

Maths Success

Children at St Joseph's need to 'wear a path' in learning in order to retain the knowledge and skills that they need to be able to reason and solve problems. Maths is taught through the Concrete, Pictorial and Abstract Approach.

Concrete

The children will explore new mathematical skills and develop their maths fluency by using concrete resources. This will happen for children in all year groups to ensure that their deeper understanding is in place and they are not just learning a method.

Year 1 example: children will use a giant hundred square and counters to count forwards and backwards one or ten.

Year 5 example: children will use rectangles cut into the same sizes to draw examples of equivalent fractions.

Pictorial

The children will develop their understanding of skills by looking at pictorial representations. E.g. Rather than having a place value grid with counters representing a number on, the children will look at a picture of the same thing. This can reinforce the skills they are learning and develop their reasoning skills as they might begin to look at pictures with errors and use their understanding to explain why something is incorrect.

Abstract

The knowledge and skills that are learned and consolidated through the concrete and pictorial stages allow the children to *apply* their understanding and draw on relevant skills for tasks that involve solving a problem. The children are encouraged to see that there are many different routes to solving problems and some questions may have multiple or endless answers.

Whole School

All of the school follows White Rose as an overview guide to help break down the small steps of learning for different topic areas. Teachers choose when across the year they teach a specific topic area and for how long for (depending on the needs of the class) although generally all classes start with place value and number skills.

Lessons are resourced using White Rose Premium, Classroom Secrets and many other examples from online websites and teachers' own premade resources.

EYFS and KSI

In EYFS and KSI the children are encouraged to learn through their experiences. Children will have whole class input daily, then experience focused group tasks across the week as well as free choice maths areas to explore. This encourages the children's independence in their learning and is observed and guided by adults where needed.

KS2

In KS2 maths learning is more formalised, however children still experience a varied style of lesson and learning task. More focus is given here to the methods that follow on from the concrete experiences of skills.

ST JOSPEH'S CATHOLIC PRIMARY SCHOOL MATHS LONG TERM VIEW

Morning Activity: mixture of arithmetic activities and puzzles if possible.

Geometry- Shape to be taught by MW every Monday. Other units to be decided next term.

I/2	W1	W2	W3	W4	W5	W6	W7	W8	W9	W10	W11	W12
Autumn	Number: Place value Year 1 within 10 Year 2			Number: Addition & Subtraction, Year 1 (within 10 including recognizing money) Year 2 (within 100 including money)						Geometry: Shape Year 1 and 2		
Spring	Number: Place value Year 1 (within 20)		Year 1 Addition and subtraction (within 20) Then place value (within 50)					Measurement: Length and height Year 1 and 2		Measurement: Mass and volume Year 1		
	Measurement: Money Year 2		Multiplication and division Year 2							Measurement: Mass, capacity and temperature Year 2		
Summer	Number: Multiplication and Division Year 1			Measurement: Time Year 1 and 2		Number: Place value (within 100) Then money				Fractions Year 1		
	Fractions Year 2					Statistics Year 2				Geometry: Position and Direction Year 2		

ST JOSEPH'S CATHOLIC PRIMARY SCHOOL MATHS LONG TERM VIEW

Morning Activity: mixture of times tables calculations (Y4 test in June)

Statistics & Position and Direction to be taught by MW in PPA for 1 hour every other Wednesday across the year, along with arithmetic practice. Discussions will be taken out to establish catch up and assessment for learning.

3/4	W1	W2	W3	W4	W5	W6	W7	W8	W9	W10	W11	W12
Autumn	Number: Place value Year 3 and 4				Number: Addition & Subtraction, Year 3 and 4				Number: Multiplication and Division Year 3 and 4			
Spring	Number: Multiplication and Division Year 3 and 4	Length, perimeter and area Year 3 and 4		Fractions Year 3 and 4				Mass & Capacity Year 3		Consolidati on		
								Decimals Year 4				
Summer	Fractions Year 3		Measurement: Money Year 3 and 4		Statistics Year 3 and 4			Geometry: Properties of Shape Year 3 and 4		Consolidation		
	Decimals (inc money) Year 4											

ST JOSPEH'S CATHOLIC PRIMARY SCHOOL MATHS LONG TERM VIEW

Morning Activities include puzzles, symmetry, time, volume and mental calculations.

5/6	W1	W2	W3	W4	W5	W6	W7	W8	W9	W10	W11	W12
Autumn	Number: Place value Year 5 and 6		Number: Four operations Year 5 and 6					Fractions Year 5 and 6 In last week- Measurement converting units Year 5				
Spring	Number: Multiplication and Division Year 5			Fractions, Decimals and Percentages Year 5 and 6					Measurement: Perimeter and area Year 5		Statistics Year 5 and 6	
	Ratio and Algebra Year 6								Measurement: Area, perimeter, and volume Year 6			
Summer	Geometry: Shape Year 5 and 6			Geometry: Position and Direction Year 5 and 6	Number: Decimals Year 5 Then negative numbers and converting units Consolidation							
					Year 6 SATS Then consolidation and projects							