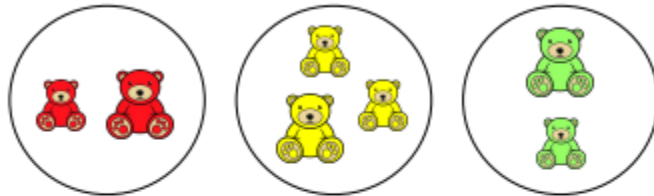
Assessment

Year 1 - Autumn - Place value (within 10)

ASSESSMENT

Name: _____ Date: _____

1 Tick (✓) to describe how the teddy bears have been sorted.



size

colour

number

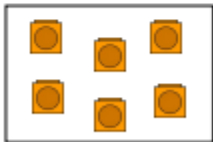


1 mark

2 Match the cubes to the correct amount.



6



9



8



2 marks

- * The first block of learning is place value with numbers to 10.
- * Children learn about numbers to 10 on a deeper level and start to understand methods that will help them accomplish trickier maths in the future. For example, when they know $3+7=10$, they will see the pattern of $30+70=100$ much easier.
- * Children will complete a pre-assessment before any teaching has taken place. This allows us to see the clear progress they have made after the teaching input.


Assessment Continued...

- * Children will then complete the same assessment again at the end of a block.
- * This allows us to see where each child has a strength and understanding, as well as some gaps that may need to be covered again and strengthened.
- * We are extremely fortunate to have a teaching assistant in each class throughout Year 1. They are able to pre-teach concepts, or work through a tricky concept with your child if it is clear they need an extra helping hand.
- * We may show them how to access the learning objective in a different way using concrete objects or pictures, to visually conceptualise a concept.

Year 1 - Autumn - Place value (within 10) **ASSESSMENT**

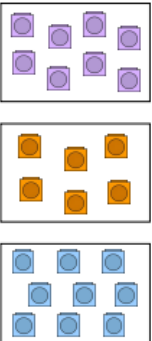
Name: _____ Date: _____

1 Tick (✓) to describe how the teddy bears have been sorted.



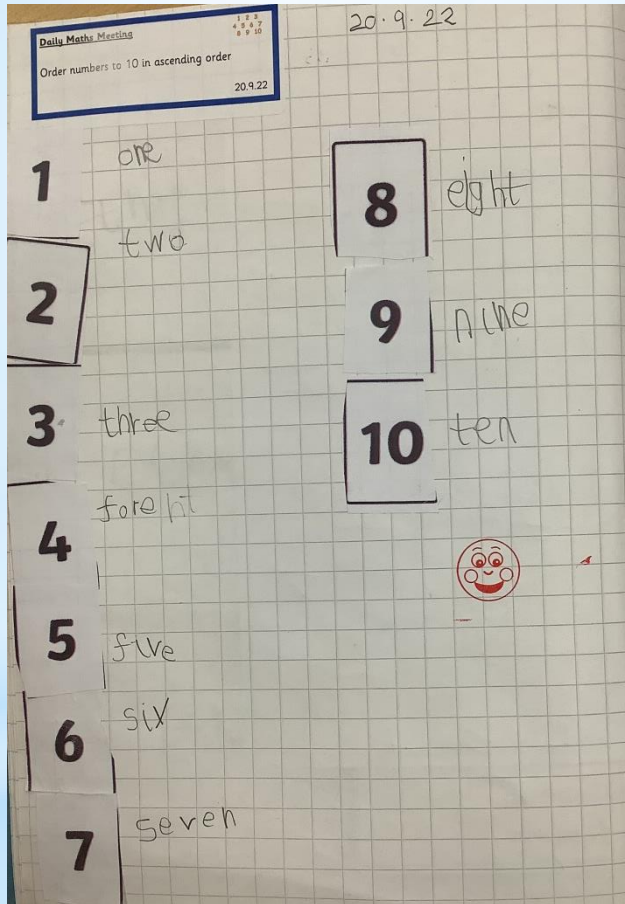
size colour number 1 mark

2 Match the cubes to the correct amount.



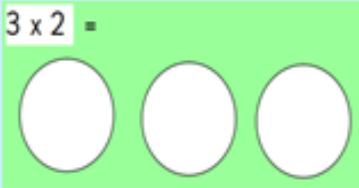


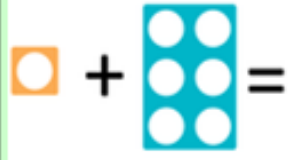
6 9 8 2 marks

Daily Maths Meetings



- * In addition to a daily maths lesson, we also teach a ‘daily maths meeting’.
- * As your child will be focusing on a different ‘block’ of learning over a period of weeks, for example; place value, we feel it is important to teach other basic skills to allow your child grasp many concepts.
- * We may focus on counting in 2’s, 5’s and 10’s or recapping different 2D and 3D shapes.
- * Here is an example of how they are presented in books.

Memory Joggers

Monday	
<p>Yesterday</p> <p>Counting in 2's</p> <p>2 4</p> <p>-----</p>	<p>Last week</p> <p>$3 \times 2 =$</p> 
<p>Different domain</p> <p>$23 +$</p>  <p>----- + ----- = -----</p>	<p>Last year</p>  <p>$=$</p>  <p>$=$</p>

* A huge focus from both Ofsted and the national curriculum is the 'long term memory'. Children are not expected to retain information if they have only been taught it once. It is important to revisit concepts so they may be embedded in their long term memory, allowing them to build upon each concept and explore it further.

* This is an example of what your child will complete. Something they have learned in Reception, something they learned yesterday, something they learned last week and finally another topic altogether.

Maths Across The Curriculum

What did we find out?



Material	Amount of liquid (ml)
paper	10ml
balloons	18ml
cloth	4ml
tin foil	2ml

I found out that the tin foil was the best material. I also think the balloons were the worst material because it had lots of air in.

* Where possible, we feel the need to link maths across the curriculum is an invaluable experience for children. This way, they can see how subjects are interlinked and have an important connection with one another.

Our predictions					Our results	
Large Funnel	Small Funnel	Funnel with sponge	Funnel with paper	Funnel with kitchen roll		
14s ✓	2m 35s	1m 30s	1m 35s	1m 32s	1	Large Funnel 14s
	X	X			2	Paper Funnel 1m35s
					3	Sponge Funnel 30s
					4	Kitchen Funnel 1m 35s
					5	Small Funnel 2m 35s

Which funnel do you think
Which funnel do you think

* Here is an example of how maths is used in Science to gather, analyse and compare data.

How can you help at home?

You can help your child by finding and talking about maths in everyday situations.

For example, a shopping trip is rich in mathematical opportunities, such as:













Spending money, calculating change and working out which offers give the best value for money.

Empty packaging can provide your child with immediate access to 3D shapes.

Counting in 2's, 5's and 10's to later support multiplication.

Asking what comes before and after a given number so children recognise place value in 2-digit numbers.

Toy Shop

	5p		7p
	8p		3p
	6p		2p
	1p		4p
	4p		3p
	5p		2p



- * Thank you for attending to understand how your child will access maths in our school.
- * We believe maths is a key subject in life that can open many gateways and experiences for your child throughout their life.
- * Teaching it is a passion for all teachers and we are proud to offer all children ways to learn that is best suited to them.
- * We as a staff appreciate the hard work you do as parents to make your children willing learners and participants!



*"will enable children
to reach their full potential"*

Any questions?