

## **Maths Long term plan September 2022 (updated September 2023)**

This long term plan has been devised using the White Rose schemes of work version 3. It highlights which areas of mathematics will be covered each term by each year group.

This scheme of work is adapted according to the needs of the class.

**July 2022** - all staff have completed an 'honesty' table highlighting the areas of the maths curriculum which their class need further consolidation on. This has been passed to the next class teacher and will be built in to the planning for the coming year

As a school we use the document Maths Guidance in Key stage 1 and 2 June 2020 (Ready to progress) to ensure that the children are fully conversant with the criteria from the previous year group. This is planned into the learning journey for each topic.


EYFS – have modified the White Rose scheme in 2022 to better align with EYFS statutory framework. However, this is also under review in order to ensure coverage toward ELGs and preparedness for year 1.

### Autumn Term Mathematics coverage

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
<b>Foundation</b>	Baseline		Match, sort and compare Talk about measure and pattern			It's me 1 2 3 Circles and triangles, shapes with 4 sides 12345						
<b>KIRF</b>				Say the numbers in order to 5			Say numbers in order to 10					
<b>Year 1</b>	Place value within 10				Addition and subtraction within 10					Shape	consolidation	
<b>KIRF</b>	Number bonds to 5 and then 10				Know days of week, months and seasons							
<b>Year 2</b>	Place value			Addition and subtraction						shape		
<b>KIRF</b>	Number bonds to 20			Addition and subtraction facts to 20								
<b>Year 3</b>	Place value		Addition and subtraction					Multiplication and division				
<b>KIRF</b>	Number bonds to 100 for multiples of 10 then onto multiples of 5							Multiplication and division facts 3 4 8 x table				
<b>Year 4</b>	Place value			Addition and subtraction			area	Multiplication and division			Consolidation	
<b>KIRF</b>	All number bonds to 100							Multiplication and division facts 6 7 9 11 12 x tables				
<b>Year 5</b>	Place value		Addition and subtraction		Multiplication and division			fractions				
<b>KIRF</b>	Know decimal bonds that total 1 ( 1 decimal place)				Square numbers upto 12 Notation for square							
<b>Year 6</b>	Place value		Multiplication, addition, subtraction, division				Fractions A (addition/ subtraction)		Fractions B (multipl / division)		Converting units	
<b>KIRF</b>	2 place decimal complements to 1							Know whether a number up to 100 is prime. Recall primes upto 19				

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
<b>Foundation</b>	Numbers to 5 (Alive in 5)/Introducing zero Counting numbers 6 7 8 Mass and capacity						Building 9 and 10 Explore 3D shapes Length, height and time					
<b>KIRF</b>	Subitizing to 5						Number bonds to 5					
<b>Year 1</b>	Place value within 20			Addition and Subtraction (within 20)			Length and height		Length and height		Weight and volume	
<b>KIRF</b>	To identify 1 more and 1 less						Know days of week, months and seasons					
<b>Year 2</b>	money		Multiplication and division				Length and height		Mass capacity and temperature			
<b>KIRF</b>	Multiplication and division facts 2 x table		Multiplication and division facts 5 and 10				Doubles and halves to 20					
<b>Year 3</b>	Multiplication and division			Length and perimeter			fractions			Mass and capacity		
<b>KIRF</b>	Multiplication and division facts 3 4 8 x table						Addition and subtraction facts to 100					
<b>Year 4</b>	Multiplication and division			Length and perimeter		fractions			decimals			
<b>KIRF</b>	Multiply and divide single digit by 10 / 100 Multiplication and division facts 6 7 9 11 12 x tables											
<b>Year 5</b>	Multiplication and division			fractions			Decimals and percentages		Perimeter / area		Statistics	
<b>KIRF</b>	Square numbers upto 12 Cube numbers Notation for square and cubed						Recall metric conversions					
<b>Year 6</b>	ratio		algebra		decimals		Fractions, decimals, percentages		Area, perimeter, volume		statistics	
<b>KIRF</b>	Know whether a number up to 100 is prime. Recall primes upto 19						To multiply and divide by 10, 100, 100 giving answer upto 3 decimal places					

### Spring Term Mathematics coverage

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
<b>Foundation</b>	To 20 and beyond How many now, manipulate and compose / decompose						Sharing and grouping Visualise, build and map Make connections					
<b>KIRF</b>	Number bonds to 10						Doubles and halves					
<b>Year 1</b>	Multiplication and division (reinforce multiples 2 5 10)			fractions		Position and direction	Place value within 100	money	time	consolidation		
<b>KIRF</b>	Doubles and halves to 10 Recognise, find and name halves and quarters						Tell the time to hour and half hour					
<b>Year 2</b>	Fractions			time		statistics		Position and direction		consolidation		
<b>KIRF</b>	Find, name recognise $\frac{1}{3}$ $\frac{1}{4}$ $\frac{1}{2}$ $\frac{3}{4}$ of shape or quantity			Tell time on analogue clock quart past and quarter to								
<b>Year 3</b>	fractions			money	Time		shape		statistics		consolidation	
<b>KIRF</b>	Recognise and show equivalent fractions			Tell time to 5 minute intervals Recall time duration facts								
<b>Year 4</b>	decimals			money	time		consolidation	shape		statistics	Position and direction	
<b>KIRF</b>	Recognise and write decimal equivalents of $\frac{1}{4}$ , $\frac{1}{2}$ $\frac{3}{4}$ $\frac{1}{5}$			Tell time to 1 minute and recall time duration facts								
<b>Year 5</b>	shape			Position and direction		decimals		Negative numbers	Converting units		volume	
<b>KIRF</b>	I can find factor pairs of a number			Read and write decimals as fractions								
<b>Year 6</b>	shape			Position, direction		Consolidation, problem solving, transition work						
<b>KIRF</b>	I can identify common factors of a pair of numbers			Recall and use equivalences between fractions, decimals and percentages								

### Summer Term Mathematics coverage

**Appendix Examples of key vocabulary and concepts re KIRF**

<b>Year group</b>	<b>Autumn</b>	<b>Spring</b>	<b>Summer</b>
Foundation			
Year 1	What is 3 add 2? What is 2 plus 2? What is 5 take away 2? What is 1 less than 4?		What is double 9? What is half of 6?
Year 2	What do I add to 5 to make 20? What is 20 take away 6? What is 3 less than 20? How many more than 16 is 20 What do I add to 5 to make 19? What is 17 take away 6? What is 13 less than 15? How many more than 8 is 11? What is the difference between 9 and 13?	What is 2 multiplied by 7? What is 2 times 9? What is 12 divided by 2? What is double 9? What is half of 14?	
Year 3	What do I add to 65 to make 100? What is 100 take away 6? What is 13 less than 100? How many more than 98 is 100? What is the difference between 89 and 100?		equivalent There are 60 seconds in a minute. There are 60 minutes in an hour. There are 24 hours in a day. There are 7 days in a week. There are 12 months in a year. There are 365 days in a year. There are 366 days in a leap year.
Year 4	Product Multiple		How many days in each month (knuckle method)

	divisor		
Year 5	What do I add to 0.8 to make 1? What is 1 take away 0.06? What is 1.3 less than 10? How many more than 9.8 is 10? What is the difference between 0.92 and 10? What is 8 squared? What is 7 multiplied by itself? What is the square root of 144? Is 81 a square number? Square Cube	1 kilogram = 1000 grams 1 kilometre = 1000 metres 1 metre = 100 centimetres 1 metre = 1000 millimetres 1 centimetre = 10 millimetres 1 litre = 1000 millilitres	$\frac{1}{2}$ 0.5 $\frac{1}{4}$ 0.25 $\frac{3}{4}$ 0.75 $\frac{1}{3}$ 0.33 $\frac{2}{3}$ 0.66 Decimal fraction Can you find a factor of 28? Find two numbers whose product is 20. I know that 6 is a factor of 72 because 6 multiplied by 12 equals 72. Factor pair
Year 6	prime number composite number factor multiple		$\frac{1}{2}$ 0.5 50% $\frac{1}{4}$ 0.25 25% $\frac{3}{4}$ 0.75 75% $\frac{1}{3}$ 0.33 33% $\frac{2}{3}$ 0.66 66% $\frac{1}{10}$ 0.1 10% $\frac{1}{5}$ 0.2 20% Key Vocabulary factor common factor multiple greatest common factor lowest common factor