

Year 5

Long Term Plan

2022 -2023



	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			Number Addition and Subtraction		Number Multiplication and Division A		Number Fractions A				
Spring	Number Multiplication and Division B			Number Fractions B		Number Decimals and Percentages		Measurement Perimeter and Area			Statistics	
Summer	Geometry Shape			Geometry Position and Direction		Number Decimals		Number Negative Numbers	Measurement Converting Units			Measurement Volume

Our maths scheme for Year 1 - 6 follows our own carefully curated progression. Learning is built upon progressively and appropriately for the children's level of experience and readiness to progress. Although a guide for content duration is made, teachers regularly use their own professional judgement to extend, shorten and adapt learning within a unit. Due to this, flexibility is accepted for our maths teaching. Teachers can use additional time throughout the year to revise and recap key learning such as number and place value as well as an emphasis on the use of four operations to ensure these skills are regularly used discretely as well as within contexts.

Our overviews follow the objectives outlined in the White Rose units and are enhanced through the careful consideration of NCETM resources to ensure our children have opportunity to gain a deeper understanding of the learning taking place. Where NCETM links are not available, teachers are able to use professional judgement on any linked NCETM spines as well as enhancing White Rose learning with additional resources. Children are exposed to learning through collaborative learning lessons, practical lessons, and independent learning.

Sentence stems are used in all units to embed language and vocabulary as well as the tools for children to express their knowledge in problem solving and reasoning. Out of year group White Rose links ensure teachers are clear with previous learning as well as future learning.

AUTUMN

Number: Place Value

NEW VOCABULARY

numbers to a million; Roman numerals to one thousand; powers of 10

White Rose Objective	NCETM link
Roman numerals to 1,000	
Numbers to 10,000	1.26 – Teaching point 1
Numbers to 100,000	1.26 – Teaching point 1
Numbers to 1,000,000	1.26 – Teaching point 1
Read and write numbers to 1,000,000	
Powers of 10	1.26 – Teaching point 2
10/100/1,000/10,000/100,000 more or less	
Partition numbers to 1,000,000	
Number line to 1,000,000	
Compare and order numbers to 100,000	1.26 – Teaching point 3
Compare and order numbers to 1,000,000	1.26 – Teaching point 3
Round to the nearest 10, 100 or 1,000	1.26 – Teaching point 5
Round within 100,000	1.26 – Teaching point 5
Round within 1,000,000	1.26 – Teaching point 5

AUTUMN

Addition & Subtraction

NEW VOCABULARY

place holder

White Rose Objective	NCETM link
Mental strategies	
Add whole numbers with more than four digits	1.29 – Teaching point 1
Subtract whole numbers with more than four digits	1.29 – Teaching point 3
Round to check answers	
Inverse operations (addition and subtraction)	1.29 – Teaching point 6
Multi-step addition and subtraction problems	1.29 – Teaching point 6
Compare calculations	
Find missing numbers	

AUTUMN

Multiplication and Division A

NEW VOCABULARY

common factor, prime number, composite number, prime factor, square number, cubed number; round up/down

White Rose Objective	NCETM link
Multiples	
Common multiples	2.21 – Teaching point 5

Factors	2.21 – Teaching point 1
Common factors	2.21 – Teaching point 1
Prime numbers	2.21 – Teaching point 3
Square numbers	
Cube numbers	2.20 – Teaching point 2
Multiply by 10, 100 and 1,000	2.19 – Teaching point 4
Divide by 10, 100 and 1,000	2.19 – Teaching point 4
Multiples of 10, 100 and 1,000	2.19 – Teaching point 4

AUTUMN

Fractions A

NEW VOCABULARY

common denominator; thousandth; simplify, simplified; convert; per cent, percentage, per hundred

White Rose Objective	NCETM link
Find fractions equivalent to a unit fraction	3.7 – Teaching point 2
Find fractions equivalent to a non-unit fraction	3.7 – Teaching point 2
Recognise equivalent fractions	3.7 – Teaching point 2
Convert improper fractions to mixed numbers	
Convert mixed numbers to improper fractions	
Compare fractions less than 1	3.7 – Teaching point 3
Order fractions less than 1	3.7 – Teaching point 3
Compare and order fractions greater than 1	3.7 – Teaching point 3
Add and subtract fractions with the same denominator	3.8 – Teaching point 1

Add fractions within 1	3.8 – Teaching point 1
Add fractions with total greater than 1	3.8 – Teaching point 1
Add to a mixed number	3.8 – Teaching point 1
Add two mixed numbers	3.8 – Teaching point 1
Subtract fractions	3.8 – Teaching point 2
Subtract from a mixed number	3.8 – Teaching point 2
Subtract from a mixed number – breaking the whole	3.8 – Teaching point 2
Subtract two mixed numbers	3.8 – Teaching point 2

SPRING

Multiplication and Division B

NEW VOCABULARY

common factor, prime number, composite number, prime factor, square number, cubed number; round up/down

White Rose Objective	NCETM link
Multiply 4-digits by 1-digit	2.18 – Teaching point 1
Multiply 2-digits (area model)	
Multiply 2-digits by 2-digits	
Multiply 3-digits by 2-digits	
Multiply 4-digits by 2-digits	
Divide 4-digits by 1-digit	2.18 – Teaching point 1
Divide with remainders	

SPRING

Fractions B – To be updated Autumn 2022

NEW VOCABULARY

White Rose Objective	NCETM link

SPRING

Decimals and Percentages

NEW VOCABULARY

thousandth; simplify, simplified; convert; per cent, percentage, per hundred

White Rose Objective	NCETM link
Decimals up to 2 d.p	1.28 – Teaching point 1
Decimals as fractions (1)	
Decimals as fractions (2)	
Understand thousandths	
Thousandths as decimals	
Rounding decimals	
Order and compare decimals	
Understand percentages	3.7 – Teaching point 3
Percentages as fractions and decimals	3.7 – Teaching point 3

Equivalent F.D.P	3.7 – Teaching point 3
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SPRING	
Area and Perimeter	
NEW VOCABULARY	
compound shape	
White Rose Objective	NCETM link
Measure perimeter	
Calculate perimeter	
Area of rectangles	
Area of compound shapes	
Area of irregular shapes	

SPRING	
Statistics	
NEW VOCABULARY	
White Rose Objective	NCETM link
Read and interpret line graphs	
Draw line graphs	
Use line graphs to solve problems	
Read and interpret tables	
Two-way tables	
Timetables	

SUMMER

Shape

NEW VOCABULARY

degrees, protractor, reflex angle; irregular polygon, dimensions; net

White Rose Objective	NCETM link
Measure angles in degrees	1.28 – Teaching point 3
Measuring with a protractor (1)	1.28 – Teaching point 3
Measuring with a protractor (2)	1.28 – Teaching point 3
Drawing lines and angles accurately	1.28 – Teaching point 3
Calculating angles around a point	1.28 – Teaching point 3
Calculating lengths and angles in shapes	1.28 – Teaching point 3
Regular and irregular polygons	1.28 – Teaching point 4
Reasoning about 3D shapes	1.28 – Teaching point 4

SUMMER

Position and Direction

NEW VOCABULARY

reflection, reflect

White Rose Objective	NCETM link
Position in the first quadrant	
Translation	
Translation with coordinates	

Reflection	
Reflection with coordinates	

SUMMER

Decimals

NEW VOCABULARY

thousandth

White Rose Objective	NCETM link
Adding decimals within 1	
Subtracting decimals within 1	
Complements to 1	
Adding decimals – crossing the whole	
Adding decimals with the same number of decimal places	
Subtracting decimals with the same number of decimal places	
Adding decimals with a different number of decimal places	
Subtracting decimals with a different number of decimal places	
Adding and subtracting whole and decimals	
Decimal sequences	
Multiplying decimals by 10, 100 and 1,000	
Dividing decimals by 10, 100 and 1,000	

SUMMER

Negative Numbers – To be updated Spring 2023

NEW VOCABULARY	
White Rose Objective	NCETM link

SUMMER	
Converting Units	
<p>NEW VOCABULARY</p> <p>imperial units, metric units, inches, lbs, pints</p>	
White Rose Objective	NCETM link
Kilograms and kilometres	
Millimetres and millilitres	
Metric units	
Imperial units	
Converting units of time	
Timetables	

SUMMER	
Volume	
<p>NEW VOCABULARY</p> <p>volume, capacity, cm cubed/cubic cm</p>	
White Rose Objective	NCETM link

What is volume	
Compare volume	
Estimate volume	
Estimate capacity	

