August 2023

# **Course Mapping Guide Primary Mathematics**



# About CENTURY

CENTURY is a learning platform that uses artificial intelligence to personalise learning for every learner. Our team of experienced teachers have created all of our content for English, maths, science, geography and physical education from years 2 to 11, as well as functional skills content for post-16 learners. All courses are aligned to the national curriculum and national standards.

- Learning materials and questions for primary, secondary and post-16 learners
- Tailored to each learner's skills and knowledge
- Powered by the world's leading adaptive learning platform
  - Web-based learning for tablets, laptops and desktops



## How does **CENTURY** work?



**v**=

 $\mathbf{x} =$ 

 $\sqrt{-1}$ 

• • •

### Diagnostics

0

٥ň٥

Learners begin by completing diagnostics that quickly identify knowledge gaps and misconceptions, and help CENTURY recommend the best learning materials for each individual learner.

°°

<u>ಿ</u>



### **Recommended Path**

This constantly adapting personalised pathway contains micro-lessons designed to address gaps in knowledge, provide stretch and challenge and promote long-term memory retention.

Leadership Dashboard

Senior and middle leaders get an overview of performance and engagement on a subject, class and learner level.



Learners get rewarded with badges and streaks for completing micro-lessons or for using CENTURY over a certain period of time to increase their motivation and engagement.

### **Automated Marking**

Micheal's Recommended Path

Teachers can view data in real time, to help quickly identify which learners require additional support or further stretch.

### **Teacher Dashboard**

Use the markbook to monitor individual learners and whole-class trends with a range of dashboards.



### Learner Dashboard & Guardian Portal

Learners can identify their strengths and areas for improvement. Parents and guardians can monitor their learner's progress, completed work, and see work set.





Teacher Dashboard

### **Course List Primary Mathematics**

Our primary mathematics offering includes specific courses for each year group, from years 2 to 6.

There is also a multiplication tables course, which is suitable for all year groups, and an arithmetic course which is suitable for years 5 and 6.

This mapping document shows how our content is mapped to the English national curriculum, as well as how it aligns with the White Rose scheme of learning.

### Year group courses



Additional courses

**Primary Mathematics Course Mapping** 

### Course Assignment Primary Mathematics





### National Curriculum Map Year 2 Mathematics

Course Primary - Year 2 Mathematics Diagnostics 9 Strands 10 Nuggets 87

#### Strands - Primary – Year 2 Mathematics

A strand is a sequence of nuggets grouped by theme or topic, forming a high-level organisation of content within a course.

Strand	No. of nuggets
Diagnostics	9
Number and Place Value	11
Addition and Subtraction	18
Multiplication and Division	13
Fractions	4

Strand	No. of nuggets
Measurement	9
Money	6
Time	6
Geometry	6
Statistics	5

#### Nuggets mapped to the National Curriculum

A nugget is a micro-lesson that contains learning material followed by questions to assess learning.

	National Curriculum		CENTURY
Торіс	National Curriculum Statement	Nugget Code	Nugget Name
an		PM10.01	Counting in Multiples of 2
Place Vall	count in steps of 2, 3, and 5 from 0, and in tens from any number, forward and backward	PM10.02	Counting in Multiples of 3
	PM10.03	Counting in Multiples of 5	
Ž	-	PM10.04	Counting in Multiples of 10

← Back to Curriculum Overview



Торіс	National Curriculum Statement	Nugget Code	Nugget Name
	Pl recognise the place value of each digit in a two-digit number (tens, ones) Pl	PM1.34	2-Digit: Recognising Place Value
		PM1.35	2-Digit: Representing Numbers
lue	identify, represent and estimate numbers using different representations, including the number line	PM1.36	Number Lines to 100
I Place Va	compare and order numbers from 0 up to 100; use <, > and = signs	PM10.15	2-Digit: Comparing Numbers with Greater Than and Less Than Symbols $<\!\!\!>$
mber and	road and write numbers to at least 100 in numerals and in words	PM10.16	Reading and Writing Numbers to 20
Z		PM10.17	Reading and Writing Numbers to 100
	use place value and number facts to solve problems		Included in nuggets above
		PM10.18	Number and Place Value Checkpoint
lition and otraction	solve problems with addition and subtraction using concrete objects and pictorial representations, including those involving numbers, quantities and measures		Included in nuggets below
Add	solve problems with addition and subtraction applying their increasing knowledge of mental and written methods		
	- recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100	PM2.30	Number Bonds to 20
	recail and use addition and subtraction facts to 20 fidentity, and derive and use related facts up to 100		Number Bonds to 100
	_	PM10.11	Single Digit Addition
	add numbers using concrete objects, pictorial representations, and mentally, including: a two-digit number and ones, a two-digit number and tens, two two-digit numbers, adding three one-digit numbers	PM10.13	Single Digit Subtraction
	subtrating numbers using concrete objects, pictorial representations, and mentally, including: a two-digit number and ones, a two-digit number and tens, two two-digit numbers	PM2.32	Adding Three 1-Digit Numbers
	subtrating numbers using concrete objects, pictorial representations, and mentally, including: a two-digit number and ones, a two-digit number and tens, two two-digit numbers	PM2.33	2-Digit: Adding and Subtracting 1s (Not Crossing 10)
		PM1.38	2-Digit: Finding 10 More or 10 Less

- Back to Curriculum Overview



Торіс	National Curriculum Statement	Nugget Code	Nugget Name
		PM2.34	2-Digit: Adding and Subtracting Multiples of 10
		PM2.35	2-Digit: Adding 1 Digit Numbers (Crossing 10)
	add numbers using concrete objects, pictorial representations, and mentally, including: a two-digit number and ones, a two-digit number and tens, two two-digit numbers, adding three one-digit numbers	PM2.36	2-Digit: Subtracting 1 Digit Numbers (Crossing 10)
	subtrating numbers using concrete objects, pictorial representations, and mentally, including: a two-digit number and ones, a two-digit number and tens, two two-digit numbers	PM2.37	2-Digit: Adding 2 Digit Numbers (No Exchanging)
otraction	subtrating numbers using concrete objects, pictorial representations, and mentally, including: a two-digit number and ones, a two-digit number and tens, two two-digit numbers	PM2.38	2-Digit: Subtracting 2 Digit Numbers (No Exchanging)
ו and Sut		PM2.39	2-Digit: Adding 2 Digit Numbers (With Exchanging)
Additio		PM2.40	2-Digit: Subtracting 2 Digit Numbers (With Exchanging)
	show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot	PM2.42	Commutativity in Addition
	recognise and use the inverse relationship between addition and subtraction and use this to check		Addition and Subtraction Fact Families
	calculations and solve missing number problems	PM2.43	2-Digit: Solving Missing Number Problems Using Fact Families
	-	PM2.44	Addition and Subtraction Checkpoint
		PM3.63	Understanding Multiplication
Division		PM10.05	Multiplying by 2
ation and	recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables	PM10.06	Multiplying by 5
Multiplic		PM10.07	Multiplying by 10
		PM3.66	Mixed Multiplication 1 (2s,5s & 10s)



Торіс	National Curriculum Statement	Nugget Code	Nugget Name
			Commutativity in Multiplication
		PM10.08	Dividing by 2
	recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables	PM10.09	Dividing by 5
Division		PM10.10	Dividing by 10
ation and		PM3.68	Mixed Division 1 (2s, 5s & 10s)
Multiplic	recognising odd and even numbers	PM3.62	Odd and Even Numbers
	calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (×), division (÷) and equals (=) signs		Included in nuggets above
	solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts.	PM3.69	Multiplication and Division Fact Families
	-	PM3.70	Multiplication and Division Checkpoint
		PM4.37	Recognising and Finding a Half
tions	recognise, find, name and write fractions 1/3 1/4 2/4 and 3/4 of a length, shape, set of objects or quantity write simple fractions for example, 1/2 of 6 = 3 and recognise the equivalence of 2/4 and 1/2	PM4.38	Recognising and Finding Quarters
Frac		PM4.39	Recognising and Finding Thirds
	-	PM4.42	Fractions Checkpoint
ints		PM5.31	2-Digit: Measuring in Centimetres
aasureme	choose and use appropriate standard units to estimate and measure length/height in any direction (m/ cm); mass (kg/g); temperature (°C); capacity (litres/ml) to the nearest appropriate unit, using rulers, scales,	PM5.32	2-Digit: Solving Problems with Length and Height
Mea	thermometers and measuring vessels		2-Digit: Measuring Mass in Grams



Торіс	National Curriculum Statement	Nugget Code	Nugget Name
			2-Digit: Measuring Mass in Kilograms
		PM5.35	2-Digit: Solving Problems with Mass
nts	choose and use appropriate standard units to estimate and measure length/height in any direction (m/ cm); mass (kg/g); temperature (°C); capacity (litres/ml) to the nearest appropriate unit, using rulers, scales, thermometers and measuring vessels	PM5.36	2-Digit: Measuring Volume and Capacity
asureme		PM5.37	2-Digit: Solving Problems with Volume and Capacity
Me		PM5.38	Measuring Temperature
	compare and order lengths, mass, volume/capacity and record the results using >, < and =		Included in nuggets above
	-	PM5.39	Measurement Checkpoint
			Counting Money (Pence)
	recognise and use symbols for pounds (£) and pence (p); combine amounts to make a particular value	PM6.12	Counting Money (Pounds)
ney	find different combinations of coins that equal the same amounts of money	PM6.16	Making the Same Amount
W	solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change		Making Amounts (Pounds and Pence)
			Finding Change 1 (from £1)
	-	PM6.17	Money Checkpoint
	compare and conjugate intervals of time	PM7.10	Estimating Time
Time	compare and sequence intervals of time	PM7.18	Comparing Durations of Time
	tell and write the time to five minutes, including quarter past/to the hour and draw the hands on a clock face to show these times	PM7.04	Telling the Time to the Nearest 5 Minutes



Торіс	National Curriculum Statement	Nugget Code	Nugget Name
Time	tell and write the time to five minutes, including quarter past/to the hour and draw the hands on a clock face to show these times	PM7.05	Telling the Time to the Nearest 5 Minutes in Words
	know the number of minutes in an hour and the number of hours in a day	PM7.19	Units of Time 1
	_	PM7.20	Time Checkpoint
	identify and describe the properties of 2-D shapes, including the number of sides and line symmetry in a vertical line	PM8.01	Describing 2D Shapes
	identify and describe the properties of 3-D shapes, including the number of edges, vertices and faces	PM8.02	Describing 3D Shapes
	identify 2-D shapes on the surface of 3-D shapes, [for example, a circle on a cylinder and a triangle on a pyramid]		Included in nugget above
Geometry	order and arrange combinations of mathematical objects in patterns and sequences	PM8.08	Patterns and Sequences
	use mathematical vocabulary to describe position, direction and movement, including movement in a straight line and distinguishing between rotation as a turn and in terms of right angles for quarter, half and three-quarter turns (clockwise and anticlockwise)	PM8.09	Describing Position and Movement
		PM8.04	Angles in Turns
	-	PM7.20	Geometry Checkpoint
		PM9.16	Tally Charts
	ask and answer simple questions by counting the number of objects in each category and sorting the	erpret and construct simple pictograms, tally charts, block diagrams and simple tables PM9.14 Block Diagrams answer simple questions by counting the number of objects in each category and sorting the	Block Diagrams
statistics	categories by quantity ask and answer questions about totalling and comparing categorical data	PM9.01	Pictograms
		PM9.20	Tables 1
	-	PM9.21	Statistics Checkpoint



## White Rose Mapping - Year 2

### Autumn Term

	White Rose Map		CENTURY Nuggets
Block 01	White Rose Small Steps	Nugget Co	le Nugget Name
Wooks	Numbers to 20	PM10.16	Reading and Writing Numbers to 20
01 - 04	Count objects to 100 by making 10s	PM1.34	2-Digit: Recognising Place Value
	Recognise tens and ones	PM1.35	2-Digit: Representing Numbers
Topic Place Value	Use a place value chart	PM10.17	Reading and Writing Numbers to 100
	Partition numbers to 100	PM10.36	Number Lines to 100
	Write numbers to 100 in words	PM1015	2-Digit: Comparing Numbers with Greater Than and Less
	Flexibly partition numbers to 100	1 1010	than symbols <>
	Write numbers to 100 in expanded form	PM10.01	Counting in Multiples of 2
	10s on the number line to 100	PM10.03	Counting in Multiples of 5
	10s and 1s on the number line to 100	PM10.04	Counting in Multiples of 10
	Estimate numbers on a number line	PM10.02	Counting in Multiples of 3
	Compare objects	PM10.18	Number and Place Value Checkpoint
	Compare numbers		
	Order objects and numbers		
	Count in 2s, 5s and 10s		
	Count in 3s		
Block 02	White Pose Small Steps	Nugget Co	le Nugget Name
	Ronds to 10	PM2 30	Number Rends to 20
vveeks 05 - 09	Eact families addition and subtraction bonds within 20	FIVI2.30	Addition and Subtraction Eact Eamilies
	Polotod facto	PIVIZ.41	
Торіс		PWI2.42	Commutativity in Addition
Addition and Subtraction	Bonas to 100 (tens)	PM2.31	
Castidetion	Add and subtract 1s	PM10.11	
	Add by making 10	PM2.32	Adding Three 1-Digit Numbers

 $\leftarrow$  Back to Curriculum Overview

Primary Mathematics Course Mapping White Rose Year 2 Autumn Term



Block 02	White Rose Small Steps	Nugget Code	Nugget Name
Continued	Add three 1-digit numbers	PM2.33	2-Digit: Adding and Subtracting 1s (Not Crossing 10)
Weeks	Add to the next 10	PM1.38	2-Digit: Finding 10 More or 10 Less
05 - 09	Add across a 10	PM2.35	2-Digit: Adding 1 Digit Numbers (Crossing 10)
Торіс	Subtract across a 10	PM10.13	Single Digit Subtraction
Addition and	Subtract from a 10	PM2.36	2-Digit: Subtracting 1 Digit Numbers (Crossing 10)
Subtraction	Subtract a 1-digit number from a 2-digit number (across a 10)	PM2.34	2-Digit: Adding and Subtracting Multiples of 10
	10 more, 10 less	PM2.37	2-Digit: Adding 2 Digit Numbers (No Exchanging)
	Add and subtract 10s	PM2.39	2-Digit: Adding 2 Digit Numbers (With Exchanging)
	Add two 2-digit numbers (not across a 10)	PM2.38	2-Digit: Subtracting 2 Digit Numbers (No Exchanging)
	Add two 2-digit numbers (across a 10)	PM2.40	2-Digit: Subtracting 2 Digit Numbers (With Exchanging
	Subtract two 2-digit numbers (not across a 10)	PM2.43	2-Digit: Solving Missing Number Problems Using
	Subtract two 2-digit numbers (across a 10)		Fact Families
	Mixed addition and subtraction	PM2.44	Addition and Subtraction Checkpoint
	Compare number sentences		
	Missing number problems		

Block 03	White Rose Small Steps	Nugget Code	Nugget Name	
Weeks	Recognise 2-D and 3-D shapes	PM8.01	Describing 2D shapes	
10 - 12	Count sides on 2-D shapes	PM8.02	Describing 3D shapes	
Topic	Count vertices on 2-D shapes	PM8.08	Patterns and Sequences	
Geometry	Draw 2-D shapes			
Shape	Lines of symmetry on shapes			
	Use lines of symmetry to complete shapes			
	Sort 2-D shapes			
	Count faces on 3-D shapes			
	Count edges on 3-D shapes			
	Count vertices on 3-D shapes			

Back to Curriculum Overview

.

Primary Mathematics Course Mapping White Rose Year 2 Autumn Term

Make patterns with 2-D and 3-D shapes

Sort 3-D shapes

### Spring Term

	White Rose Map		CENTURY Nuggets
Block 01	White Rose Small Steps	Nugget Code	Nugget Name
Wooks	Count money - pence	PM6.11	Counting Money (Pence)
01 - 02	Count money - pounds (notes and coins)	PM6.12	Counting Money (Pounds)
	Count money - pounds and pence	PM6.15	Making Amounts (Pounds and Pence)
Topic	Choose notes and coins	PM6.16	Making the Same Amount
money	Make the same amount	PM6.14	Finding Change 1
	Compare amounts of money	PM6.17	Money Checkpoint
	Calculate with money		
	Make a pound		
	Find change		
	Two-step problems		
Block 02	White Dose Small Stops	Nugget Code	Nugget Name
		DM2 63	
Weeks	Mako ogual groups	PM3.03	
03-07	Add equal group	PM10.05	Multiplying by 2
Торіс	Introduce the multiplication symbol	PM10.08	Dividing by 2
Multiplication	Multiplication sentences	PM3 62	Odd and Even Numbers
		PM10.07	Multiplying by 10
	Make equal groups - grouping	PM10.10	Dividing by 10
	Make equal groups - sharing	PM10.06	Multiplying by 5
	The 2 times-table	PM10.09	Dividing by 5
	Divide by 2	PM3.69	Multiplication and Division Fact Families
	Doubling and halving	PM3.66	Mixed Multiplication 1 (2s. 5s. & 10s)
	Odd and even numbers	PM3.68	Mixed Division (2s, 5s, & 10s)
	The 10 times-table	PM3.70	Multiplication and Division Checkpoint
	Divide by 10		• • • • • • • • • • • • • • • • • • •

- Back to Curriculum Overview

Block	02
Continu	ed

White Rose Small Steps The 5 times-table

The 5 and 10 times-tables

Divide by 5

Weeks **03 - 07** 

Topic Multiplication and Division

Block 03	White Rose Small Steps	Nugget Code	Nugget Name
Wooks	Measure in centimetres	PM5.31	2-Digit: Measuring in Centimetres
<b>08 - 09</b>	Measure in metres	PM5.32	2-Digit: Solving Problems with Length and Height
<b>-</b> .	Compare lengths and heights		
lopic	Order lengths and heights		
Height	Four operations with lengths and heights		

Block 04	White Rose Small Steps	Nugget Code	Nugget Name
Weeks	Compare mass	PM5.33	2-Digit: Measuring Mass in Grams
10 - 12	Measure in grams	PM5.34	2-Digit: Measuring Mass in Kilograms
	Measure in kilograms	PM5.35	2-Digit: Solving Problems with Mass
lopic	Four operations with mass	PM5.36	2-Digit: Measuring Volume and Capacity
capacity and	Compare volume and capacity	PM5.37	2-Digit: Solving Problems with Volume and Capacity
temperature	Measure in mililitres	PM5.38	Measuring Temperature
	Measure in litres	PM5.39	Measurement Checkpoint
	Four operations with volume and capacity		
	Temperature		



### Summer Term

	White Rose Map	CENTURY Nuggets
Block 01	White Rose Small Steps	Nugget Code Nugget Name
Vooks	Introduction to parts and whole	PM4.37 Recognising and Finding a Half
1 - 03	Equal and unequal parts	PM4.38 Recognising and Finding Quarters
	Recognise a half	PM4.39 Recognising and Finding Thirds
opic	Find a half	PM4.42 Fractions Checkpoint
	Recognise a quarter	
	Find a quarter	
	Recognise a third	
	Find a third	
Black 02	White Beer Court Chart	Normal Code - Normal Norma
DIUCK UZ		
Veeks	O'clock and hair past	PM7.04 Ielling the Time to the Nearest 5 Minutes
4 - 06	Quarter past and quarter to	PM7.05 Ielling the Time to the Nearest 5 Minutes in Words
opic	Tell the time past the hour	PM7.18 Comparing Durations of Time
ime	Tell the time to the hour	PM7.19 Units of Time 1
	Tell the time to 5 minutes	PM7.10 Estimating Time
	Minutes in an hour	PM7.20 Time Checkpoint
	Hours in a day	
Block 03	White Rose Small Steps	Nugget Code Nugget Name
., .	Make tally charts	PM9.16 Tally Charts
Veeks 07 - 08	Tables	PM9.20 Tables 1
	Block diagrams	PM9.14 Block Diagrams
opic	Draw pictograms (1-1)	PM9.01 Pictograms
otatistics	Interpret pictograms (1-1)	PM9.21 Statistics Checkpoint
	Draw pictograms (2 ,5 and 10)	

Back to Curriculum Overview

Block 04	White Rose Small Steps	Nugget Code	Nugget Name	
Weeks	Language of position	PM8.09	Describing Position and Movement	
09 - 10	Describe movement	PM804	Angles in Turns 1	
<b>-</b> ·	Describe turns	PM7.20	Geometry Checkpoint	
lopic Position and	Describe movement and turns			
Direction	Shape patterns with turns			



### National Curriculum Map Year 3 Mathematics

Course Primary - Year 3 Mathematics Diagnostics 9 Strands 11 Nuggets 131

#### Strands - Primary – Year 3 Mathematics

A strand is a sequence of nuggets grouped by theme or topic, forming a high-level organisation of content within a course.

Strand	No. of nuggets
Diagnostics	9
Number and Place Value	20
Addition and Subtraction	26
Multiplication and Division	28
Fractions	12
Measurement	9

Strand	No. of nuggets
Money	10
Time	12
Geometry	7
Statistics	5
End of Year Assessments	2

### Nuggets mapped to the National Curriculum

A nugget is a micro-lesson that contains learning material followed by questions to assess learning.

	National Curriculum		CENTURY
Торіс	National Curriculum Statement	Nugget Code	Nugget Name
	count from 0 in multiples of 4, 8, 50 and 100	PM1.01	Counting in Multiples of 4
value Value		PM1.02	Counting in Multiples of 8
Place		PM1.03	Counting in Multiples of 50
		PM1.04	Counting in Multiples of 100





Торіс	National Curriculum Statement	Nugget Code	Nugget Name
	recognise the place value of each digit in a 3-digit number (100s, 10s, 1s)	PM1.05	3- Digit: Recognising Place Value
	identify, represent and estimate numbers using different representations	PM1.06	3-Digit: Representing Numbers up to 1000
ت و	find 10 more or 10 less than a given number	PM1.07	3-Digit: Finding 10 More or 10 Less
umber an Iace Valu	find 100 more or 100 less than a given number	PM1.08	Finding 100 More or 100 Less
Z¢	compare and order numbers up to 1,000	PM1.09	3-Digit: Comparing Numbers with Greater Than and Less Than Symbols $\diamondsuit$
	compare and order numbers up to 1,001	PM1.10	Ordering Numbers Up to 1000
	read and write numbers up to 1,000 in numerals and in words	PM1.11	Reading and Writing Numbers up to 1000
	add and subtract numbers mentally, including: a three-digit number and 1s a three-digit number and 10s a three-digit number and 100s	PM2.01	3-Digit: Adding and Subtracting 1s
		PM2.02	3-Digit: Adding and Subtracting 10s
		PM2.03	3-Digit: Adding and Subtracting 100s
	add and subtract numbers with up to 3 digits,	PM2.04	3-Digit: Column Addition (no Exchanging)
on and action		PM2.05	3-Digit: Column Addition (with Exchanging)
Additi		PM2.06	3-Digit: Column Subtraction (no Exchanging)
	addition and subtraction	PM2.07	3-Digit: Column Subtraction (with Exchanging)
	PN	PM2.08	3-Digit: Addition and Subtraction Practice 1
		PM2.09	3-Digit: Addition and Subtraction Word Problems 1
	estimate the answer to a calculation and use inverse operations to check answers	PM2.10	3-Digit: Rounding to the Nearest 10 and 100

- Back to Curriculum Overview

Primary Mathematics Course Mapping Year 3 Mathematics National Curriculum Map



Торіс	National Curriculum Statement	Nugget Code	Nugget Name
Addition and Subtraction	estimate the answer to a calculation and use	PM2.11	Estimating Using Rounding
	inverse operations to check answers	PM2.12	Checking Answers Using the Inverse 1
		PM3.01	Multiplying by 3
		PM3.02	Multiplying by 4
		PM3.03	Multiplying by 8
	recall and use multiplication and division facts	PM3.04	Mixed Multiplication 2 (3s, 4s & 8s)
	for the 3, 4 and 8 multiplication tables	PM3.05	Dividing by 3
		PM3.06	Dividing by 4
ation and Division		PM3.07	Dividing by 8
		PM3.08	Mixed Division 2 (3s, 4s & 8s)
Multiplic	write and calculate mathematical statements for	PM3.09	Multiplying Multiples of 10
		PM3.10	Multiplying Using Partitioning
		PM3.11	Multiplying Using the Grid Method
	multiplication and division using the multiplication tables that they know, including for two digit numbers times one-digit numbers, using mental and progressing	PM3.12	Short Multiplication
	to formal written methods	PM3.13	Short Division 1 (No Remainders)
		PM3.14	Short Division 2 (with Remainders)
		PM3.15	Multiplication and Division Practice 1

Back to Curriculum Overview



Торіс	National Curriculum Statement	Nugget Code	Nugget Name
5 5	write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for two digit numbers times one-digit numbers, using mental and progressing	PM3.16	Multiplication and Division Word Problems 1
ultiplicatio nd Divisio		PM3.60	2- Digit: Dividing Using Partitioning (No Remainders)
, Si <u>S</u>	to formal written methods	PM3.61	2- Digit: Dividing Using Partitioning (With Remainders)
	recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators	PM4.01	Identifying Fractions
	count up and down in tenths; recognise that tenths arise from dividing an object into 10 equal parts and in dividing one-digit numbers or quantities by 10	PM4.02	Tenths
	compare and order unit fractions, and fractions with the same denominators	PM4.03	Comparing and Ordering Fractions
tions	add and subtract fractions with the same denominator within one whole [for example, 5/7 + 1/7 = 6/7]	PM4.04	Adding and Subtracting Fractions
Frac	recognise and show, using diagrams, equivalent fractions with small denominators	PM4.05	Equivalent Fractions
	recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators	PM4.06	Finding Unit Fractions of Amounts
		PM4.07	Finding Non-Unit Fractions of Amounts
	recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators	PM4.08	Finding Fractions of Amounts
	measure, compare, add and subtract: lengths (m/cm/mm) mass (kg/g) volume/capacity (l/ml)	PM5.01	3-Digit: Units of Measure
		PM5.02	3-Digit: Length
rement		PM5.03	3-Digit: Solving Length Problems
Measu		PM5.04	3-Digit: Mass and Weight
		PM5.05	3-Digit: Solving Mass Problems
		PM5.06	3-Digit: Volume and Capacity



Торіс	National Curriculum Statement	Nugget Code	Nugget Name
asurement	measure, compare, add and subtract: lengths (m/cm/mm), mass (kg/g), volume/capacity (l/ml)	PM5.07	3-Digit: Solving Volume and Capacity Problems
		PM5.08	Perimeter by Counting
ž		PM5.09	Calculating the Perimeter
		PM6.01	Adding Amounts of Money
	pupils continue to become fluent in recognising the value of coins, by adding and subtracting amounts, including mixed units, and giving change using manageable amounts. They record £ and p separately.	PM6.02	Adding Amounts of Money 2
A units and the second se		PM6.05	Solving Money Problems 1
Ň			Finding Change 2
	add and subtract amounts of money to give change, using both $\ensuremath{\mathfrak{L}}$ and $\ensuremath{p}$ in practical contexts	PM6.04	Subtracting Amounts of Money
		PM6.14	Finding Change 1 (from £1)
	know the number of seconds in a minute and the number of days in each month, year and leap year	PM7.01	Units of Time 2
		PM7.02	Times of Day
		PM7.03	Telling the Time in Words
e		PM7.04	Telling the Time to the Nearest 5 Minutes
Ē	record and compare time in terms of seconds, minutes and hours; use vocabulary such as o'clock, am/pm, morning, afternoon, noon and midnight	PM7.05	Telling the Time to the Nearest 5 Minutes in Words
	_	PM7.06	Telling the Time to the Nearest Minute
		PM7.07	Roman Numerals (up to 20)
		PM7.08	Telling the Time with Roman Numerals

- Back to Curriculum Overview



Тор	ic National Curriculum Statement	Nugget Code	Nugget Name
	estimate and read time with increasing accuracy to the nearest minute;	PM7.09	12 Hour and 24 Hour Clocks
ē	record and compare time in terms of seconds, minutes and hours; use vocabulary such as o'clock, am/pm, morning, afternoon, noon and midnight	PM7.10	Estimating Time
Ē	compare durations of events	PM7.11	Finding the Duration
	[for example, to calculate the time taken by particular events or tasks]	PM7.12	Start and End Times
		PM8.01	Describing 2D Shapes
	draw 2-D shapes and make 3-D shapes using modelling materials; recognise 3-D shapes in different orientations and describe them	PM8.02	Describing 3D Shapes
		PM8.03	Nets of Shapes
Geometry	recognise angles as a property of shape or a description of a turn	PM8.04	Angles in Turns
	identify right angles, recognise that 2 right angles make a half-turn, 3 make three-quarters of a turn and 4 a complete turn; identify whether angles are greater than or less than a right angle	PM8.05	Identifying Angles
			Identifying Lines
		PM8.07	Lines of Symmetry
Statistics			Pictograms
	interpret and present data using bar charts, pictograms and tables	PM9.02	Tables 2
			Bar Charts 1



## White Rose Mapping - Year 3

### Autumn Term

	White Rose Map		CENTURY Nuggets
Block 01	White Rose Small Steps	Nugget Code	Nugget Name
Wooks	Represent numbers to 100	PM1.34	2-Digit: Recognising place value
01 - 03	Partition numbers to 100	PM1.35	2-Digit: Representing numbers
	Number line to 100	PM1.36	Number lines to 100
Topic Place Value	Hundreds	PM1.05	3-Digit: Recognising place value
	Represent numbers to 1,000	PM1.06	3-Digit: Representing numbers
	Partition numbers to 1,000	PM1.04	Counting in multiples of 100
	Flexible partitioning of numbers to 1,000	PM1.38	2-Digit: Finding 10 more or 10 less
	Hundreds, tens and ones	PM1.07	3-Digit: Finding 10 more or 10 less
	Find 1, 10 or 100 more or less	PM1.08	Finding 100 more or 100 less
	Number line to 1,000	PM1.37	Number lines to 1000
	Estimate on a number line to 1,000	PM1.09	3-Digit: Comparing numbers with greater than and less
	Compare numbers to 1,000		than symbols <>
	Order numbers to 1,000	PM1.10	Ordering numbers up to 1000
	Count in 50s	PM1.03	Counting in multiples of 50
Block 02	White Rose Small Steps	Nugget Code	Nugget Name
Weeks	Apply number bonds within 10	PM2.01	3-Digit: Adding and subtracting 1s
04 - 08	Apply number bonds within 10	PM2.02	3-Digit: Adding and subtracting 10s
Topic	Add and subtract 1s	PM2.03	3-Digit: Adding and subtracting 100s
Addition and	Add and subtract 10s	PM2.37	2-Digit: Adding 2-digit numbers (no exchanging)
Subtraction	Add and subtract 100s	PM2.38	2-Digit: Subtracting 2-digit numbers (no exchanging)
	Spot the pattern	PM2.39	2-Digit: Adding 2-digit numbers (with exchanging)
	Add 1s across a 10	PM2.40	2-Digit: Subtracting 2-digit numbers (with exchanging)
	Add 10s across a 100	PM2.04	3-Digit: Column addition (no exchanging)
	Subtract 1s across a 10	PM2.06	3-Digit: Column subtraction (no exchanging)

- Back to Curriculum Overview

Primary Mathematics Course Mapping White Rose Year 3 Autumn Term



Block 03	White Rose Small Steps	Nugget Code	Nugget Name
Continued	Subtract 10s across a 100	PM2.06	3-Digit: Column subtraction (no exchanging)
Weeks	Make connections	PM2.05	3-Digit: Column addition (with exchanging)
04 - 08	Add two numbers (no exchange)	PM2.08	Addition and subtraction practice 1
Topic	Subtract two numbers (no exchange)	PM2.09	Addition and subtraction word problems 1
Addition and	Add two numbers (across a 10)	PM2.31	Number bonds to 100
Subtraction	Add two numbers (across a 100)	PM2.10	Rounding to the nearest 10 and 100
	Subtract two numbers (across a 10)	PM2.11	Estimating using rounding
	Subtract two numbers (across a 100)	PM2.12	Checking answers using the inverse 1
	Add 2-digit and 3-digit numbers		
	Subtract a 2-digit number from a 3-digit number		
	Complements to 100		
	Estimate answers		
	Inverse operations		
	Make decisions		
Block 04	White Rose Small Steps	Nugget Code	Nugget Name
Wooks	Multiplication – equal groups	PM3.63	Understanding multiplication
09 - 12	Use arrays	PM10.01	Counting in multiples of 2
<b>_</b> .	Multiples of 2	PM10.03	Counting in multiples of 5
Iopic Multiplication	Multiples of 5 and 10	PM10.04	Counting in multiples of 10
and Division	Sharing and grouping	PM10.02	Counting in multiples of 3
	Multiply by 3	PM3.01	Multiplying by 3
	Divide by 3	PM3.05	Dividing by 3
	The 3 times-table	PM1.01	Counting in multiples of 4
	Multiply by 4	PM3.02	Multiplying by 4
	Divide by 4	PM3.06	Dividing by 4
	The 4 times-table	PM1.02	Counting in multiples of 8
	Multiply by 8	PM3.03	Multiplying by 8
	Divide by 8	PM3.07	Dividing by 8
	The 8 times-table		
	The 2, 4 and 8 times-tables		

 $\leftarrow$  Back to Curriculum Overview

Primary Mathematics Course Mapping White Rose Year 3 Autumn Term

### Spring Term

White Rose Map		CENTURY Nuggets
White Rose Small Steps	Nugget Code	Nugget Name
Multiples of 10	PM10.04	Counting in Multiples of 10
Related calculations	PM3.09	Multiplying Multiples of 10
Reasoning about multiplication	PM3.64	Comparing Statements
Multiply a 2-digit number by a 1-digit number - no exchange	PM3.12	2-Digit: Multiplying by 1-Digit
Multiply a 2-digit number by a 1-digit number - with exchange	PM3.60	2-Digit: Dividing Using Partitioning (no Remainders)
Link multiplication and division	PM3.61	2-Digit: Dividing Using Partitioning (with Remainders
Divide a 2-digit number by a 1-digit number - no exchange	PM3.65	Scaling Problems 1
Divide a 2-digit number by a 1-digit number - flexible partitioning	PM3.15	Multiplication and Division Practice 1
Divide a 2-digit number by a 1-digit number – with remainders	PM3.16	Multiplication and Division Word Problems 1
Scaling		
How many ways?		
White Pose Small Stops	Nuggot Codo	Nugget Name
Measure in metros and continetros	PM5 02	3-Digit: Length
Measure in millimetres	PM5.03	3-Digit: Solving Length Problems
Measure in centimetres and millimetres	PM5.08	Perimeter by Counting
Metres, centimetres and millimetres	PM5.09	Calculating the Perimeter
Equivalent lengths (metres and centimetres)		
Equivalent lengths (centimetres and millimetres)		
Compare lengths		
Add lengths		
Subtract lengths		
What is perimeter?		
Measure perimeter		
·····		
	White Rose Small Steps         Multiples of 10         Related calculations         Reasoning about multiplication         Multiply a 2-digit number by a 1-digit number - no exchange         Multiply a 2-digit number by a 1-digit number - with exchange         Link multiplication and division         Divide a 2-digit number by a 1-digit number - no exchange         Divide a 2-digit number by a 1-digit number - mexchange         Divide a 2-digit number by a 1-digit number - with remainders         Scaling         How many ways?         Measure in metres and centimetres         Measure in centimetres and millimetres         Measure in centimetres and centimetres)         Equivalent lengths (metres and centimetres)         Compare lengths         Add lengths         Subtract lengths         What is perimeter?         Measure perimeter	White Rose Map         White Rose Small Steps       Nugget Code         Multiples of 10       PM10.04         Related calculations       PM3.09         Reasoning about multiplication       PM3.64         Multiply a 2-digit number by a 1-digit number - no exchange       PM3.61         Divide a 2-digit number by a 1-digit number - mo exchange       PM3.65         Divide a 2-digit number by a 1-digit number - no exchange       PM3.65         Divide a 2-digit number by a 1-digit number - mo exchange       PM3.65         Divide a 2-digit number by a 1-digit number - mo exchange       PM3.65         Divide a 2-digit number by a 1-digit number - mo exchange       PM3.65         Divide a 2-digit number by a 1-digit number - mo exchange       PM3.65         Scaling       PM3.06       Scaling         How many ways?       PM5.02       PM5.02         Measure in metres and centimetres       PM5.03         Measure in centimetres and millimetres       PM5.03         Metres, centimetres and centimetres)       PM5.09         Equivalent lengths (metres and centimetres)       PM5.09         Equivalent lengths (centimetres and millimetres)       PM5.09         Compare lengths       Add lengths         Subtract lengths       What is perimeter?         Measure perimeter? </td

Block 03	White Rose Small Steps	Nugget Code	Nugget Name	
Continued	Understand the denominators of unit fractions	PM4.01	Identifying Fractions	
Weeks	Compare and order unit fractions	PM4.03	Comparing and Ordering Fractions	
07 - 09	Understand the numerators of non-unit fractions	PM4.40	Counting in Fractions	
Τορίς	Understand the whole	PM4.05	Equivalent Fractions 1	
Fractions A	Compare and order non-unit fractions			
	Fractions and scales			
	Fractions on a number line			
	Count in fractions on a number line			
	Equivalent fractions on a number line			

Block 04

Weeks **10 - 12** 

Topic Mass and capacity

White Rose Small Steps	Nugget Code	Nugget Name	
Use scales	PM5.04	3-Digit: Mass and Weight	
Measure mass in grams	PM5.05	3-Digit: Solving Mass Problems	
Measure mass in kilograms and grams	PM5.06	3-Digit: Volume and Capacity	
Equivalent masses (kilograms and grams)	PM5.07	3-Digit: Solving Volume and Capacity Problems	
Compare mass			
Add and subtract mass			
Measure capacity and volume in millilitres			
Measure capacity and volume in litres and millilitres			
Equivalent capacities and volumes (litres and millilitres)			
Compare capacity and volume			
Add and subtract capacity and volume			

 $\leftarrow$  Back to Curriculum Overview

Equivalent fractions on a number line

### Summer Term

	White Rose Map		CENTURY Nuggets
Block 01	White Rose Small Steps	Nugget Code	Nugget Name
Wooks	Add fractions	PM4.04	Adding and Subtracting Fractions
01 - 02	Subtract fractions	PM4.06	Finding Unit Fractions of Amounts
	Partition the whole	PM4.07	Finding Non-Unit Fractions of Amounts
Iopic Fractions B	Unit fractions of a set of objects	PM4.08	Finding Fractions of Amounts
	Non-unit fractions of a set of objects		
	Reasoning with fractions of an amount		
Block 02	White Rose Small Steps	Nugget Code	Nugget Name
	Pounds and pence	PM6.15	Making Amounts (Pounds and Pence)
Weeks	Convert pounds and pence	PM6.13	Converting Pounds and Pence
03-04	Add money	PM6.01	Adding Amounts of Money
Торіс	Subtract money	PM6.02	Adding Amounts of Money 2
Money	Find change	PM6.04	Subtracting Amounts of Money
		PM6.14	Finding Change 1 (from £1)
		PM6.03	Finding Change 2
		PM6.05	Solving Money Problems
Block 03	White Deep Small Sterre	Numeric Control	Numeral Name
BIOCK US	White Rose Small Steps	Nugget Code	Nugget Name
Weeks	Roman numerals to 12	PM7.07	Roman Numerais (up to 20)
05 - 07		PM7.03	
Торіс	ieii the time to the minute	PM7.04	I elling the Time to the Nearest 5 Minutes
Time	Read time on a digital clock	PM7.05	Ielling the Time to the Nearest 5 Minutes in Words
	Use am and pm	PM7.01	Units of Time 2
	Years, months and days	PM7.02	Times of Day
	Days and hours	PM7.12	Start and End Times

- Back to Curriculum Overview

Block 03	White Rose Small Steps	Nugget Code	Nugget Name	
Continued	Hours and minutes - use start and end times	PM7.18	Comparing Durations of Time	
Weeks	Hours and minutes - use durations	PM7.11	Finding the Duration	
05 - 07	Minutes and seconds			
Topic	Units of time			
Time	Solve problems with time			
Block 04	White Doce Small Stops	Nuggot Codo	Nuggot Namo	
Biotik of		PM8 04	Angles in Turns 1	
Weeks		PM8.04		
08 - 09		PM8.05	Identifying Lines	
Торіс		PIN6.00		
Shape	Herizentel and Vertical		Describing 2D Shapes	
	Parallel and perpendicular	FINO.02	Describing 3D Snapes	
	Paragnice and describe 2 Dishapes			
	Draw polygons			
	Make 2 D change			
	make 3-D shapes			
Block 05	White Rose Small Steps	Nugget Code	Nugget Name	
Wooks	Interpret pictograms	PM9.01	Pictograms	
10 - 11	Draw pictograms	PM9.03	Bar Charts 1	
	Interpret bar charts	PM9.16	Tally Charts	
Iopic Statistics	Draw bar charts	PM9.02	Tables 2	
etatistics	Collect and represent data			
	Two-way tables			



### National Curriculum Map Year 4 Mathematics

**Course** Primary - Year 4 Mathematics

Diagnostics 10 Strands 12 Nuggets 206

#### **Strands - Primary - Year 4 Mathematics**

A strand is a sequence of nuggets grouped by theme or topic, forming a high-level organisation of content within a course.

Strand	No. of nuggets
Diagnostics	10
Number and Place Value	28
Addition and Subtraction	20
Multiplication and Division	39
Fractions and Decimals	16
Measurement	20

Strand	No. of nuggets
Time	13
Money	10
Geometry	13
Statistics	7
Catch Up	36
End of Year Assessments	4

### Nuggets mapped to the National Curriculum

A nugget is a micro-lesson that contains learning material followed by questions to assess learning.

National Curriculum		CENTURY	
Торіс	National Curriculum Statement	Nugget Code	Nugget Name
e		PM1.12	.12 Counting in Multiples of 6
Place Va	count in multiples of 6, 7, 9, 25 and 1,000	PM1.13	Counting in Multiples of 7
mber and		PM1.02	Counting in Multiples of 8
Z		PM1.14	Counting in Multiples of 9



Торіс	National Curriculum Statement	Nugget Code	Nugget Name
			Counting in Multiples of 25
		PM1.16	Counting in Multiples of 1000
	find 1,000 more or less than a given number	PM1.33	Finding 1000 More or 1000 Less
ce Value	count backwards through 0 to include pegative numbers	PM1.18	Negative Numbers 1
r and Plac		PM1.19	Negative Numbers 2 (Including Addition and Subtraction)
Numbe	recognise the place value of each digit in a four-digit number (1,000s, 100s, 10s, and 1s) order and compare numbers beyond 1,000	PM1.20	Place Value in 4 Digit Numbers
		PM1.22	Comparing and Ordering Numbers
	round any number to the nearest 10, 100 or 1,000	PM1.23	Rounding to the Nearest 10, 100 and 1000
	read Roman numerals to 100 (I to C) and know that over time, the numeral system changed to include the concept of 0 and place value	PM1.24	Roman Numerals (up to 100)
			4-Digit: Column Addition (no Exchanging)
		PM2.14	4-Digit: Column Addition (with Exchanging)
tion	add and subtract numbers with up to 4 digits using the formal	PM2.15 4-Digit: Column Subtraction (no Exchanging)	4-Digit: Column Subtraction (no Exchanging)
I Subtract	written methods of columnar addition and subtraction where appropriate	PM2.16	4-Digit: Column Subtraction (with Exchanging)
dition and		PM2.17	4-Digit: Addition and Subtraction Practice 2
Ad		PM2.18	4-Digit: Addition and Subtraction Word Problems 2
	estimate and use inverse operations to check answers to a calculation		Checking Answers Using the Inverse 2
			Estimating to Check Answers

- Back to Curriculum Overview

Primary Mathematics Course Mapping Year 4 Mathematics National Curriculum Map



Торіс	National Curriculum Statement	Nugget Code	Nugget Name
Addition and Subtraction	solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why	PM2.21	Solving Two-Step Problems
	recall multiplication and division facts for multiplication tables up to 12 × 12 use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together 3 numbers	PM10.05	Multiplying by 2
		PM3.01	Multiplying by 3
		PM3.02	Multiplying by 4
		PM10.06	Multiplying by 5
		PM3.17	Multiplying by 6
		PM3.18	Multiplying by 7
sion		PM3.03	Multiplying by 8
and Divi		PM3.19	Multiplying by 9
tiplication		PM10.07	Multiplying by 10
W		PM3.20	Multiplying by 11
		PM3.21	Multiplying by 12
		PM3.22	Mixed Multiplication (Within the Times Tables)
		PM10.08	Dividing by 2
		PM3.05	Dividing by 3
		PM3.06	Dividing by 4
		PM3.23	Dividing by 6



Торіс	National Curriculum Statement	Nugget Code	Nugget Name
	PM10.0 PM3.2 PM3.0 PM3.2 PM3.0 PM3.2 PM3.2 PM3.2 PM3.2 PM3.2 PM3.2 PM3.2 PM3.2 PM3.2 PM3.2 PM3.2 PM3.2 PM3.2	PM10.09	Dividing by 5
		PM3.24	Dividing by 7
		PM3.07	Dividing by 8
		PM3.25	Dividing by 9
		PM10.10	Dividing by 10
		PM3.26	Dividing by 11
		PM3.27	Dividing by 12
Division		PM3.28	Mixed Division (Within the Times Tables)
Multiplication and		PM3.29	Multiplying 3 Numbers Together
		PM3.64	Comparing Statements
	recognise and use factor pairs and commutativity in mental calculations	PM3.30	Factor Pairs
	multiply two-digit and three-digit numbers by a one-digit number using formal written layout	PM3.09	Multiplying Multiples of 10
		PM3.10	Multiplying Using Partitioning
		PM3.31	2/3-Digit: Multiplying by 1-Digit
	solve problems involving multiplying and adding, including using the distributive law to multiply two-digit numbers by 1 digit, integer scaling problems and harder correspondence problems such as n objects are connected to m objects	PM3.32	Scaling Problems 2
		PM3.33	Correspondence Problems 1
		PM3.34	Correspondence Problems 2



Торіс	National Curriculum Statement	Nugget Code	Nugget Name
- Fractions (Including Decimals)	recognise and show, using diagrams, families of common equivalent fractions	PM4.05	Equivalent Fractions 1
	count up and down in hundredths; recognise that hundredths arise when dividing an object by 100 and dividing tenths by 10	PM4.09	Hundredths
	solve problems involving increasingly harder fractions to calculate quantities, and fractions to divide quantities, including non-unit fractions where the answer is a whole number	PM4.06	Finding Unit Fractions of Amounts
		PM4.07	Finding Non-Unit Fractions of Amounts
		PM4.08	Finding Fractions of Amounts
	add and subtract fractions with the same denominator	PM4.04	Adding and Subtracting Fractions
	recognise and write decimal equivalents of any number of tenths or hundreds	PM1.21	2dp: Recognising Place Value in Decimals
		PM4.10	Decimal Equivalents (Tenths/Hundredths)
	recognise and write decimal equivalents to quarter, half, three quarters	PM4.11	Decimal Equivalents (Quarter, Half and Three Quarters)
	find the effect of dividing a one- or two-digit number by 10 and 100, identifying the value of the digits in the answer as ones, tenths and hundredths	PM4.12	Dividing and Multiplying by 10 and 100 (Including Decimals)
	round decimals with 1 decimal place to the nearest whole number	PM4.13	Rounding Decimals to the Nearest Whole Number
	compare numbers with the same number of decimal places up to two decimal places	PM4.14	Comparing Decimals
	solve simple measure and money problems involving fractions and decimals to two decimal places	۲	Covered throughout nuggets in this topic
Measurement	convert between different units of measure [for example, kilometre to metre; hour to minute]	PM5.10	Measuring Length
		PM5.11	Converting mm and cm
		PM5.12	Converting cm and m
		PM5.13	Converting m and km

Торіс	National Curriculum Statement	Nugget Code	Nugget Name
Measurement	P convert between different units of measure [for example, kilometre to metre; hour to minute] P	PM5.14	Converting Length
		PM7.14	Converting Seconds, Minutes and Hours
	find the area of rectilinear shapes by counting squares	PM5.20	Area by Counting
		PM5.21	Area
	estimate, compare and calculate different measures, including money in pounds and pence	PM5.04	3-Digit: Mass and Weight
		PM5.15	Measuring Mass
		PM5.16	Converting Mass
		PM5.05	3-Digit: Solving Mass Problems
		PM5.06	3-Digit: Volume and Capacity
		PM5.17	Measuring Volume
		PM5.18	Converting Volume
		PM5.07	3-Digit: Solving Volume and Capacity Problems
		PM6.06	Pounds and Pence
		PM6.01	Adding Amounts of Money
		PM6.02	Adding Amounts of Money 2
		PM6.07	Comparing Amounts of Money
		PM6.08	Estimating Amounts of Money



Торіс	National Curriculum Statement	Nugget Code	Nugget Name
Measurement	estimate, compare and calculate different measures, including money in pounds and pence	PM6.03	Finding Change 2
		PM6.04	Subtracting Amounts of Money
		PM6.10	Solving Money Problems 2
	read, write and convert time between analogue and digital 12- and 24-hour clocks	PM7.09	12 Hour and 24 Hour Clocks
	solve problems involving converting from hours to minutes, minutes to seconds, years to months, weeks to days	PM7.13	Converting Weeks, Days, Years and Months
Geometry - Properties of Shapes	compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes	PM8.11	Triangles
		PM8.12	Quadrilaterals
		PM8.13	Sorting Shapes
	identify acute and obtuse angles and compare and order angles up to two right angles by size	PM8.05	Identifying Angles
	Identify lines of symmetry in 2-D shapes presented in different orientations	PM8.07	Lines of Symmetry
	complete a simple symmetric figure with respect to a specific line of symmetry	۲	Covered throughout nuggets in this topic
Geometry - Position and Direction	describe positions on a 2-D grid as coordinates in the first quadrant	PM8.14	Describing Position
	plot specified points and draw sides to complete a given polygon.	PM8.15	Plotting Points
	describe movements between positions as translations of a given unit to the left/right and up/down	PM8.16	Translation 1
Statistics	interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs. solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs.	PM9.01	Pictograms
		PM9.02	Tables 2
		PM9.03	Bar Charts 1
		PM9.04	Line Graphs 1


# White Rose Mapping - Year 4

#### Autumn Term

	White Rose Map		CENTURY Nuggets
Block 01	White Rose Small Steps	Nugget Code	Nugget Name
Weeks	Represent numbers to 1,000	PM1.05	3-Digit: Recognising place value
01 - 04	Partition numbers to 1,000	PM1.06	3-Digit: Representing numbers up to 1000
	Number line to 1,000	PM1.37	Number lines to 1000
Topic Place Value	Thousands	PM1.20	Place value in 4 digit numbers
	Represent numbers to 10,000	PM1.16	Counting in multiples of 1000
	Partition numbers to 10,000	PM1.07	Finding 10 more or 10 less
	Flexible partitioning of numbers to 10,000	PM1.08	Finding 100 more or 100 less
	Find 1, 10, 100, 1,000 more or less	PM1.17	Finding 1000 more or less
	Number line to 10,000	PM1.22	Comparing and ordering numbers
	Estimate on a number line to 10,000	PM7.07	Roman numerals (up to 20)
	Compare numbers to 10,000	PM1.24	Roman numerals (up to 100)
	Order numbers to 10,000	PM1.23	Rounding to the nearest 10, 100 and 1000
	Roman numerals		
	Round to the nearest 10		
	Round to the nearest 100		
	Round to the nearest 1,000		
	Round to the nearest 10, 100 or 1,000		
Block 02			
	White Rose Small Steps	Nugget Code	
Weeks 05 - 07	Add and subtract 1s, 10s, 100s and 1,000s	PM2.01	3-Digit: Adding and subtracting 1s
	Add up to two 4-digit numbers – no exchange	PM2.02	3-Digit: Adding and subtracting 10s
Торіс	Add two 4-digit numbers – one exchange	PM2.03	3-Digit: Adding and subtracting 100s
Addition and Subtraction	Add two 4-digit numbers – more than one exchange	PM2.13	4-Digit: Column addition (no exchanging)

Back to Curriculum Overview



Block 02	White Rose Small Steps	Nugget Code	Nugget Name
Continued	Subtract two 4-digit numbers – no exchange	PM2.14	4- Digit: Column addition (with exchanging)
Weeks	Subtract two 4-digit numbers – one exchange	PM2.15	4-Digit: Column subtraction (no exchanging)
05 - 07	Subtract two 4-digit numbers – more than one exchange	PM2.16	4-Digit: Column subtraction (with exchanging)
Tonic	Efficient subtraction	PM2.20	Estimating to check answers
Addition and	Estimate answers	PM2.19	Checking answers using the inverse 2
Subtraction	Checking strategies		
Block 03	White Rose Small Steps	Nugget Code	Nugget Name
Week	What is area?	PM5.20	Area by counting
08	Count squares		
Topic	Make shapes		
Area	Compare areas		
Block 04	White Rose Small Steps	Nugget Code	Nugget Name
	Multiples of 3	PM3.01	Multiplying by 3
Weeks	Multiply and divide by 6	PM3.05	Dividing by 3
09-11	6 times-table and division facts	PM3.17	Multiplying by 6
Торіс	Multiply and divide by 9	PM3.23	Dividing by 6
Multiplication	9 times-table and division facts	PM3.19	Multiplying by 9
	The 3, 6 and 9 times-tables	PM3.25	Dividing by 9
	Multiply and divide by 7	PM3.18	Multiplying by 7
	7 times-table and division facts	PM3.24	Dividing by 7
	11 times-table and division facts	PM3.20	Multiplying by 11
	12 times-table and division facts	PM3.26	Dividing by 11
	Multiply by 1 and 0	PM3.21	Multiplying by 12
	Divide a number by 1 and itself	PM3.27	Dividing by 12
	Multiply three numbers	PM3.29	Multiplying 3 numbers together



# Spring Term

	White Rose Map		CENTURY Nuggets
Block 01	White Rose Small Steps	Nugget Code	Nugget Name
Weeks	Factor pairs	PM3.30	Factor Pairs
01 - 03	Use factor pairs	PM3.12	2-Digit: Multiplying by 1-Digit
	Multiply by 10	PM3.31	2/3-Digit: Multiplying by 1-Digit
Iopic Multiplication	Multiply by 100	PM3.35	2/3-Digit: Dividing Using Partitioning (no Remainders)
and division	Divide by 10	PM3.36	2/3-Digit: Dividing Using Partitioning (with Remainders
В	Divide by 100	PM3.33	Correspondence Problems 1
	Related facts – multiplication and division	PM3.34	Correspondence Problems 2
	Informal written methods for multiplication		
	Multiply a 2-digit number by a 1-digit number		
	Multiply a 3-digit number by a 1-digit number		
	Divide a 2-digit number by a 1-digit number (1)		
	Divide a 2-digit number by a 1-digit number (2)		
	Divide a 3-digit number by a 1-digit number		
	Correspondence problems		
	Efficient multiplication		
Block 02	White Rose Small Steps	Nugget Code	Nugget Name
Weeks	Measure in kilometres and metres	PM5.10	Measuring Length
04 - 05	Equivalent lengths (kilometres and metres)	PM5.13	Converting m and km
Tonic	Perimeter on a grid	PM5.08	Perimeter by Counting
Length and	Perimeter of a rectangle	PM5.09	Calculating the Perimeter
perimeter	Perimeter of rectilinear shapes		
	Find missing lengths in rectilinear shapes		
	Calculate perimeter of rectilinear shapes		
	Perimeter of regular polygons		
	Perimeter of polygons		

Back to Curriculum Overview

Block 03	White Rose Small Steps	Block 04	White Rose Small Steps		
Continued	Understand the whole	Weeks	Tenths as fractions		
Weeks	Count beyond 1	10 - 12	Tenths as decimals		
06 - 09	Partition a mixed number	Topic	Tenths on a place value chart		
Торіс	Number lines with mixed numbers	Decimals A	Tenths on a number line		
Fractions	Compare and order mixed numbers		Divide a 1-digit number by 10 Divide a 2-digit number by 10		
	Understand improper fractions				
	Convert mixed numbers to improper fractions		Hundredths as fractions		
	Convert improper fractions to mixed numbers		Hundredths as decimals Hundredths on a place value chart Divide a 1- or 2-digit number by 100		
	Equivalent fractions on a number line				
	Equivalent fraction families				
	Add two or more fractions				
	Add fractions and mixed numbers		Nugget Code Nugget Name		
	Subtract two fractions		PM4.02 Tenths		
	Subtract from whole amounts		PM4.09 Hundredths		
	Subtract from mixed numbers		PM4.10 Decimal Equivalents (Tenths/Hundredths)		
	Equivalent fraction families		PM4.12 Dividing and Multiplying by 10 and 100 (Including Decimals)		
	Add two or more fractions				
	Add fractions and mixed numbers				
	Subtract two fractions				
	Subtract from whole amounts				
	Nugget Code Nugget Name				
	PM4.01 Identifying Fractions				

PM4.40

PM4.05

PM4.04

**Counting in Fractions** 

**Equivalent Fractions 1** 

Adding and Subtracting Fractions

# Summer Term

	White Rose Map		CENTURY Nuggets
Block 01	White Rose Small Steps	Nugget Code	Nugget Name
Wooks	Make a whole with tenths	PM4.14	Comparing Decimals
01 - 02	Make a whole with hundredths	PM4.13	Rounding Decimals to the Nearest Whole Number
	Partition decimals	PM4.11	Decimal Equivalents
Topic Decimals B	Flexibly partition decimals		
Decimais D	Compare decimals		
	Order decimals		
	Round to the nearest whole number		
	Halves and quarters as decimals		
Block 02	White Rose Small Steps	Nugget Code	Nugget Name
Wooks	Write money using decimals	PM6.06	Pounds and Pence
03 - 04	Convert between pounds and pence	PM6.07	Comparing Amounts of Money
<b>-</b> .	Compare amounts of money	PM6.08	Estimating Amounts of Money
lopic Money	Estimate with money	PM6.10	Solving Money Problems 2
	Calculate with money		
	Solve problems with money		
Block 03	White Rose Small Steps	Nugget Code	Nugget Name
Wooks	Years, months, weeks and days	PM7.13	Converting Weeks, Days, Years and Months
05 - 06	Hours, minutes and seconds	PM7.14	Converting Seconds, Minutes and Hours
	Convert between analogue and digital times	PM7.09	12 Hour and 24 Hour Clocks
Topic	Convert to the 24-hour clock		
Time	Convert from the 24-hour clock		



Block 04	White Rose Small Steps	Nugget Code	Nugget Name	
Wooks	Understand angles as turns	PM8.04	Angles in Turns 1	
08 - 09	Identify angles	PM8.05	Identifying Angles	
	Compare and order angles	PM8.11	Triangles	
lopic Shape	Triangles	PM8.12	Quadrilaterals	
onape	Quadrilaterals	PM8.07	Lines of Symmetry	
	Polygons			
	Lines of symmetry			
	Complete a symmetric figure			
Block 05	White Rose Small Steps	Nugget Code	Nugget Name	
Wook	Interpret charts	PM9.01	Pictograms	
10	Comparison, sum and difference	PM9.03	Bar Charts 1	
	Interpret line graphs	PM9.04	Line Graphs 1	
Topic	Draw line graphs			
Statistics				
Block 06	White Rose Small Steps	Nugget Code	Nugget Name	
Weeks	Describe position using coordinates	PM8.14	Describing Position	
11-12	Plot coordinates	PM8.15	Plotting Points	
	Draw 2-D shapes on a grid	PM8.16	Translation 1	
Topic Resition and	Translate on a grid			
direction	Describe translation on a grid			



# National Curriculum Map Primary – Year 5

Course Primary - Year 5 Mathematics

Diagnostics 10 Strands 12 Nuggets 206

### Strands - Primary - Year 5 Mathematics

A strand is a sequence of nuggets grouped by theme or topic, forming a high-level organisation of content within a course.

Strand	No. of nuggets
Diagnostics	14
Number and Place Value	15
Addition and Subtraction	14
Multiplication and Division	23
Times Tables and Division Facts	24
Mixed operations	7
Fractions	18
Fractions, decimals and percentages	18

Strand	No. of nuggets
Measurement	23
Time	13
Area, Perimeter and Volume	10
Properties of Shapes	21
Position and Direction	4
Statistics	10
End of Year Assessments	4

## Nuggets mapped to the National Curriculum

A nugget is a micro-lesson that contains learning material followed by questions to assess learning.

	National Curriculum		CENTURY
Торіс	National Curriculum Statement	Nugget Code	Nugget Name
er and Value	read, write, order and compare numbers to at least 1,000,000		Place Value up to 1,000,000
<b>N</b> umb Place	and determine the value of each digit	PM1.26	Comparing and Ordering Numbers to 1,000,000

← Back to Curriculum Overview





Торіс	National Curriculum Statement	Nugget Code	Nugget Name
_	count forwards or backwards in steps of powers of 10 for any given number up to 1,000,000	PM1.27	Counting Forwards and Backwards in Powers of 10
	interpret negative numbers in context, count forwards and backwards	PM1.18	Negative Numbers 1
	with positive and negative whole numbers, including through 0	PM1.19	Negative Numbers 2 (Including Addition and Subtraction)
Ine	round any number up to 1,000,000 to the nearest	PM1.23	Rounding to the Nearest 10, 100 and 1000
l Place Va	10, 100, 1,000, 10,000 and 100,000	PM1.28	Rounding to the Nearest 10,000 and 100,000
mber and	solve number problems and practical problems that involve all of the above	-	① Included in Nuggets Above
Z		PM7.07	Roman Numerals (up to 20)
	read Roman numerals to 1,000 (M) and	PM1.24	Roman Numerals (up to 100)
	recognise years written in Roman numerals	PM1.29	Roman Numerals (up to 1000)
		PM1.30	Roman Numerals (Beyond 1000)
	add and subtract whole numbers with more than 4 digits,	PM2.22	4+ Digit: Column Addition
	including using formal written methods (columnar addition and subtraction)	PM2.23	4+ Digit: Column Subtraction
traction		PM2.24	Mental Strategies for Addition 1
n and Sub	add and subtract numbers mentally	PM2.25	Mental Strategies for Addition 2
Additior	with increasingly large numbers	PM2.26	Mental Strategies for Subtraction 1
	PM2	PM2.27	Mental Strategies for Subtraction 2
	use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy	PM2.20	Estimating to Check Answers

Primary Mathematics Course Mapping Year 5 Mathematics National Curriculum Map



Торіс	National Curriculum Statement	Nugget Code	Nugget Name
Addition and Subtraction	solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why	PM2.21	Solving Two-Step Problems
	identify multiples and factors, including finding all factor pairs of a number,		Factor Pairs
	and common factors of 2 numbers	PM3.40	Common Factors
	know and use the vocabulary of prime numbers, prime factors and composite (non-prime) numbers	PM3.41	Prime Numbers
	establish whether a number up to 100 is prime and recall prime numbers up to 19	PM3.42	Prime Factors
		PM3.50	3/4-Digit: Multiplying by 1-Digit
	multiply numbers up to 4 digits by a one- or two-digit number using a formal written method, including long multiplication for two-digit numbers	PM3.51 2-Digit: Multiplying by 2-Digits	2-Digit: Multiplying by 2-Digits
ion		PM3.52	3/4-Digit: Multiplying by 2-Digits
and Divi			Mental Strategies for Multiplication 1
tiplicatior	multiply and divide numbers mentally, drawing upon known facts	PM3.48       Mental Strategies for Multiplication 2         PM3.49       Mental Strategies for Division	Mental Strategies for Multiplication 2
W			Mental Strategies for Division
	divide numbers up to 4 digits by a one-digit number using the formal written method	PM3.53	3/4-Digit: Dividing by 1-Digit Numbers Using Short Division (without Remainders)
	of short division and interpret remainders appropriately for the context	PM3.54	3/4-Digit: Dividing by 1-Digit Numbers Using Short Division (with Remainders)
		PM3.45	Multiplying by 10, 100 and 1000 (Involving Decimals up to 3 d.p.)
		PM3.46 Dividing by 10, 100 and 1000 (Involving Decimals Up	Dividing by 10, 100 and 1000 (Involving Decimals Up to 3 d.p.)
	recognise and use square numbers and cube numbers, and the notation for squared ( <sup>2</sup> ) and cubed ( <sup>3</sup> )		Square Numbers
			Cube Numbers



Торіс	National Curriculum Statement	Nugget Code	Nugget Name
Multiplication and Division	solve problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign	PM11.01	Understanding the Equals Sign
		PM11.02	Solving Multistep Problems 1 (with Multiplication)
		PM11.03	Solving Multistep Problems 2 (with Division)
	solve problems involving multiplication and division.	PM3.32	Scaling Problems 2
	including scaling by simple fractions and problems involving simple rates	PM11.04	Multistep Scaling Problems
	identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths	PM4.15	Equivalent Fractions 2
	compare and order fractions whose denominators	PM4.16	Comparing Proper Fractions 1
	are all multiples of the same number	PM4.18	Comparing and Ordering Improper Fractions and Mixed Numbers
ages)	recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements > 1 as a mixed number [for example, $2/5 + 4/5 = 6/5 = 1 1/5$ ]	PM4.17	Mixed Numbers and Improper Fractions
d Percent		PM4.04	Adding and Subtracting Fractions
cimals and	add and subtract fractions with the same denominator, and denominators that are multiples of the same number	PM4.27	Adding and Subtracting Fractions with Different Denominators
uding Dec		PM4.29	Adding and Subtracting Mixed Numbers 1
tions (Incl		PM4.28	Multiplying Fractions by Whole Numbers
Fracti	multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams	PM4.30	Multiplying Mixed Numbers by Whole Numbers
		PM4.31	Fractions as Operators
	read and write decimal numbers as fractions [for example, 0.71 = 71/100 ]		Decimal Equivalents (Quarter, Half and Three Quarters)
			Decimal Equivalents (Tenths/Hundredths)



Торіс	National Curriculum Statement	Nugget Code	Nugget Name	
	recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents	PM12.01	Thousandths	
	round decimals with 2 decimal places to the nearest whole number and to 1 decimal place		Rounding Decimals to the Nearest Whole Number	
			Rounding Decimals	
ages)			3dp: Recognising Place Value in Decimals	
d Percent	read, write, order and compare numbers with up to 5 decimal places	PM4.14	Comparing Decimals	
cimals an		PM12.14	Adding and Subtracting Decimals (within 1)	
uding De	solve problems involving number up to 3 decimal places	PM12.15	3dp: Decimal Complements to 1	
tions (Incl		PM12.04	Adding and Subtracting Decimals	
Fract	recognise the percent symbol (%) and understand that per cent relates to 'number of parts per 100', and write percentages as a fraction with denominator 100, and as a decimal fraction	PM12.05	Introduction to Percentages	
			Fractions, Decimals and Percentages 1	
	solve problems which require knowing percentage and decimal equivalents of $ 1\!\!\!/_2$ , $1\!\!\!/_3$ , $1\!\!\!/_5$ , $1\!\!\!/_5$ and those fractions with a denominator of a multiple of 10 or 25	PM12.07	Finding Percentages 1	
			Finding Percentages 2	
		PM5.11	Converting mm and cm	
ant		PM5.12	Converting cm and m	
Measureme	convert between different units of metric measure [for example, kilometre and metre; centimetre and metre; centimetre and millimetre; gram and kilogram; litre and millilitre]	PM5.13	Converting m and km	
		PM5.14	Converting Length	
			Converting Mass	



Торіс	National Curriculum Statement	Nugget Code	Nugget Name	
			Converting Volume	
	convert between different units of metric measure [for example, kilometre and metre; centimetre and metre;	PM5.23	Solving Length Problems with Conversion	
	centimetre and millimetre; gram and kilogram; litre and millilitre]	PM5.25	Solving Mass Problems with Conversion	
		PM5.27	Solving Volume and Capacity Problems with Conversion	
		PM5.22	Imperial Units of Length	
	understand and use approximate equivalences between metric units and common imperial units such as inches, pounds and pints	PM5.24	Imperial Units of Mass	
			Imperial Units of Volume and Capacity	
rement	measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres	PM13.01	Calculating the Perimeter 2	
Measu			Area of Rectangles	
	calculate and compare the area of rectangles (including squares), including using standard units, square centimetres (cm²) and square metres (m²), and estimate the area of irregular shapes	PM13.03	Area of Compound Shapes	
			Estimating Area	
	estimate volume [for example, using 1 cm <sup>3</sup> blocks to build cuboids (including cubes)] and capacity [for example, using water]		Volume of Shapes 1	
			Estimating Volume and Capacity	
		PM7.13	Converting Weeks, Days, Years and Months	
	solve problems involving converting between units of time	PM7.14	Converting Seconds, Minutes and Hours	
			Converting Units of Time	
Geometry – Properties of Shapes	identify 3-D shapes, including cubes and other cuboids, from 2-D representations	PM14.03	Views of 3D Shapes	

Primary Mathematics Course Mapping Year 5 Mathematics National Curriculum Map

Торіс	National Curriculum Statement	Nugget Code	Nugget Name
		PM14.05	Identifying Angles 2
	know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles	PM14.08	Measuring Angles
		PM14.07	Estimating Angles
Shapes	draw given angles, and measure them in degrees (°)	PM14.09	Drawing Angles
Derties of	identify angles at a point and 1 whole turn (total 360°)	PM14.12	Angles Around a Point
try – Proj	identify angles at a point on a straight line and half a turn (total 180°)	PM14.11	Angles on a Straight Line
Geome	identify other multiples of 90°	PM14.04	Angles in Turns 2
	identify use the properties of rectangles to deduce related facts and find missing lengths and angles	PM14.02	Lengths of Right-Angled Shapes
		PM14.06	Angles in Right-Angled Shapes
	identify distinguish between regular and irregular polygons based on reasoning about equal sides and angles	PM14.01	Regular and Irregular Polygons
ietry - on and ction	identify, describe and represent the position of a shape following a reflection or translation, using the appropriate language, and know that the shape has not changed		Translation 1
Geom Positi Dire			Reflection 1
	solve comparison, sum and difference problems using information presented in a line graph	PM9.13	Bar Charts 2
		PM9.08	Line Graphs 2
Statistics	complete, read and interpret information in tables, including timetables	PM9.05	Tables 3
		PM9.06	Two-Way Tables
			Timetables



# White Rose Mapping - Year 5

## Autumn Term

White Rose Map			CENTURY Nuggets		
Block 01	White Rose Small Steps Roman numerals to 1,000	Nugget Code PM1.29	Nugget Name Roman numerals (up to 1000)		
01 - 03	Numbers to 10,000	PM1.20	Place value in 4 digit numbers		
Topic Place Value	Numbers to 1,000,000 Read and write numbers to 1,000,000 Powers of 10	PM1.27 PM1.26 PM1.23	Counting forwards and backwards in powers of 10 Comparing and ordering numbers to 1,000,000 Rounding to the nearest 10, 100 and 1000		
	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 Compare and order numbers to 1,000,000 Round to the nearest 10, 100 or 1,000 Round within 100,000 Round within 1,000,000	PM1.28	Rounding to the nearest 10,000 and 100,000		
Block 02	White Rose Small Steps	Nugget Code	Nugget Name		
Weeks <b>04 - 05</b> Topic	Mental strategies Add whole numbers with more than four digits Subtract whole numbers with more than four digits	PM2.24 PM2.25 PM2.26	Mental strategies for addition 1 Mental strategies for addition 2 Mental strategies for subtraction 1		
Addition and Subtraction	Round to check answers Inverse operations (addition and subtraction)	PM2.27 PM2.22	Mental strategies for subtraction 2 4+ Digit: Column addition		

Block 02	White Rose Small Steps	Nugget Code	Nugget Name
Continued	Multi-step addition and subtraction problems	PM2.23	4+ Digit: Column subtraction
Weeks	Compare calculations	PM2.20	Estimating to check answers
04 - 05	Find missing numbers	PM2.19	Checking answers using the inverse 2
Topic Addition and Subtraction		PM2.21	Solving two-step problems

Block 03	White Rose Small Steps	Nugget Code	Nugget Name
Weeks	Multiples	PM3.30	Factor pairs
06 - 08	Common multiples	PM3.40	Common factors
Taula	Factors	PM3.41	Prime numbers
Nultiplication	Common factors	PM3.43	Square numbers
and Division A	Prime numbers	PM3.44	Cube numbers
	Square numbers	PM3.09	Multiplying multiples of 10
	Cube numbers	PM3.47	Mental strategies for multiplication 1
	Multiply by 10, 100 and 1,000	PM3.49	Mental strategies for division
	Divide by 10, 100 and 1,000		
	Multiples of 10, 100 and 1,000		

	Block 04	White Rose Small Steps	Nugget Code	Nugget Name
Weeks <b>09 - 12</b>	Find fractions equivalent to a unit fraction	PM4.05	Equivalent fractions 1	
	Find fractions equivalent to a non-unit fraction	PM4.15	Equivalent fractions 2	
Topic Fractions A	Recognise equivalent fractions	PM4.17	Mixed numbers and improper fractions	
	Convert improper fractions to mixed numbers	PM4.03	Comparing and ordering fractions	
	Convert mixed numbers to improper fractions	PM4.16	Comparing proper fractions 1	
	Compare fractions less than 1	PM4.18	Comparing and ordering improper fractions and mixed numbers	
	Order fractions less than 1	PM4.04	Adding and subtracting fractions	
		Compare and order fractions greater than 1	PM4.27	Adding and subtracting fractions with different denominators



Block 04	White Rose Small Steps			
Continued	Add and subtract fractions with the same denominator			
Weeks	Add fractions within 1			
09 - 12	Add fractions with total greater than 1			
Торіс	Add to a mixed number			
Fractions A	Add two mixed numbers			
	Subtract fractions			
	Subtract from a mixed number			
	Subtract from a mixed number – breaking the whole			
	Subtract two mixed numbers			

#### Nugget Code Nugget Name

PM4.29 Adding and subtracting mixed numbers 1

### Spring Term

	White Rose Map		CENTURY Nuggets	
Block 01	White Rose Small Steps	Nugget Code	Nugget Name	
Mooke	Multiply up to a 4-digit number by a 1-digit number	PM3.50	3/4-Digit: Multiplying by 1-Digit	
01 - 03	Multiply a 2-digit number by a 2-digit number (area model)	PM3.51	2-Digit: Multiplying by 2-Digits	
	Multiply a 2-digit number by a 2-digit numbe	PM3.52	3/4-Digit: Multiplying by 2-Digits	
Topic	Multiply a 3-digit number by a 2-digit number	PM3.37	2/3-Digit: Dividing Using Written Methods	
and division	Multiply a 4-digit number by a 2-digit number	PM3.53	3/4-Digit: Dividing by 1-Digit Numbers Using Short Division	
В	Solve problems with multiplication		(without Remainders)	
	Short division	PM3.54	3/4-Digit: Dividing by 1-Digit Numbers Using Short Division	
	Divide a 4-digit number by a 1-digit number		(white Remainders)	
	Divide with remainders			
	Efficient division			
	Solve problems with multiplication and division			
	Divide a 2-digit number by a 1-digit number (2)			
	Divide a 3-digit number by a 1-digit number			
	Correspondence problems			
	Efficient multiplication			
	Efficient multiplication			
	Block 01 Weeks 01 - 03 Topic Multiplication and division B	Write Rose Map         Block 01       White Rose Small Steps         Weeks 01 - 03       Multiply up to a 4-digit number by a 1-digit number Multiply a 2-digit number by a 2-digit number (area model)         Topic Multiplication and division B       Multiply a 3-digit number by a 2-digit number         B       Solve problems with multiplication         B       Solve problems         B       Solve problems         B       Solve problems         B	Block 01       White Rose Small Steps       Nugget Code         Weeks 01 - 03       Multiply up to a 4-digit number by a 1-digit number       PM3.50         Topic       Multiply a 2-digit number by a 2-digit number (area model)       PM3.51         Multiply a 2-digit number by a 2-digit number       PM3.52         Multiply a 3-digit number by a 2-digit number       PM3.53         Solve problems with multiplication       PM3.53         Solve problems with multiplication       PM3.54         Divide a 4-digit number by a 1-digit number       PM3.54         Divide a 4-digit number by a 1-digit number       PM3.54         Divide a 4-digit number by a 1-digit number       PM3.54         Divide a 3-digit number by a 1-digit number       PM3.54         Divide a 3-digit number by a 1-digit number       PM3.54         Divide a 3-digit number by a 1-digit number       PM3.54         Divide a 3-digit number by a 1-digit number       PM3.54         Divide a 3-digit number by a 1-digit number       PM3.54         Divide a 3-digit number by a 1-digit number       PM3.54         Divide a 3-digit number by a 1-digit number       PM3.54         Divide a 3-digit number by a 1-digit number       PM3.54         Divide a 3-digit number by a 1-digit number       PM3.54         Divide a 3-digit number by a 1-digit number	

 $\leftarrow$  Back to Curriculum Overview

Primary Mathematics Course Mapping White Rose Year 5 Autumn | Spring Term

Block 02	White Rose Small Steps	Nugget Code	Nugget Name
Weeks	Multiply a unit fraction by an integer	PM4.28	Multiplying Fractions by Whole Numbers
04 - 05	Multiply a non-unit fraction by an integer	PM4.30	Multiplying Mixed Numbers by Whole Numbers
<b>_</b> .	Multiply a mixed number by an integer	PM4.06	Finding Unit Fractions of Amounts
Iopic Fractions B	Calculate a fraction of a quantity	PM4.07	Finding Non-Unit Fractions of Amounts
	Fraction of an amount	PM4.36	Finding Fractions of Amounts: Finding the Whole
	Find the whole	PM4.31	Fractions as Operators
	Use fractions as operators		

Block 03	White Rose Small Steps	Nugget Code	Nugget Name
Weeks	Decimals up to 2 decimal places	PM1.21	2dp: Recognising Place Value in Decimals
06 - 08	Equivalent fractions and decimals (tenths)	PM4.10	Decimal Equivalents (Tenths/Hundredths)
Topic	Equivalent fractions and decimals (hundredths)	PM4.11	Decimal Equivalents (Quarter, Half and Three Quarters)
Decimals and	Equivalent fractions and decimals	PM12.01	Thousandths
percentages	Thousandths as fractions	PM12.02	3dp: Recognising Place Value in Decimals
	Thousandths as decimals	PM4.14	Comparing Decimals
	Thousandths on a place value chart	PM4.13	Rounding Decimals to the Nearest Whole Number
	Order and compare decimals (same number of decimal places)	PM12.03	Rounding Decimals
	Order and compare any decimals with up to 3 decimal places	PM12.05	Introduction to Percentages
	Round to the nearest whole number	PM12.06	Fractions, Decimals and Percentages 1
	Round to 1 decimal place		
	Understand percentages		
	Percentages as fractions		
	Percentages as decimals		

Equivalent fractions, decimals and percentages





Block 05	White Rose Small Steps	Nugget Code	Nugget Name
Wooks	Perimeter of rectangles	PM5.09	Calculating the Perimeter
<b>09 - 10</b>	Perimeter of rectilinear shapes	PM5.09	Calculating the Perimeter
<b>_</b> .	Perimeter of polygons	PM13.02	Area of Rectangles
lopic Perimeter	Area of rectangles	PM13.03	Area of Compound Shapes
and area	Area of compound shapes	PM13.04	Estimating Area
	Estimate area		

BIOCK 06	White Rose Small Steps	Nugget Code Nugget Name	
Weeks <b>11 - 12</b>	Draw line graphs	PM9.04 Line Graphs 1	
	Read and interpret line graphs	PM9.08 Line Graphs 2	
Topic Statistics	Read and interpret tables	PM9.05 Tables 3	
	Two-way tables	PM9.06 Two-Way Tables	
	Read and interpret timetables	PM9.07 Timetables	



### Summer Term

White Rose Map			CENTURY Nuggets		
Block 01	White Rose Small Steps	Nugget Code	Nugget Name		
Wooks	Understand and use degrees	PM14.05	Identifying Angles 2		
01 - 03	Classify angles	PM14.07	Estimating Angles		
	Estimate angles	PM14.08	Measuring Angles		
Topic	Measure angles up to 180°	PM14.09	Drawing Angles		
onape	Draw lines and angles accurately	PM14.12	Angles Around a Point		
	Calcuate angles around a point	PM14.11	Angles on a Straight Line		
	Calculate angles on a straight line	PM14.01	Regular and Irregular Polygons		
	Lengths and angles in shapes	PM8.02	Describing 3D Shapes		
	Regular and irregular polygons				
	3-D shapes				
Block 02	White Rose Small Steps	Nugget Code	Nugget Name		
Weeks <b>04 - 05</b>	Read and plot coordinates	PM8.15	Plotting Points		
	Problem solving with coordinates	PM8.16	Translation 1		
	Translation	PM15.01	Reflection 1		
Position and	Translation with coordinates				
Direction	Lines of symmetry				
	Reflection in horizontal and vertical lines				
Block 03	White Rose Small Steps	Nugget Code	Nugget Name		
Wooks	Use known facts to add and subtract decimals within 1	PM12.14	Adding and Subtracting Decimals (within 1)		
06 - 08	Complements to 1	PM4.41	2dp: Decimal Complements to 1		
	Add and subtract decimals across 1	PM12.15	3dp: Decimal Complements to 1		
Topic	Add decimals with the same number of decimal places	PM12.04	Adding and Subtracting Decimals		
Decimais	Subtract decimals with the same number of decimal places	PM4.12	Dividing and Multiplying by 10 and 100		
	Add decimals with different numbers of decimal places	PM3.45 Multiplying by 10, 100 and 1000			
	Subtract decimals with different numbers of decimal places		(involving Decimals up to 3 d.p)		

← Back to Curriculum Overview



Block 03	White Rose Small Steps	Nugget Code	Nugget Name			
Continued	Efficient strategies for adding and subtracting decimals	PM3.46	Dividing by 10, 100 and 1000			
Weeks	Decimal sequences		(involving Decimals up to 3 d.p)			
06 - 08	Multiply by 10, 100 and 1,000					
Торіс	Divide by by 10, 100 and 1,000					
Decimals	Multiply and divide decimals - missing values					
Block 04	White Rose Small Steps	Nugget Code	Nugget Name			
Week	Understand negative numbers	PM1.18	Negative Numbers 1			
09	Count through zero in 1s	PM1.19	Negative Numbers 2 (Including Addition and Subtraction)			
Tania	Count through zero in multiples					
lopic Negative	Compare and order negative numbers					
Numbers	Find the difference					
Block 05	White Rose Small Steps	Nugget Code	Nugget Name			
Week	Kilograms and kilometres	PM5.11	Converting mm and cm			
10	Millimetres and Millilitres	PM5.12	Converting cm and m			
Tania	Convert units of length	PM5.13	Converting m and km			
Converting	Convert between metric and imperial units	PM5.23	Solving Length Problems with Conversion			
Units	Convert units of time	PM5.22	Imperial Units of Length			
	Calculate with timetables	PM5.24	Imperial Units of Mass			
		PM5.26	Imperial Units of Volume and Capacity			
		PM7.15	Converting Units of Time			
		PM9.07	Timetables			
Block 06	White Rose Small Steps	Nugget Code	Nugget Name			
Week	Cubic centimetres	PM13.06	Volume of Shapes 1			
11	Compare volume					
Tapia	Estimate volume					
lopic Volume	Estimate capacity					



# National Curriculum Map Year 6 Mathematics

Course Primary - Year 6 Mathematics

Diagnostics 17 Strands 18 Nuggets 272

#### **Strands - Primary - Year 6 Mathematics**

A strand is a sequence of nuggets grouped by theme or topic, forming a high-level organisation of content within a course.

Strand	No. of nuggets
Diagnostics	17
Number and Place Value	15
Addition and Subtraction	16
Times Tables and Division Facts	24
Multiplication and Division	27
Mixed Operations	10
Fractions	29
Fractions, Decimals and Percentages	20
Percentages	8

Strand	No. of nuggets
Ratio and Proportion	6
Algebra	11
Measurements	25
Time	13
Area, Perimeter and Volume	14
Properties of Shapes	28
Position and Direction	7
Statistics	15
End of Year 6 Assessments	4

#### Nuggets mapped to the National Curriculum

A nugget is a micro-lesson that contains learning material followed by questions to assess learning.

	National Curriculum		CENTURY
Торіс	National Curriculum Statement	Nugget Code	Nugget Name
iber Vlace ue	read, write, order and compare numbers up to 10,000,000 and determine the value of each digit	PM1.31	Place Value up to 10,000,000
Num and F Val	round any whole number to a required degree of accuracy	PM1.23	Rounding to the Nearest 10, 100 and 1000

 $\leftarrow$  Back to Curriculum Overview

Primary Mathematics Course Mapping Year 6 Mathematics National Curriculum Map



Торіс	National Curriculum Statement	Nugget Code	Nugget Name
imber and Place Value	round any whole number to a required degree of accuracy	PM1.28	Rounding to the Nearest 10,000 and 100,000
	use negative numbers in context, and calculate intervals across 0 PM1.19 PM1.32 PM1.32	PM1.19	Negative Numbers 2 (Including Addition and Sub- traction)
		Negative Numbers 3	
ž	solve number and practical problems that involve all of the above	۲	Included in Nuggets Above
	multiply multi-digit numbers up to 4 digits by a two-digit whole number	PM3.51	2-Digit: Multiplying by 2-Digits
	using the formal written method of long multiplication	PM3.52	3/4-Digit: Multiplying by 2-Digits
	divide numbers up to 4 digits by a two-digit whole number using the formal written PI method of long division, and interpret remainders as whole number remainders, fractions, or by rounding, as appropriate for the context PI	PM3.57	Long Division 1 (Dividing by a Single Digit Number)
-		PM3.58	Long Division 2 (Dividing by a 2 Digit Number)
d Division	divide numbers up to 4 digits by a two-digit number using the formal written method of short division where appropriate, interpreting remainders according to the context	PM3.53	3/4-Digit: Dividing by 1-Digit Numbers Using Short Division (without Remainders)
lication ar		PM3.54	3/4-Digit: Dividing by 1-Digit Numbers Using Short Division (with Remainders)
n, Multipl		PM3.56	Dividing by 2 Digit Numbers Using Short Division
Subtractio		PM2.24	Mental Strategies for Addition 1
ddition, S		PM2.25	Mental Strategies for Addition 2
٩	perform mental calculations, including with	PM2.26	Mental Strategies for Subtraction 1
	mixed operations and large numbers	PM2.27	Mental Strategies for Subtraction 2
		PM3.47	Mental Strategies for Multiplication 1
		PM3.48	Mental Strategies for Multiplication 2

Торіс	National Curriculum Statement	Nugget Code	Nugget Name
	perform mental calculations, including with mixed operations and large numbers	PM3.49	Mental Strategies for Division
			Common Factors
	identify common factors, common multiples and prime numbers	PM3.41	Prime Numbers
-		PM3.55	Common Multiples
d Division		PM11.05	Operations of Equal Priority
ication an	use their knowledge of the order of operations to carry out calculations involving the 4 operations	PM11.06	BIDMAS: 4 Operations and Brackets
n, Multipl		PM11.07	BIDMAS: Indices
Subtractio	solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why	PM2.28	Multistep Addition and Subtraction Problems
ddition, S		PM11.02	Solving Multistep Problems 1 (with Multiplication)
٩		PM11.03	Solving Multistep Problems 2 (with Division)
	solve problems involving addition, subtraction, multiplication and division	PM2.22	4+ Digit: Column Addition
		PM2.23	4+ Digit: Column Subtraction
	use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy	PM2.20	Estimating to Check Answers
	use common factors to simplify fractions; use common multiples to express fractions in the same denomination	PM4.23	Simplifying Fractions
tions		PM4.16	Comparing Proper Fractions 1
Fract	compare and order fractions, including fractions >1	PM4.21	Comparing Proper Fractions 2
		PM4.18	Comparing and Ordering Improper Fractions and Mixed Numbers



Торіс	National Curriculum Statement	Nugget Code	Nugget Name
	F add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions F	PM4.27	Adding and Subtracting Fractions with Different Denominators
		PM4.32	Adding and Subtracting Fractions with Different Denominators 2
		PM4.29	Adding and Subtracting Mixed Numbers 1
		PM4.33	Adding and Subtracting Mixed Numbers 2
	multiply simple pairs of proper fractions, writing the answer in its simplest form [for example, $\frac{1}{4} \times \frac{1}{2} = \frac{1}{8}$ ]	PM4.24	Multiplying Simple Pairs of Proper Fractions
	divide proper fractions by whole numbers [for example, $1/3 \div 2 = 1/6$ ]	PM4.25	Dividing Fractions by Whole Numbers
	associate a fraction with division and calculate decimal fraction equivalents [for example, 0.375] for a simple fraction [for example, 3/8]	PM12.12	Fractions to Decimals Using Division
Fractions	identify the value of each digit in numbers given       PM12.02         to 3 decimal places and multiply and divide numbers       PM3.45         by 10, 100 and 1,000 giving answers up to 3 decimal places       PM3.46	PM12.02	3dp: Recognising Place Value in Decimals
L.		PM3.45	Multiplying by 10, 100 and 1000 (Involving Decimals up to 3 d.p.)
		PM3.46	Dividing by 10, 100 and 1000 (Involving Decimals Up to 3 d.p.)
	multiply one-digit numbers with up to 2 decimal places by whole numbers	PM12.09	Multiplying Decimals
	use written division methods in cases where the answer has up to 2 decimal places	PM12.10	Dividing Decimals
	solve problems which require answers to be rounded to specified degrees of accuracy	۲	Included in Nuggets Above
	recall and use equivalences between simple fractions,	PM12.11	Converting Decimals to Fractions
	decimals and percentages, including in different contexts	PM12.13	Fractions, Decimals and Percentages 2
Ratio and Proportion	solve problems involving the relative sizes of 2 quantities where missing values can be found by using integer multiplication and division facts	PM17.01	Introduction to Ratio
		PM17.02	Simplifying Ratios



Торіс	National Curriculum Statement	Nugget Code	Nugget Name
	solve problems involving the relative sizes of 2 quantities where missing values can be found by using integer multiplication and division facts	PM17.06	Proportion
		PM16.01	Finding Percentages of Amounts 1 (1%, 10%, 25%, 50%)
		PM16.02	Finding Percentages of Amounts 2 (2-9%)
rion	solve problems involving the calculation of percentages [for example, of measures and such as 15% of 360] and the use of percentages for comparison	PM16.03	Finding Percentages of Amounts 3 (multiples of 10)
and Prop		PM16.04	Finding Percentages of Amounts 4 (11-99%)
Ratio		PM16.05	Percentages (Missing Values)
	solve problems involving similar shapes where the scale factor is known or can be found	PM17.05	Similar Shapes
	F solve problems involving unequal sharing and grouping using knowledge of fractions and multiples F	PM17.03	Ratios and Fractions
		PM17.04	Sharing into a Given Ratio
	use simple formulae	PM18.02	Function Machines
		PM18.07	Formulae
	generate and describe linear number sequences	PM18.01	Sequences
ebra		PM18.03	Forming Expressions 1
Algo		PM18.04	Forming Expressions 2
	express missing number problems algebraically	PM18.05	Forming Expressions 3
		PM18.06	Substitution
		PM18.08	Solving 1 Step Equations

Торіс	National Curriculum Statement	Nugget Code	Nugget Name
Algebra	express missing number problems algebraically	PM18.09	Solving 2 Step Equations
	find pairs of numbers that satisfy an equation with 2 unknowns	PM18.10	Satisfying Equations with 2 Variables
	enumerate possibilities of combinations of 2 variables	PM18.11	Enumerating Possibilities
		PM5.14	Converting Length
	solve problems involving the calculation and conversion of units of measure, using decimal notation up to 3 decimal places where appropriate	PM5.16	Converting Mass
		PM5.18	Converting Volume
	use, read, write and convert between standard units, converting measurements of length, mass, volume and time from a smaller unit of measure to a larger unit, and vice versa, using decimal notation to up to 3 decimal places	PM5.29	Converting Metric Measures
ıts	convert between miles and kilometres	PM5.30	Converting Miles and Kilometres
asuremei	recognise that shapes with the same areas can have different perimeters and vice versa	PM13.05	Area and Perimeter
¥	recognise when it is possible to use formulae for area and volume of shapes	PM13.02	Area of Rectangles
		PM13.10	Volume of Shapes 2
		PM13.07	Area of Parallelograms
	calculate the area of parallelograms and triangles	PM13.08	Area of Right-Angled Triangles
		PM13.09	Area of Triangles
Properties of Shapes	draw 2-D shapes using given dimensions and angles	PM14.14	Nets of Shapes 2
	compare and classify geometric shapes based on their properties and sizes	PM14.16	Angles in Triangles
	and find unknown angles in any triangles, quadrilaterals, and regular polygons	PM14.17	Angles in Quadrilaterals



Торіс	National Curriculum Statement	Nugget Code	Nugget Name
	compare and classify geometric shapes based on their properties and sizes and find unknown angles in any triangles, quadrilaterals, and regular polygons	PM14.18	Angles in Regular Polygons
	illustrate and name parts of circles, including radius, diameter and circumference and know that the diameter is twice the radius	PM14.13	Circles
		PM14.12	Angles Around a Point
of Shape	recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles	PM14.11	Angles on a Straight Line
roperties	PM14.15	Vertically Opposite Angles	
Ē	describe positions on the full coordinate grid (all 4 quadrants)	PM15.02	Four Quadrants
	Product of the state of the state of the coordinate plane, and reflect them in the axes	PM15.03	Translation 2
		PM15.04	Reflection 2
	PM9.09 interpret and construct pie charts and line graphs and use these to solve problems PM9.10 PM9.11	PM9.09	Line Graphs 3
Statistics		PM9.10	Pie Charts 1
		PM9.11	Pie Charts 2
	calculate and interpret the mean as an average	PM9.12	Finding the Mean



# White Rose Mapping - Year 6

# Autumn Term

	White Rose Map		CENTURY Nuggets
Block 01	White Rose Small Steps	Nugget Code	Nugget Name
Weeks	Numbers to 1,000,000	PM1.25	Place value up to 1,000,000
01 - 02	Numbers to 10,000,000	PM1.31	Place value up to 10,000,000
	Read and write numbers to 10,000,000	PM1.26	Comparing and ordering numbers to 1,000,000
Place Value	Powers of 10	PM1.23	Rounding to the nearest 10, 100 and 1000
	Number line to 10,000,000	PM1.28	Rounding to the nearest 10,000 and 100,000
	Compare and order any integers	PM1.18	Negative numbers 1
	Round any integer	PM1.19	Negative numbers 2 (including addition and subtraction)
	Negative numbers		
Block 02	White Rose Small Steps	Nugget Code	Nugget Name
Weeks	Add and subtract integers	PM2.22	4+ Digits: Column addition
03 - 07	Common factors	PM2.23	4+ Digits: Column subtraction
Famia	Common multiples	PM3.40	Common factors
Addition,	Rules of divisibility	PM3.55	Common multiples
Subtraction,	Primes to 100	PM3.41	Prime numbers
Multiplication	Square and cube numbers	PM3.43	Square numbers
	Multiply up to a 4-digit number by a 2-digit number	PM3.44	Cube numbers
	Solve problems with multiplication	PM3.51	2-Digit: Multiplying by 2-digits
	Short division	PM3.52	3/4-Digit: Multiplying by 2-digits
	Division using factors	PM11.02	Solving multistep problems 1 (with multiplication)
	Introduction to long division	PM3.53	3/4-Digit: Dividing by 1-digit numbers using short division (without remainders)
	Long division with remainders	PM3.54	3/4-Digit: Dividing by 1-digit numbers using short division (with remainders)



Block 02 Continued	White Rose Small Steps	Nugget Code	Nugget Name
	Solve problems with division	PM3.57	Long division 1 (dividing by a single digit number)
Weeks	Solve multi-step problems	PM3.58	Long division 2 (dividing by a 2-Digit number)
03 - 07	Order of operations	PM11.03	Solving Multistep Problems 2 (with Division)
Торіс	Mental calculations and estimation	PM11.05	Operations of equal priority
Addition,	Reason from known facts	PM11.06	BIDMAS: 4 operations and brackets
Subtraction, Multiplication and Division		PM11.07	BIDMAS: Indices
Block 03	White Rose Small Steps	Nugget Code	Nugget Name
Weeks	Equivalent fractions and simplifying	PM4.15	Equivalent fractions 2
08 - 09	Equivalent fractions on a number line	PM4.34	Fractions on a number line 1
Tania	Compare and order (denominator)	PM4.35	Fractions on a number line 2
Fractions A	Compare and order (numerator)	PM4.23	Simplifying fractions

PM4.16

PM4.21

PM4.27

PM4.32

PM4.29

PM4.33

Block 04

Weeks **10 - 11** 

Topic Fractions B

White Rose Small Steps
Multiply fractions by integers
Multiply fractions by fractions
Divide a fraction by an integer
Divide any fraction by an integer
Mixed questions with fractions
Fraction of an amount
Fraction of an amount – find the whole

Add and subtract simple fractions

Add mixed numbers

Multi-step problems

Subtract mixed numbers

Add and subtract any two fractions

Nugget Code	Nugget Name
PM4.28	Multiplying fractions by whole numbers
PM4.24	Multiplying simple pairs of proper fractions
PM4.25	Dividing fractions by whole numbers
PM4.08	Finding fractions of amounts
PM4.36	Finding fractions of amounts: finding the whole

Adding and subtracting fractions with different denominators Adding and subtracting fractions with different denominators 2

Comparing proper fractions 1

Comparing proper fractions 2

Adding and subtracting mixed numbers 1

Adding and subtracting mixed numbers 2

 $\leftarrow \textit{Back to Curriculum Overview}$ 



Block 05	White Rose Small Steps	Nugget Code	Nugget Name
Week	Metric measures	PM5.29	Converting metric measures
12	Convert metric measures	PM5.23	Solving length problems with conversion
Topic	Calculate with metric measures	PM5.25	Solving mass problems with conversion
Converting	Miles and kilometres	PM5.27	Solving volume and capacity problems with conversion
Units	Imperial measures	PM5.30	Converting miles and kilometres
		PM5.22	Imperial units of length
		PM5.24	Imperial units of mass
		PM5.26	Imperial units of volume and capacity

# Spring Term

	White Rose Map		CENTURY Nuggets	
Block 01	White Rose Small Steps	Nugget Code	Nugget Name	
Maska	Add or multiply?	PM17.01	Introduction to Ratio	
01 - 02	Use ratio language	PM17.03	Ratios and Fractions	
Topic <mark>Ratio</mark>	Introduction to the ratio symbol	PM17.05	Similar Shapes	
	Ratio and fractions	PM17.04	Sharing into a Given Ratio	
	Scale drawing	PM17.06	Proportion	
	Use scale factors			
	Similar shapes			
	Ratio problems			
	Proportion problems			
	Recipes			



Block 02	White Rose Small Steps	Nugget Code	Nugget Name	
Weeks	1-step function machines	PM18.02	Function Machines	
03 - 04	2-step function machines	PM18.03	Forming Expressions 1	
<b>-</b> ·	Form expressions	PM18.04	Forming Expressions 2	
Iopic Algebra	Substitution	PM18.05	Forming Expressions 3	
gozia	Formulae	PM18.06	Substitution	
	Form equations	PM18.07	Formulae	
	Solve 1-step equations	PM18.08	Solving 1 Step Equations	
	Solve 2-step equations	PM18.09	Solving 2 Step Equations	
	Find pairs of values	PM18.10	Satisfying Equations with 2 Variables	
	Solve problems with two unknowns			

Block 03

Weeks **05 - 07** 

Topic Decimals

White Rose Small Steps	Nugget Code	Nugget Name
Place value within 1	PM12.02	3dp: Recognising Place Value in Decimals
Place value – integers and decimals	PM12.03	Rounding Decimals
Round decimals	PM12.04	Adding and Subtracting Decimals
Add and subtract decimals	PM3.45	Multiplying by 10, 100 and 1000 (Involving Decimals up to 3 d.p.)
Multiply by 10, 100 and 1,000	PM3.46	Dividing by 10, 100 and 1000 (Involving Decimals Up to 3 d.p.)
Divide by 10, 100 and 1,000	PM12.09	Multiplying Decimals
Multiply decimals by integers	PM12.10	Dividing Decimals
Divide decimals by integers		
Multiply and divide decimals in context		



Block 04	White Rose Small Steps	Nugget Code	Nugget Name
Weeks <b>07 - 08</b>	Decimal and fraction equivalents	PM12.11	Converting Decimals to Fractions
	Fractions as division	PM12.12	Fractions to Decimals Using Division
onio	Understand percentages	PM12.05	Introduction to Percentages
ractions,	Fractions to percentages	PM12.07	Finding Percentages 1
decimals and	Equivalent fractions, decimals and percentages	PM12.08	Finding Percentages 2
percentages	Order fractions, decimals and percentages	PM12.06	Fractions, Decimals and Percentages 1
	Percentage of an amount – one step	PM12.13	Fractions, Decimals and Percentages 2
	Percentage of an amount – multi-step	PM16.01	Finding Percentages of Amounts 1 (1%, 10%, 25%, 50%)
	Percentages – missing values	PM16.02	Finding Percentages of Amounts 2 (2-9%)
		PM16.03	Finding Percentages of Amounts 3 (multiples of 10)
		PM16.04	Finding Percentages of Amounts 4 (11-99%)
		PM16.05	Percentages (Missing Values)
Block 05	White Rose Small Steps	Nugget Code	Nuquet Name
Maaka	Shapes – same area	PM13.05	Area and Perimeter
<b>9 - 10</b>	Area and perimeter	PM13.08	Area of Right-Angled Triangles
	Area of a triangle – counting squares	PM13.09	Area of Triangles
opic	Area of a right-angled triangle	PM13.07	Area of Parallelograms
erimeter and	Area of any triangle	PM13.06	Volume of Shapes 1
olume	Area of a parallelogram	PM13.10	Volume of Shapes 2
	Volume – counting cubes		
	Volume of a cuboid		
Block 06	White Rose Small Steps	Nugget Code	Nuqget Name
	Line graphs	PM9.09	Line Graphs 3
/veeks	Dual bar charts	PM9.10	Pie Charts 1
·	Read and interpret pie charts	PM9.11	Pie Charts 2
Горіс	Pie charts with percentages	PM9.12	Finding the Mean
STATISTICS	Draw pie charts		
	·		

# Summer Term

	White Rose Map		CENTURY Nuggets
Block 01	White Rose Small Steps	Nugget Code	Nugget Name
Weeks 01 - 03	Measure and classify angles	PM14.05	Identifying Angles 2
	Calculate angles	PM14.08	Measuring Angles
	Vertically opposite angles	PM14.15	Vertically Opposite Angles
Topic	Angles in a triangle	PM14.16	Angles in Triangles
Shape	Angles in a triangle - special cases	PM14.17	Angles in Quadrilaterals
	Angles in a triangle - missing angles	PM14.13	Circles
	Angles in a quadrilateral	PM14.14	Nets of Shapes 2
	Angles in polygons		
	Circles		
	Draw shapes accurately		
	Nets of 3-D shapes		
Block 02	White Rose Small Steps	Nugget Code	Nugget Name
	The first quadrant	PM8.15	Plotting Points
weeк <b>04</b>	Read and plot points in four quadrants	PM15.02	Four Quadrants
-	Solve problems with coordinates	PM15.03	Translation 2
Topic Position and	Translations	PM15.04	Reflection 2

Reflections

Direction



# Course Content Primary Multiplication Tables



#### Diagnostics 1 Strands 6 Nuggets 52

This course is designed to develop fluency and recall of multiplication tables. It includes each of the times tables, mixed tables tests and practice tests of increasing difficulty.

# **Strands - Primary Multiplication Tables Course**

A strand is a sequence of nuggets grouped by theme or topic, forming a high-level organisation of content within a course.

Strand	No. of nuggets
Diagnostic Assessment	1
Multiplication Tables	33
Easy Practice	3
Medium Practice	3
Hard Practice	3
Practice Assessments	10

### Nuggets

A nugget is a micro-lesson that contains learning material followed by questions to assess learning.

Strand	Code	Nugget Name
Diagnostics	PMT0.01	Diagnostic: Practice Assessment
	PMT1.01	2 Times Table Practice (1)
	PMT1.02	2 Times Table Practice (2)
	PMT1.03	2 Times Table Practice (3)
	PMT1.04	3 Times Table Practice (1)
	PMT1.05	3 Times Table Practice (2)
	PMT1.06	3 Times Table Practice (3)
	PMT1.07	4 Times Table Practice (1)
es	PMT1.08	4 Times Table Practice (2)
ion Tab	PMT1.09	4 Times Table Practice (3)
Itiplicat	PMT1.10	5 Times Table Practice (1)
W	PMT1.11	5 Times Table Practice (2)
	PMT1.12	5 Times Table Practice (3)
	PMT1.13	6 Times Table Practice (1)
	PMT1.14	6 Times Table Practice (2)
	PMT1.15	6 Times Table Practice (3)
	PMT1.16	7 Times Table Practice (1)
	PMT1.17	7 Times Table Practice (2)
	PMT1.18	7 Times Table Practice (3)



Strand	Code	Nugget Name		Strand	Code	Nugget Name
	PMT1.19	8 Times Table Practice (1)		Hard Practice	PMT4.01	Hard Practice (1)
	PMT1.20	8 Times Table Practice (2)			PMT4.02	Hard Practice (2)
	PMT1.21	8 Times Table Practice (3)			PMT4.03	Hard Practice (3)
	PMT1.22	9 Times Table Practice (1)	_		PMT5.01	Practice Assessment (1)
	PMT1.23	9 Times Table Practice (2)	-		PMT5.02	Practice Assessment (2)
	PMT1.24	9 Times Table Practice (3)	-		PMT5.03	Practice Assessment (3)
Tables	PMT1.25	10 Times Table Practice (1)	Practice Assessments	ints	PMT5.04	Practice Assessment (4)
lication	PMT1.26	10 Times Table Practice (2)		Practice Assessme	PMT5.05	Practice Assessment (5)
Multip	PMT1.27	10 Times Table Practice (3)			PMT5.06	Practice Assessment (6)
	PMT1.28	11 Times Table Practice (1)			PMT5.07	Practice Assessment (7)
	PMT1.29	11 Times Table Practice (2)			PMT5.08	Practice Assessment (8)
	PMT1.30	11 Times Table Practice (3)			PMT5.09	Practice Assessment (9)
	PMT1.31	12 Times Table Practice (1)	-		PMT5.10	Practice Assessment (10)
	PMT1.32	12 Times Table Practice (2)				
	PMT1.33	12 Times Table Practice (3)				
Easy Practice	PMT2.01	Easy Practice (1)				
	PMT2.02	Easy Practice (2)				
	PMT2.03	Easy Practice (3)				
Medium Practice	PMT3.01	Medium Practice (1)				
	PMT3.02	Medium Practice (2)	_			
	PMT3.03	Medium Practice (3)				

# Course Content Primary Year 5-6 Arithmetic



Diagnostics 8 Strands 9 Nuggets 60

This course is designed for students to practise fluency and recall in number skills. It includes several practice papers and is designed specifically to help students prepare for the SATs arithmetic assessment.

#### Strands - Primary Year 5 - 6 Arithmetic Course

A strand is a sequence of nuggets grouped by theme or topic, forming a high-level organisation of content within a course.

Strand	No. of nuggets
Diagnostics	8
Place Value	2
Addition and Subtraction	15
Multiplication	10
Division	8
Mixed Operations	4
Fractions	7
Percentages	8
Diagnostics: Practice Papers	6

# Nuggets mapped to the National Curriculum

A nugget is a micro-lesson that contains learning material followed by questions to assess learning.

Strand	Code	Nugget Name
	PAR0.01	Diagnostic: Place Value
	PAR0.02	Diagnostic: Addition
	PAR0.03	Diagnostic: Subtraction
ostics	PAR0.04	Diagnostic: Multiplication
Diagn	PAR0.05	Diagnostic: Division
	PAR0.06	Diagnostic: Mixed Operations
	PAR0.07	Diagnostic: Fractions
	PAR0.08	Diagnostic: Percentages
ne Le	PAR1.01	Place Value 1
Pla	PAR1.02	Place Value 2
	PAR2.01	Addition Mental Methods 1
	PAR2.02	Addition Mental Methods 2
<u> </u>	PAR2.03	Addition Written Methods 1
btractio	PAR2.04	Addition Written Methods 2
and Su	PAR2.05	Addition Written Methods with Decimals 1
ddition	PAR2.06	Addition Written Methods with Decimals 2
۷	PAR2.07	Subtraction Mental Methods 1
	PAR2.08	Subtraction Mental Methods 2a
	PAR2.09	Subtraction Mental Methods 2b




Strand	Code	Nugget Name		Strand	
Addition and Subtraction	PAR2.10	Subtraction Mental Methods 3		Division	1
	PAR2.11	Subtraction Written Methods 1		v	
	PAR2.12	Subtraction Written Methods 2		eration	I
	PAR2.13	Subtraction Involving Decimals		xed Op	I
	PAR2.14	Subtraction Written Methods (with Decimals) 1		Σ	I
	PAR2.15	Subtraction Written Methods (with Decimals) 2			
Muttplication	PAR3.01	Multiplying by 1 and 0			I
	PAR3.02	Multiplying by 10, 100 and 1,000		-	I
	PAR3.03	Multiplying Multiples of 10 and 100		ractions	I
	PAR3.04	Multiplying 3 Numbers		ш –	I
	PAR3.05	Multiplying by Multiples of 10 and 100 with Decimals		_	I
	PAR3.06	Short Multiplication		_	1
	PAR3.07	Long Multiplication 1			
-	PAR3.08	Long Multiplication 2			
-	PAR3.09	Multiplying by Decimals 1			
	PAR3.10	Multiplying by Decimals 2			
- Division -	PAR4.01	Dividing by 1		Percen	
	PAR4.02	Mental Division		_	
	PAR4.03	Dividing by 10 and 100 with Decimals		_	
	PAR4.04	The Bus Stop Method		_	
	PAR4.05	Long Division 1		is: Ders	
	PAR4.06	Long Division 2		ignostic lice Pap	1
	PAR4.07	Long Division 3		Dia Pract	1

Strand	Code	Nugget Name
Division	PAR4.08	Long Division 4
ixed Operations	PAR5.01	Squared and Cubed Numbers 1
	PAR5.02	Squared and Cubed Numbers 2
	PAR5.03	BIDMAS 1
2	PAR5.04	BIDMAS 2
	PAR6.01	Adding and Subtracting Fractions 1
_	PAR6.02	Adding and Subtracting Fractions 2
<u>v</u> –	PAR6.03	Adding and Subtracting Fractions 3
raction	PAR6.04	Dividing Fractions by a Whole Number
	PAR6.05	Multiply Fractions by Fractions
_	PAR6.06	Multiply Proper Fractions by a Whole Number
	PAR6.07	Multiply Mixed Numbers by a Whole Number
_	PAR7.01	Finding Percentages of Amounts 1
_	PAR7.02	Finding 1 - 9% of an Amount
_	PAR7.03	Finding Multiples of 10% of an Amount
ntages -	PAR7.04	Percentages of 1,000
Perce	PAR7.05	Finding Percentages of Amounts 2
_	PAR7.06	Finding Percentages of Amounts 3
_	PAR7.07	Finding Percentages of Amounts 4
	PAR7.08	Finding Percentages of Amounts 5
_ bers	PAR8.01	Arithmetic Practice Assessment 1
agnosti ctice Pa	PAR8.02	Arithmetic Practice Assessment 2
Prac	PAR8.03	Arithmetic Practice Assessment 3

 $\leftarrow$  Back to Curriculum Overview

CENTURY 68

Strand	Code	Nugget Name
s: Ders	PAR8.04	Arithmetic Practice Assessment 4
ignostio tice Pa	PAR8.05	Arithmetic Practice Assessment 5
Dié Prac	PAR8.06	Arithmetic Practice Assessment 6



**Questions?** Email support@century.tech

