

Year 6

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, Subtraction, Multiplication and Division					Number Fractions A		Number Fractions B		Measurement Converting Units	
Spring	Ratio		Algebra		Number Decimals		Number Fractions, Decimals and Percentages		Measurement Area, Perimeter and Volume		Statistics		
Summer	Geometry Shape			Geometry Position and Direction	Themed Projects, Consolidation and Problem Solving								

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 discreetly 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 ten million

White Rose Objective

NCETM link

Numbers to 1,000,000

1.30 – Teaching point 2

Numbers to 10,000,000

1.30 – Teaching point 2

Read and write numbers to 10,000,000

1.30 – Teaching point 2

Powers of 10

Number line to 10,000,000

Compare and order any integers

1.30 – Teaching point 2

Round any integer

1.30 – Teaching point 2

Negative numbers



AUTUMN

Addition, Subtraction, Multiplication and Division

NEW VOCABULARY

order of operations, BIDMAS; common multiple, lowest common multiple

White Rose Objective	NCETM link
Add and subtract integers	1.30 – Teaching point 4
Common factors	
Common multiples	
Rules of divisibility	
Primes to 100	
Square and cube numbers	
Multiply up to a 4-digit number by a 2-digit number	2.23 – Teaching point 4
Solve problems with multiplication	
Short division	2.24 – Teaching point 1
Division using factors	2.24 – Teaching point 1
Introduction to long division	2.24 – Teaching point 2 2.24 – Teaching point 3
Long division with remainders	2.24 – Teaching point 2 2.24 – Teaching point 3
Solve problems with division	
Solve multi-step problems	
Orders of operations	
Mental calculations and estimation	2.23 – Teaching point 1
Reason from known facts	2.23 – Teaching point 1

AUTUMN

Fractions A

NEW VOCABULARY

cancel, highest common factor, common numerator

White Rose Objective	NCETM link
Equivalent fractions and simplifying	
Equivalent fractions on a number line	
Compare and order (denominator)	
Compare and order (numerator)	
Add and subtract simple fractions	
Add and subtract any two fractions	
Add mixed numbers	
Subtract mixed numbers	
Multi-step problems	

AUTUMN

Fractions B

NEW VOCABULARY

cancel, highest common factor, common numerator

White Rose Objective	NCETM link
Multiply fractions by integers	3.9 – Teaching point 3
Multiply fraction by fractions	3.9 – Teaching point 3
Divide a fraction by an integer	3.9 – Teaching point 3
Divide any fraction by an integer	3.9 – Teaching point 3

Mixed questions with fractions	3.9 – Teaching point 3
Fraction of an amount	3.9 – Teaching point 3
Fraction of an amount – find the whole	3.9 – Teaching point 3

AUTUMN

Converting Units

NEW VOCABULARY

tonnes, ounces, stone, miles

White Rose Objective	NCETM link
Metric measures	
Convert metric measures	
Calculate with metric measures	
Miles and kilometres	
Imperial measures	

SPRING

Ratio

NEW VOCABULARY

ratio, proportion; for every_ there are_, :(to); enlargement, scale factor

White Rose Objective	NCETM link
Using ratio language	2.27 – Teaching point 1
Ratio and fractions	2.27 – Teaching point 1

Introducing the ratio symbol	2.27 – Teaching point 1
Calculating ratio	2.27 – Teaching point 1
Using scale factors	2.27 – Teaching point 1
Calculating scale factors	2.27 – Teaching point 1
Ratio and proportion problems	2.27 – Teaching point 1

SPRING

Algebra

NEW VOCABULARY

algebra: Function, input, output; algebra, algebraic, rule; expression; substitute; formula, formulae; equation; value, possible values, enumerate

White Rose Objective	NCETM link
Find a rule – one step	1.31 – Teaching point 3
Find a rule – two step	1.31 – Teaching point 3
Forming expressions	1.31 – Teaching point 3
Substitution	1.31 – Teaching point 3
Formulae	1.31 – Teaching point 3
Forming equations	1.31 – Teaching point 3
Solve simple one-step equations	1.31 – Teaching point 3
Solve two-step equations	1.31 – Teaching point 3
Find pairs in values	1.31 – Teaching point 3
Enumerate possibilities	1.31 – Teaching point 3

SUMMER

Decimals

NEW VOCABULARY

White Rose Objective	NCETM link
Three decimal places	
Multiply by 10, 100 and 1,000	
Divide by 10, 100 and 1,000	
Multiply decimals by integers	2.28 – Teaching point 2
Divide decimals by integers	2.28 – Teaching point 2
Division to solve problems	2.28 – Teaching point 2
Decimals as fractions	3.10 – Teaching point 1
Fractions to decimals (1)	3.10 – Teaching point 1
Fractions to decimals (2)	3.10 – Teaching point 1

SPRING

Fractions, Decimals and Percentages – To be updated Autumn 2022

NEW VOCABULARY

White Rose Objective	NCETM link

SPRING

Area, Perimeter and Volume

NEW VOCABULARY

White Rose Objective	NCETM link
Shapes – same area	2.30 – Teaching point 1
Area and perimeter	2.30 – Teaching point 1
Area of a triangle (1)	2.30 – Teaching point 2
Area of a triangle (2)	2.30 – Teaching point 2
Area of a triangle (3)	2.30 – Teaching point 2
Area of a parallelogram	2.30 – Teaching point 3
What is volume?	
Volume – counting cubes	
Volume of a cuboid	

SPRING

Statistics

NEW VOCABULARY

mean, pie chart

White Rose Objective	NCETM link
Read and interpret line graphs	
Draw line graphs	
Use line graphs to solve problems	
Circles	3.10 – Teaching point 6
Read and interpret pie charts	3.10 – Teaching point 6
Pie charts with percentages	3.10 – Teaching point 6
Draw pie charts	3.10 – Teaching point 6
The mean	

SUMMER

Shape

NEW VOCABULARY

vertically opposite (angles), internal angles; circumference, radius, diameter, centre

White Rose Objective	NCETM link
Measure with a protractor	
Introduce angles	
Calculate angles	
Vertically opposite angles	
Angles in a triangle	
Angles in a triangle – special cases	
Angles in a triangle – missing angles	
Angles in special quadrilaterals	

Angles in regular polygons	
Draw shapes accurately	
Draw nets of 3D shapes	

SUMMER

Position and Direction

NEW VOCABULARY

four quadrants

White Rose Objective	NCETM link
The first quadrant	
Four quadrants	
Translation	
Reflection	