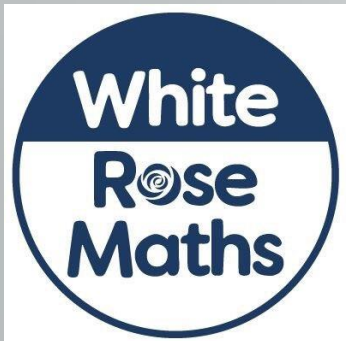
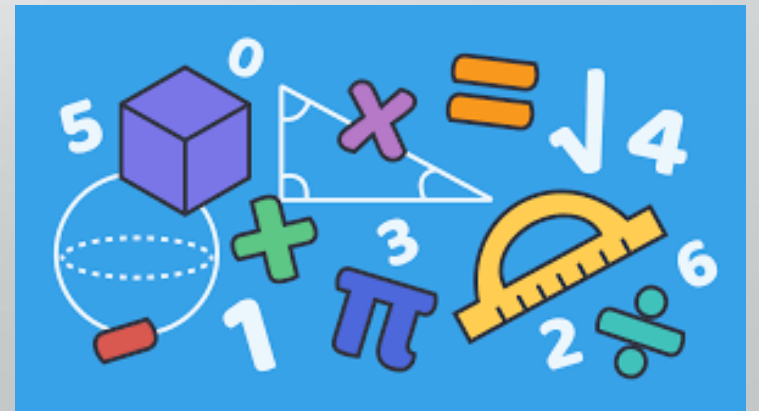




KS1 and EYFS maths workshop for parents

Wednesday 22nd October 2025

5.30pm



Aims for this session:

- To understand how we do maths at Southfield Park Primary.
- To feel confident to support your child with maths at home.

Attitudes to maths

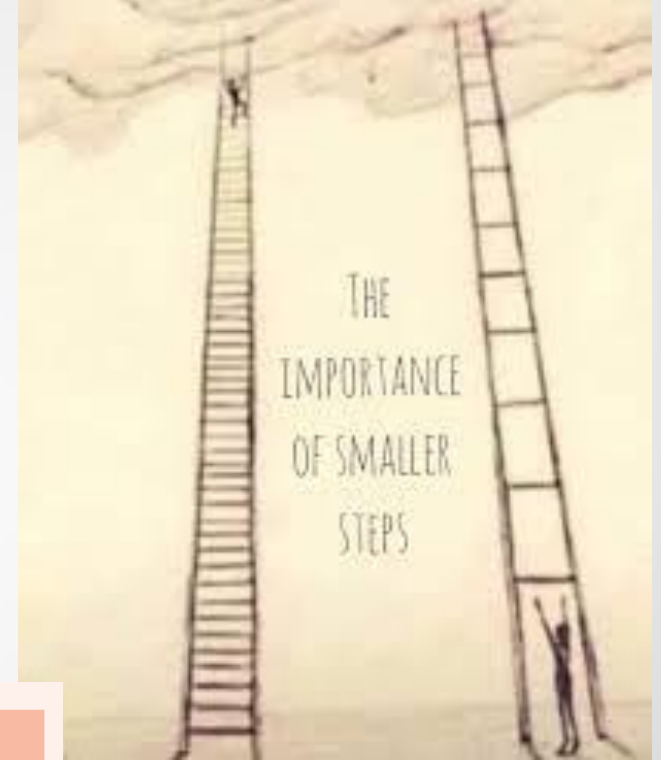
- There is a persistent misconception in our society that maths ability is 'fixed', and that some people (a minority) can 'do' maths and others can't – just about every teacher of maths will have heard a parent say something like: 'I'm not surprised X is struggling in maths, I was always rubbish at it myself'.
- Such parental attitudes can lead some children to feel that there's no point in engaging with learning maths because they are, innately, not a 'maths person'

Charlie Stripp MBE – Mathematical association



Small steps of progression

- In Southfield Park, we follow the White Rose Maths and the small steps of progression.



Year 1 | Autumn term | Block 1 - Place value

Small steps

- 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

Reception

	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	Getting to know you		Match, sort and compare FREE TRIAL VIEW	<i>Free trial</i> Talk about measure and patterns VIEW	It's me 1, 2, 3 VIEW		Circles and triangles VIEW		1, 2, 3, 4, 5 VIEW		Shapes with 4 sides VIEW	
Spring	Alive in 5 VIEW	Mass and capacity VIEW	Growing 6, 7, 8 VIEW	Length, height and time VIEW	Building 9 and 10 VIEW	Explore 3-D shapes VIEW						
Summer	To 20 and beyond VIEW	How many now? VIEW	Manipulate, compose and decompose VIEW	Sharing and grouping VIEW	Visualise, build and map VIEW	Make connections VIEW	Consolidation					

You will be able to see this overview on the White Rose maths website under the parents and home learning page.

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	<p>Number</p> <p>Place value (within 10) FREE TRIAL</p> <p>VIEW</p>					<p>Number</p> <p>Addition and subtraction (within 10)</p> <p>VIEW</p>					<p>Geometry Shape</p> <p>VIEW</p>	<p>Consolidation</p>
Spring	<p>Number</p> <p>Place value (within 20)</p> <p>VIEW</p>	<p>Number</p> <p>Addition and subtraction (within 20)</p> <p>VIEW</p>			<p>Number</p> <p>Place value (within 50)</p> <p>VIEW</p>	<p>Measurement</p> <p>Length and height</p> <p>VIEW</p>	<p>Measurement</p> <p>Mass and volume</p> <p>VIEW</p>					
Summer	<p>Number</p> <p>Multiplication and division</p> <p>VIEW</p>	<p>Number</p> <p>Fractions</p> <p>VIEW</p>	<p>Geometry Position and direction</p> <p>VIEW</p>	<p>Number</p> <p>Place value (within 100)</p> <p>VIEW</p>	<p>Measurement Money</p> <p>VIEW</p>	<p>Measurement</p> <p>Time</p> <p>VIEW</p>		<p>Consolidation</p>				

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	<p>Number</p> <hr/> <p>Place value</p> <p>FREE TRIAL</p> <p>VIEW</p>				<p>Number</p> <hr/> <p>Addition and subtraction</p> <p>VIEW</p>				<p>Geometry</p> <hr/> <p>Shape</p> <p>VIEW</p>			
Spring	<p>Measurement</p> <hr/> <p>Money</p> <p>VIEW</p>	<p>Number</p> <hr/> <p>Multiplication and division</p> <p>VIEW</p>				<p>Measurement</p> <hr/> <p>Length and height</p> <p>VIEW</p>	<p>Measurement</p> <hr/> <p>Mass, capacity and temperature</p> <p>VIEW</p>					
Summer	<p>Number</p> <hr/> <p>Fractions</p> <p>VIEW</p>			<p>Measurement</p> <hr/> <p>Time</p> <p>VIEW</p>	<p>Statistics</p> <p>VIEW</p>		<p>Geometry</p> <hr/> <p>Position and direction</p> <p>VIEW</p>	<p>Consolidation</p>				

Counting principles

Counting principles

01

THE ONE-ONE
PRINCIPLE

02

THE STABLE
ORDER
PRINCIPLE

03

THE CARDINAL
PRINCIPLE

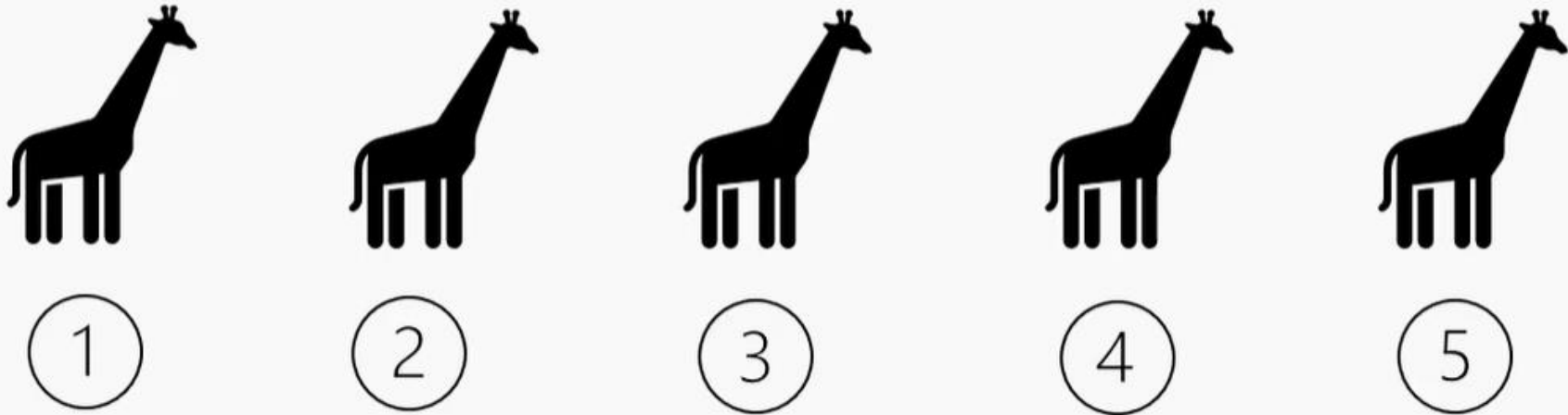
04

THE
ABSTRACTION
PRINCIPLE

05

THE ORDER-
IRRELEVANCE
PRINCIPLE

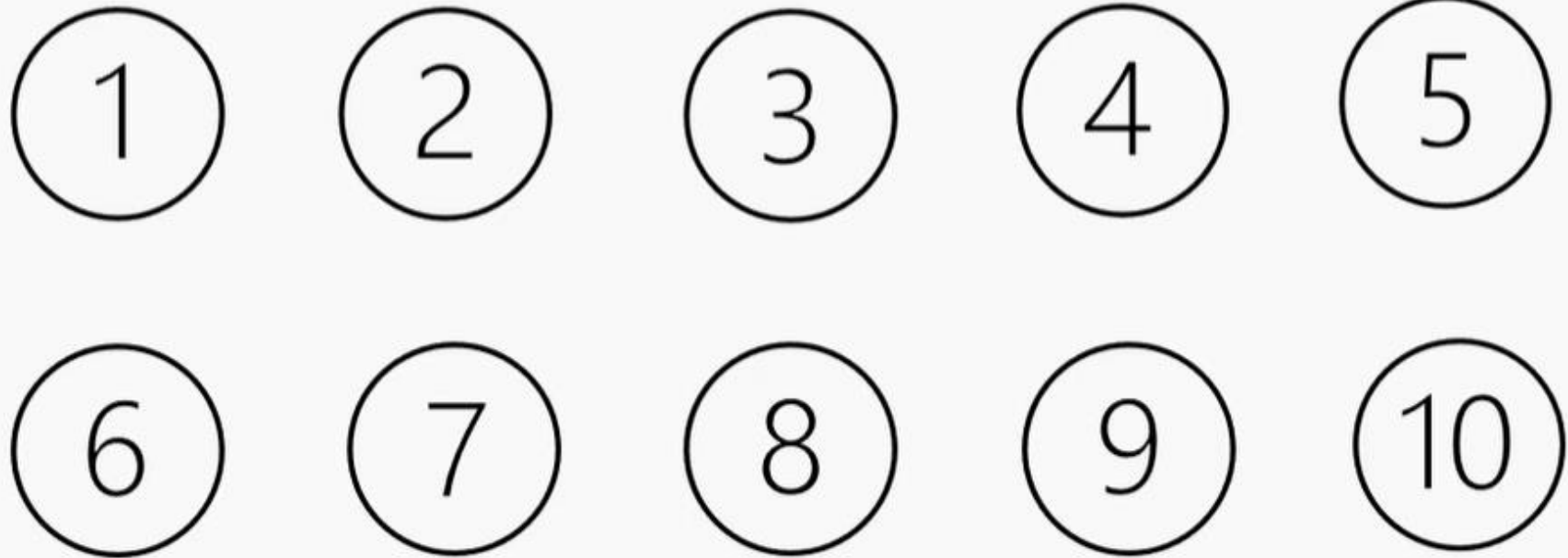
The one-one principle



1 The one-to-one principle.

This involves children assigning one number name to each object that is being counted. Children need to ensure that they count each object only once, ensuring they have counted every object.

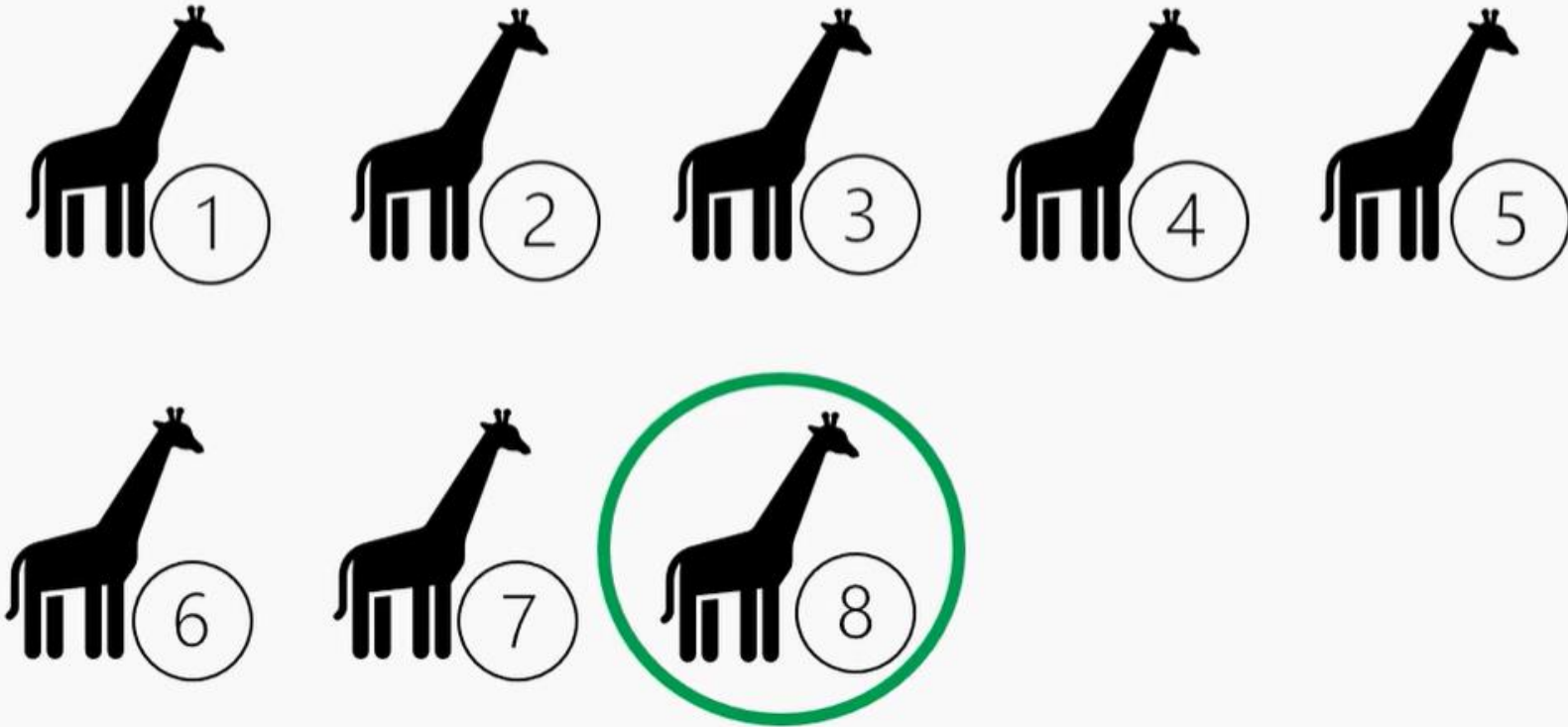
The stable order principle



2 The stable-order principle.

Children understand that, when counting, the numbers have to be said in a certain order.

The cardinal principle



3 The cardinal principle.

Children understand that the number name assigned to the final object in a group is the total number of objects in that group.

The abstraction principle



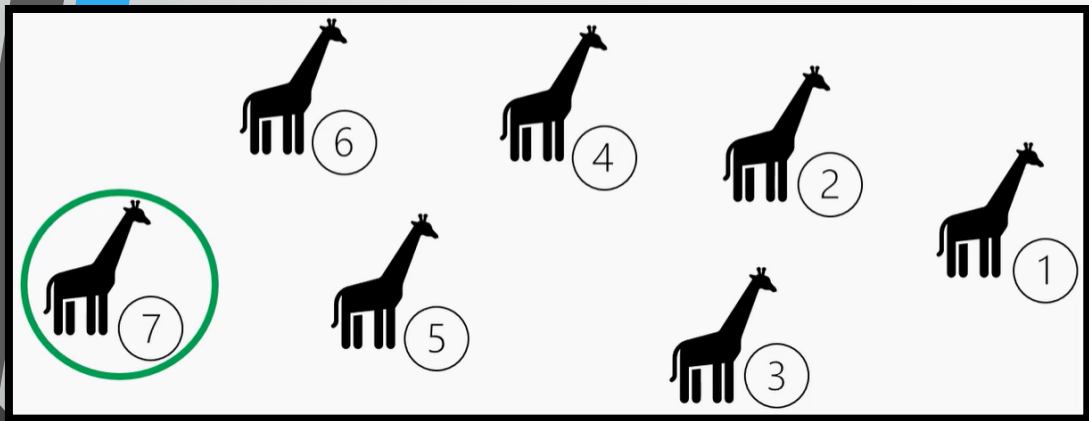
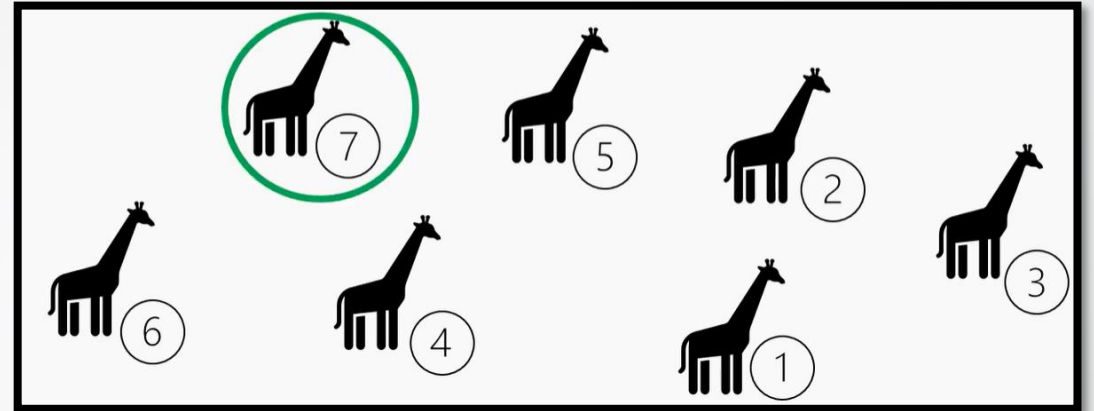
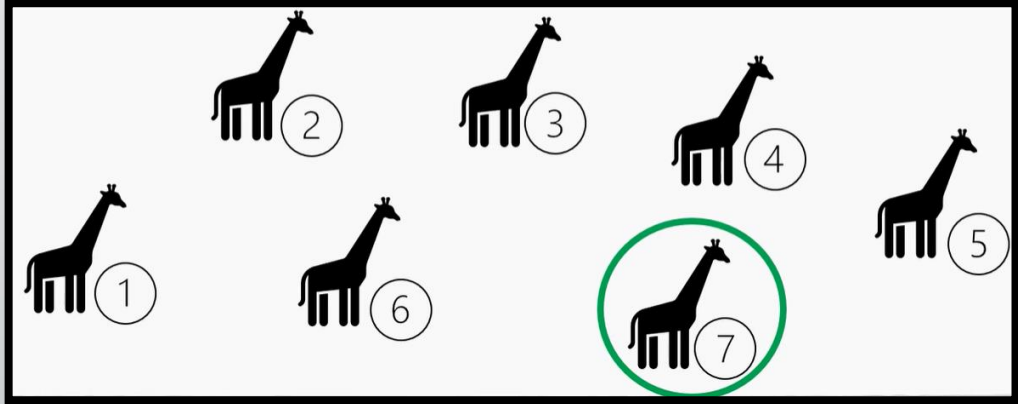
Clicks

4 The abstraction principle.

This involves children understanding that anything can be counted, including things that cannot be touched, such as sounds and movements e.g. jumps.

5

The order-irrelevance principle



5 The order-irrelevance principle.

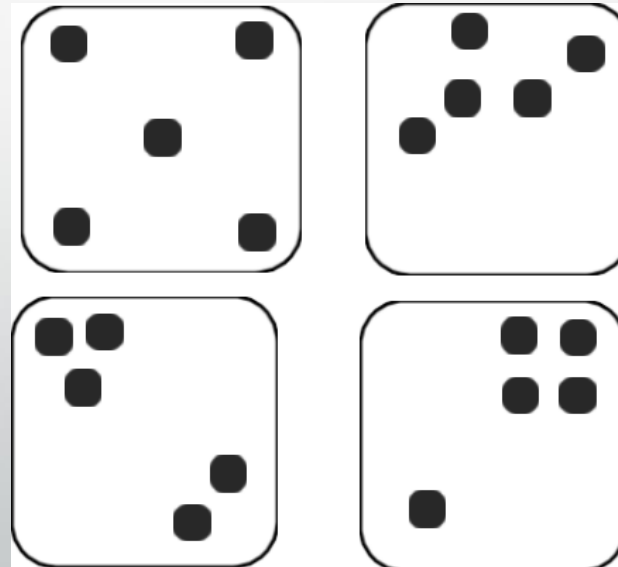
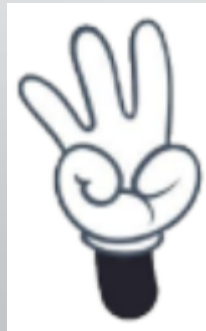
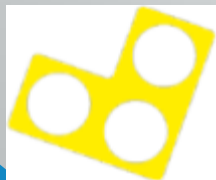
This involves children understanding that the order in which we count a group of objects is irrelevant. There will still be the same number.

Automaticity

AUTOMATICITY is the ability to effortlessly complete everyday tasks with low interference of other simultaneous activities and without conscious thought to step-by-step process.

- When children are fluent in their understanding of number bonds and times tables, it supports them to access the new concepts and methods more effectively.

Recognising numbers



Automaticity

- When children are fluent in their understanding of number bonds and times tables, it supports them to access the new concepts and methods more effectively.

Number bonds not just to 10

The chart displays number bonds for numbers 2 through 10. Each number is represented by a colored vertical bar. At the top of each bar is the number. Below the number is a hand gesture showing the number of fingers raised. Below the hand gesture is a list of addition equations that result in the number. The equations are listed in a grid format, with the first column always being $0 + \text{number} = \text{number}$.

2	3	4	5	6	7	8	9	10
$0 + 2 = 2$	$0 + 3 = 3$	$0 + 4 = 4$	$0 + 5 = 5$	$0 + 6 = 6$	$0 + 7 = 7$	$0 + 8 = 8$	$0 + 9 = 9$	$0 + 10 = 10$
$1 + 1 = 2$	$1 + 2 = 3$	$1 + 3 = 4$	$1 + 4 = 5$	$1 + 5 = 6$	$1 + 6 = 7$	$1 + 7 = 8$	$1 + 8 = 9$	$1 + 9 = 10$
$2 + 0 = 2$	$2 + 1 = 3$	$2 + 2 = 4$	$2 + 3 = 5$	$2 + 4 = 6$	$2 + 5 = 7$	$2 + 6 = 8$	$2 + 7 = 9$	$2 + 8 = 10$
	$3 + 0 = 3$	$3 + 1 = 4$	$3 + 2 = 5$	$3 + 3 = 6$	$3 + 4 = 7$	$3 + 5 = 8$	$3 + 6 = 9$	$3 + 7 = 10$
		$4 + 0 = 4$	$4 + 1 = 5$	$4 + 2 = 6$	$4 + 3 = 7$	$4 + 4 = 8$	$4 + 5 = 9$	$4 + 6 = 10$
			$5 + 0 = 5$	$5 + 1 = 6$	$5 + 2 = 7$	$5 + 3 = 8$	$5 + 4 = 9$	$5 + 5 = 10$
				$6 + 0 = 6$	$6 + 1 = 7$	$6 + 2 = 8$	$6 + 3 = 9$	$6 + 4 = 10$
					$7 + 0 = 7$	$7 + 1 = 8$	$7 + 2 = 9$	$7 + 3 = 10$
						$8 + 0 = 8$	$8 + 1 = 9$	$8 + 2 = 10$
							$9 + 0 = 9$	$9 + 1 = 10$
								$10 + 0 = 10$

Number Bonds

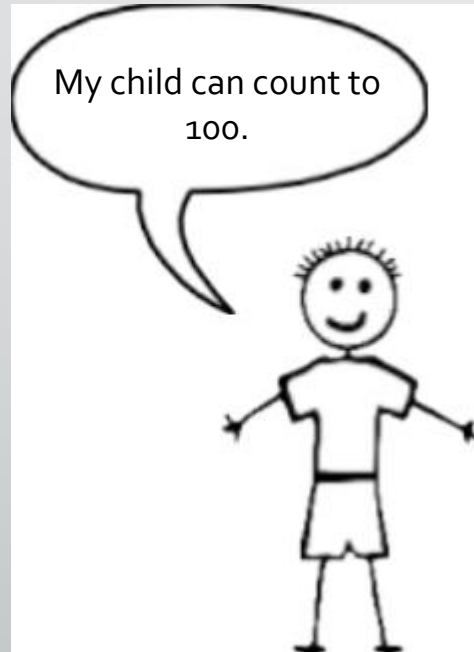
Automaticity

- When children are fluent in their understanding of number bonds and times tables, it supports them to access the new concepts and methods more effectively.

Times tables knowledge (year 2)

2 times table	5 times table	10 times table
0 x 2 = 0	0 x 5 = 0	0 x 10 = 0
1 x 2 = 2	1 x 5 = 5	1 x 10 = 10
2 x 2 = 4	2 x 5 = 10	2 x 10 = 20
3 x 2 = 6	3 x 5 = 15	3 x 10 = 30
4 x 2 = 8	4 x 5 = 20	4 x 10 = 40
5 x 2 = 10	5 x 5 = 25	5 x 10 = 50
6 x 2 = 12	6 x 5 = 30	6 x 10 = 60
7 x 2 = 14	7 x 5 = 35	7 x 10 = 70
8 x 2 = 16	8 x 5 = 40	8 x 10 = 80
9 x 2 = 18	9 x 5 = 45	9 x 10 = 90
10 x 2 = 20	10 x 5 = 50	10 x 10 = 100
11 x 2 = 22	11 x 5 = 55	11 x 10 = 110
12 x 2 = 24	12 x 5 = 60	12 x 10 = 120

Application of number



Alphabetland

The new number names are:

A, B, C, D,....

You must not translate these number names into banned number names one, two, three,

Can you count from A-Z?

Can you count from R-Z?

Can you count backwards from U?

Can you add D to H?

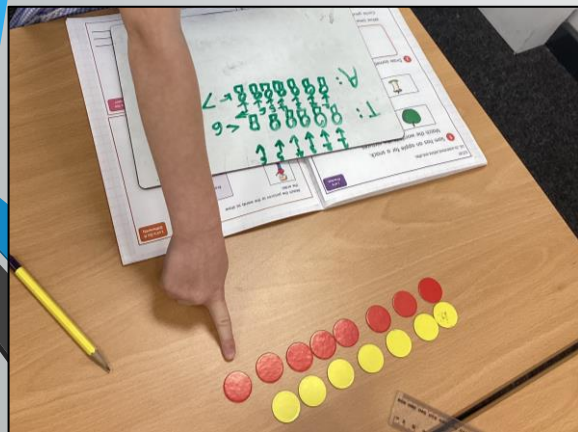
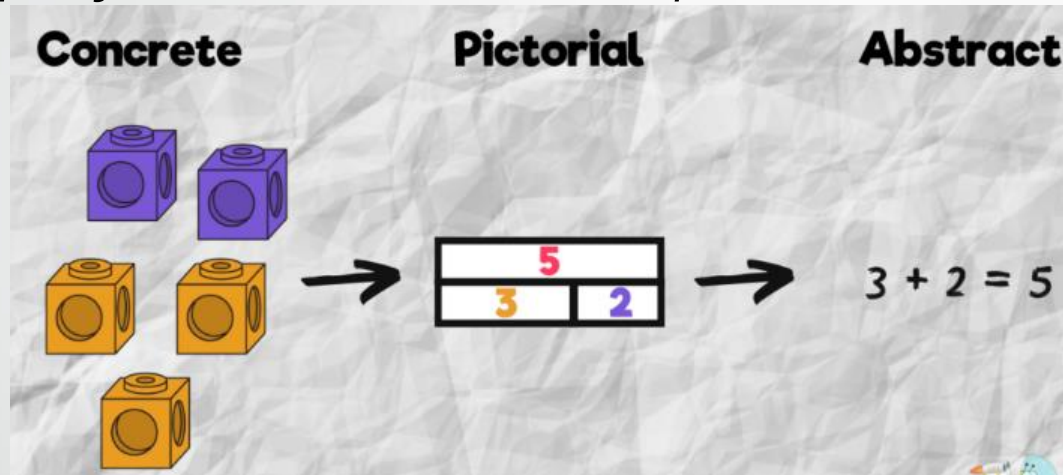
Can you subtract J from Y?

Children need to have a very deep understanding of number to be able to apply their knowledge of number into different contexts.

Concrete, pictorial and abstract

The concrete, pictorial and abstract approach is used in Southfield Park Primary School to secure your child's understanding and prepare them for real life.

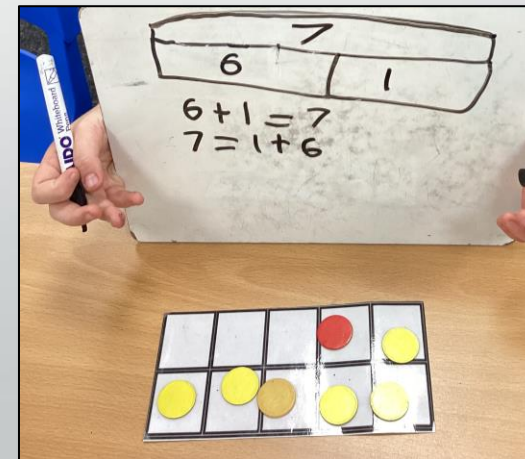
Here is an example of how we use the concrete, pictorial and abstract in our school.



Concrete



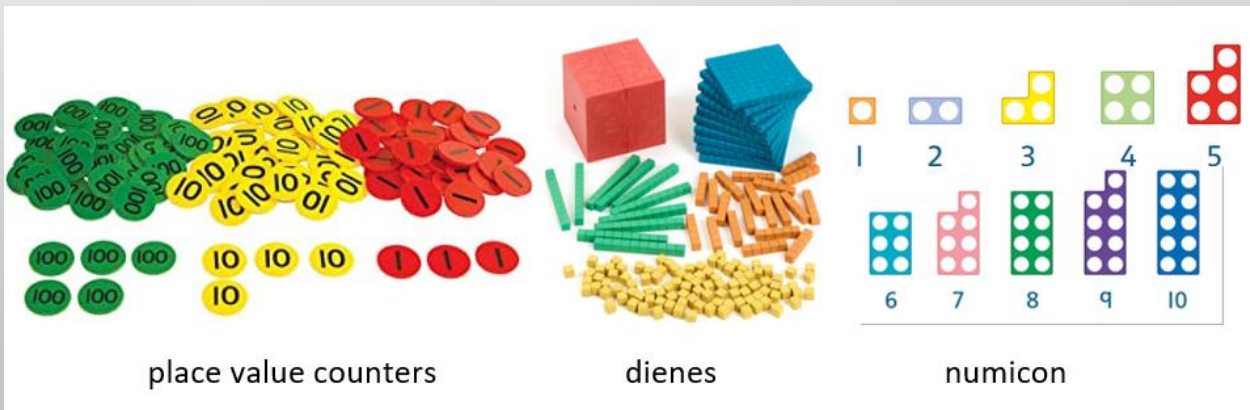
Pictorial



Abstract

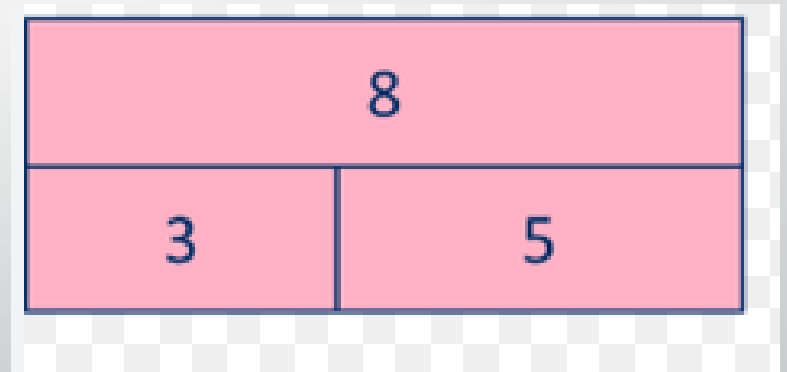
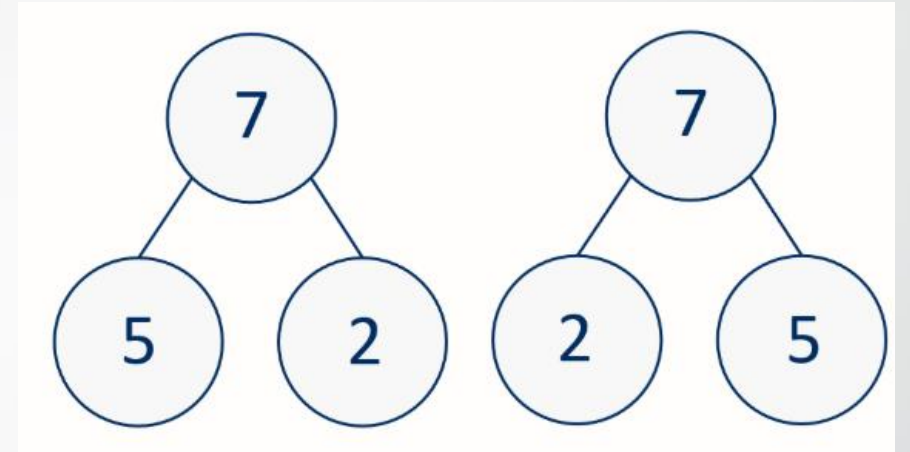
Concrete

- The Concrete stage encourages the use of manipulatives (physical resources) to physically show the process behind what is being taught.
- This can be as simple as using counters to represent numbers, allowing children to visualise the idea of more or less or comprehend what 3 (or any given number) actually is.
- All of the main mathematical operations can be introduced and explored in this way.



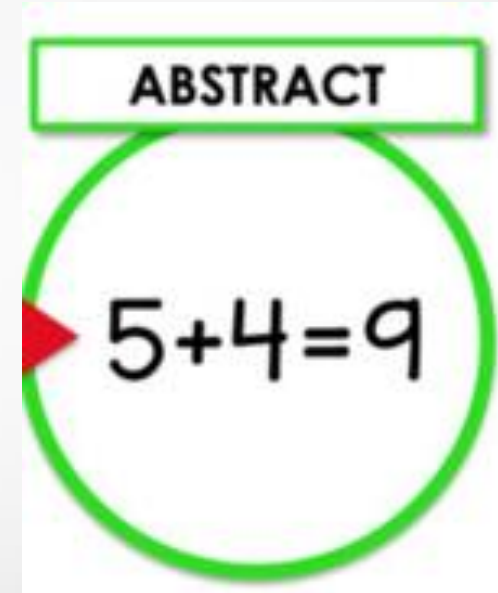
Pictorial

- Once secure with understanding at the concrete stage, pupils move on to pictorial based problem-solving and expression. Teachers move the children on from using physical resources onto pictorial resources.
- Pictorial support such as ten frames, bar models and part whole representations are used for pupils to show their understanding through answering questions using these visuals.
- The pictorial stage is essential for learners to consolidate and secure their understanding of topics. It bridges the gap between getting to grips with a concept (quite literally) and knowing how to combat more abstract ideas.



Abstract

- The abstract stage is when children face questions using numbers and symbols, or key vocabulary alone. For example, $2+3 = 5$
- At this stage, pupils are expected to have a depth of knowledge which can now be applied without the need for physical or visual support strategies.



Fluency, reasoning and problem solving

- Our lessons at Southfield Park involve fluency, reasoning and problem solving to deepen the children's understanding.

Fluency

Complete the sentences.



There are white bears.

There are brown bears.

There are bears altogether.

Fluency the ability to calculate accurately and efficiently, while also having the flexibility to choose the best strategy for a given problem

Reasoning

Kim is working out the missing number.

$$43 + 5 = 42 + \square$$



42 is 1 less than 43,
so the missing number must
be 1 more than 5

Use Kim's method to find the missing number.

Mathematical reasoning is the process of using logical thinking to solve problems, make connections, and justify conclusions

Problem Solving

Ron has 2 dogs and 3 cats.

How many pets does he have altogether?

Mathematical problem solving is the process of applying knowledge, logic, and reasoning to find a solution to a challenge that is not a routine exercise

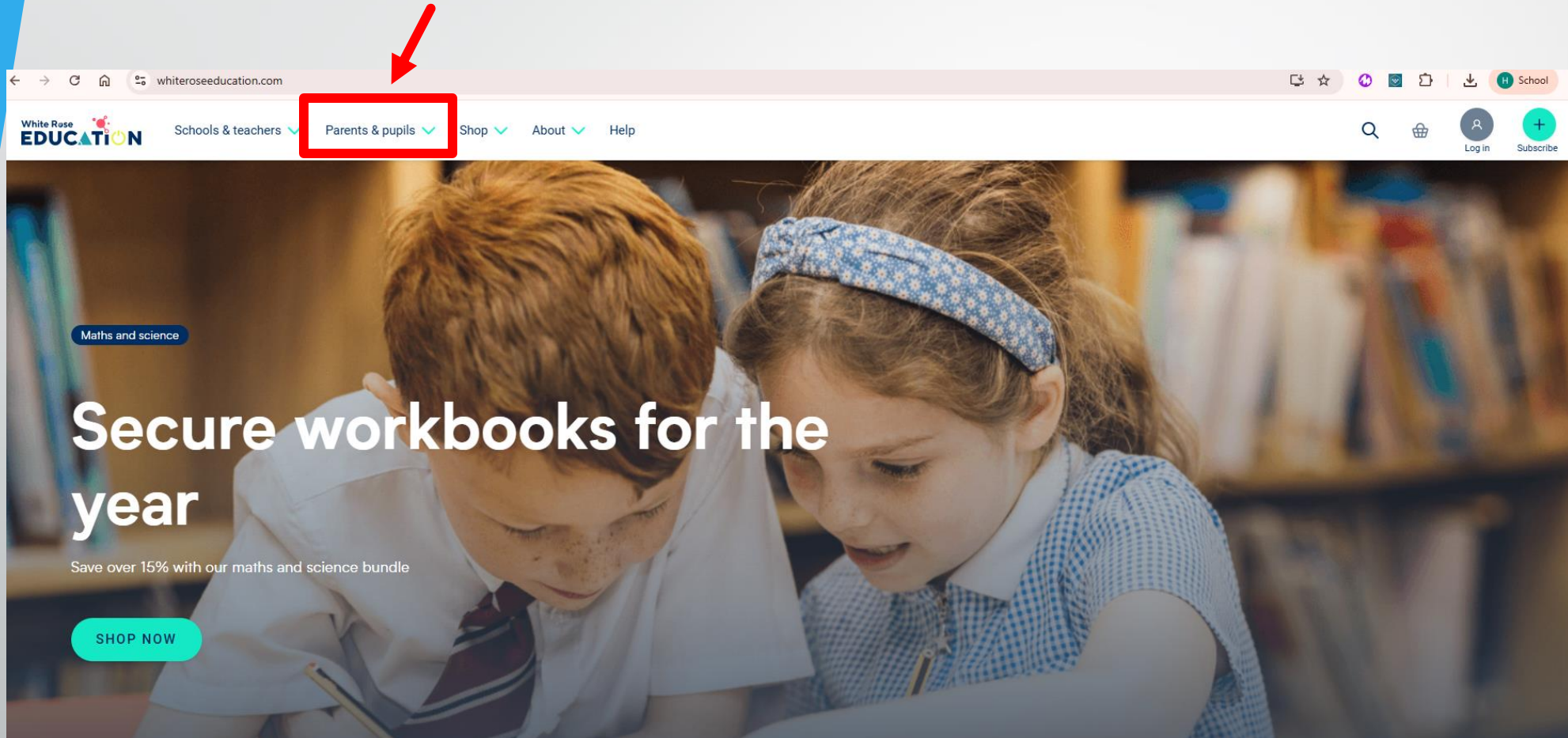
Vocabulary

Borrowing 

Carrying 

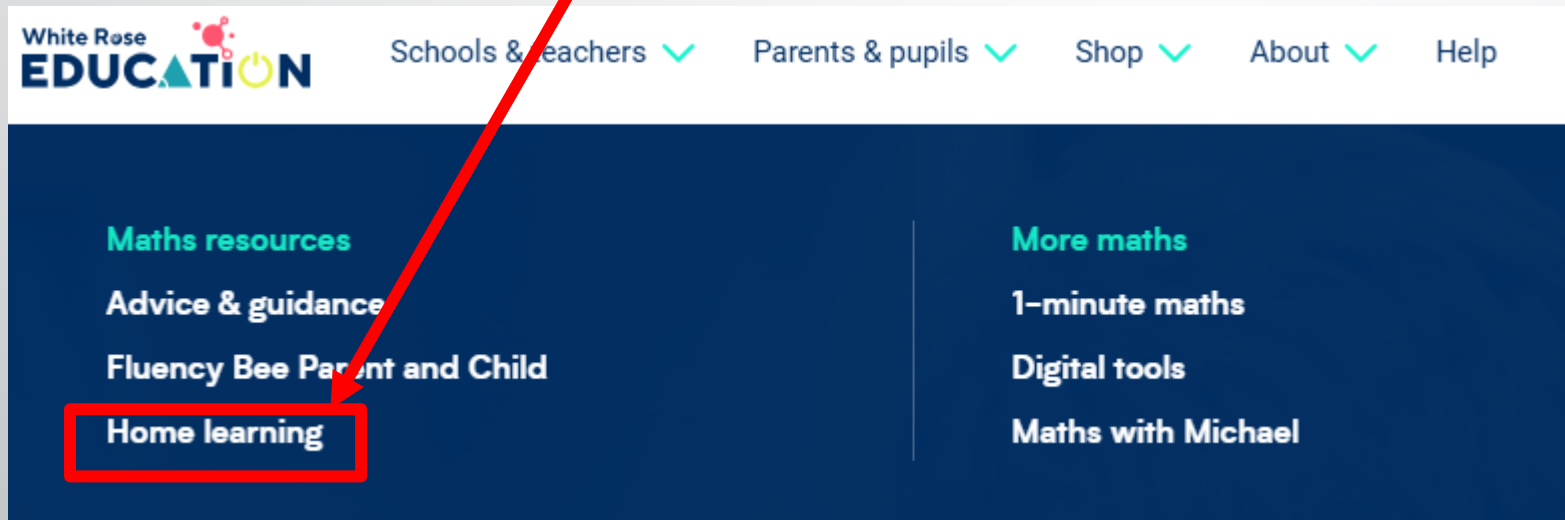
Exchanging

White Rose Maths videos to use at home



The image shows a screenshot of the White Rose Education website. The browser address bar displays "whiteroseeducation.com". The navigation menu includes "Schools & teachers", "Parents & pupils", "Shop", "About", and "Help". The "Parents & pupils" menu item is highlighted with a red box, and a red arrow points to it from above. The main content area features a banner with the text "Maths and science" in a blue pill-shaped button, followed by "Secure workbooks for the year" in large white font. Below this, it says "Save over 15% with our maths and science bundle" and a teal "SHOP NOW" button. The background of the banner shows two children, a boy and a girl, looking at a book together in a library setting.

White Rose Maths videos to use at home



The image shows a screenshot of the White Rose Education website's navigation menu. The menu is set against a dark blue background. At the top left is the White Rose Education logo. To the right of the logo are five main navigation items: 'Schools & teachers', 'Parents & pupils', 'Shop', 'About', and 'Help', each with a green downward-pointing chevron. Below these are two columns of sub-navigation items. The left column is titled 'Maths resources' and includes 'Advice & guidance', 'Fluency Bee Parent and Child', and 'Home learning'. The right column is titled 'More maths' and includes '1-minute maths', 'Digital tools', and 'Maths with Michael'. A red arrow points from the top of the page down to the 'Home learning' link, which is enclosed in a red rectangular box.

White Rose
EDUCATION

Schools & teachers ✓ Parents & pupils ✓ Shop ✓ About ✓ Help

Maths resources

- Advice & guidance
- Fluency Bee Parent and Child
- Home learning**

More maths

- 1-minute maths
- Digital tools
- Maths with Michael

White Rose Maths videos to use at home

White Rose EDUCATION Schools & teachers Parents & pupils Shop About Help

Home learning

All of our home learning lessons for early years through to Year 11 are available now. Every lesson comes with a short video showing you clearly and simply how to help your child complete the activity successfully.

SCHEME OF LEARNING

Year: Maths Year 1 (v3 schemes) Term: All FILTER

	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)									

Select your child's year group V3 means version 3.

- Maths Early Years
- Maths Year 1 (v3 schemes)
- Maths Year 2 (v3 schemes)
- Maths Year 3 (v3 schemes)
- Maths Year 4 (v3 schemes)
- Maths Year 5 (v3 schemes)
- Maths Year 6 (v3 schemes)
- Maths Year 7
- Maths Year 8
- Maths Year 9**
- Maths Year 10
- Maths Year 11
- Maths Year 1 (v2 schemes)
- Maths Year 2 (v2 schemes)
- Maths Year 3 (v2 schemes)
- Maths Year 4 (v2 schemes)
- Maths Year 5 (v2 schemes)
- Maths Year 6 (v2 schemes)

Term: All

White Rose Maths videos to use at home

Once you have selected your year group you may click filter

The screenshot shows the White Rose Maths website interface. At the top, there are two dropdown menus: 'Year' set to 'Maths Year 2 (v3 schemes)' and 'Term' set to 'All'. To the right of these is a teal 'FILTER' button, which is highlighted with a red square and a red arrow pointing to it from the text above. Below the filters is a grid of content cards for '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
Autumn	Number Place value VIEW			Number Addition and subtraction VIEW			Geometry Shape VIEW					
	Measurement	Number				Measurement	Measurement					

White Rose Maths videos to use at home

You may then select the unit they are currently on.
This will be clear by the term down the side and the weeks along the top.

The screenshot displays the White Rose Maths website interface. At the top, there are filters for 'Year' (set to 'Maths Year 2 (v3 schemes)') and 'Term' (set to 'All'), with a 'FILTER' button. Below the filters is a grid of video units. The grid is organized by week (Week 1 to Week 12) and term (Autumn). The units are:

	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 VIEW				Number Addition and subtraction VIEW					Geometry Shape VIEW		
	Measurement							Measurement		Measurement		

A red arrow points from the text above to the 'Shape' unit in Week 10, which is highlighted with a red box.

White Rose Maths videos to use at home

This will then show you a range of videos for each small step of the children's learning.

The screenshot shows a user interface for selecting educational videos. At the top, it is titled 'Shape' and 'Autumn'. Below this is an information box stating: 'These videos are intended to be used alongside the White Rose Education premium resources which may have been provided by your teacher.' A red arrow points from this text to a red-bordered box around the first video thumbnail. The thumbnail is titled 'RECOGNISE 2-D AND 3-D SHAPES' and has a duration of 13:43. To its right is another thumbnail titled 'COUNT SIDES ON 2-D SHAPES' with a duration of 07:37. Both thumbnails feature the White Rose Maths logo and a play button icon. Below the thumbnails, the titles 'Recognise 2-D and 3-D shapes' and 'Count sides on 2-D shapes' are visible. The interface also includes a close button (X) in the top right corner and a play button icon in the top left corner of the video area.

How can I support my child at home?

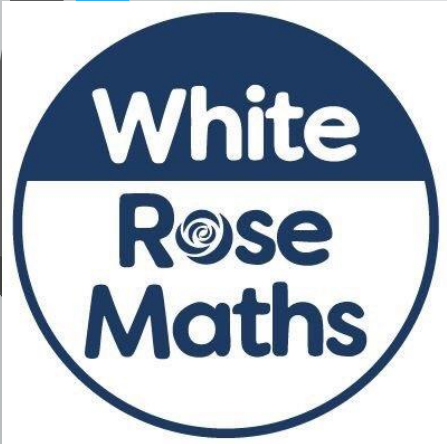


TTRS

- Numbots



White Rose Maths – Home learning videos on the parent area



Any questions?

