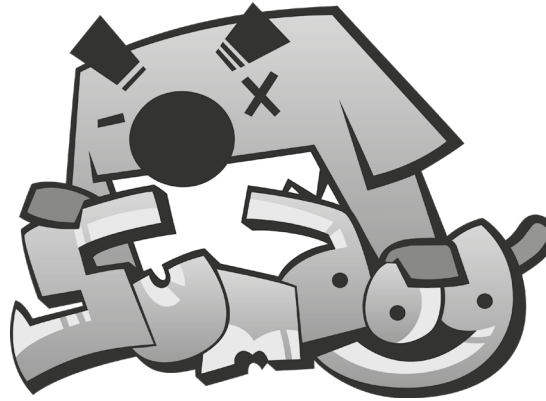
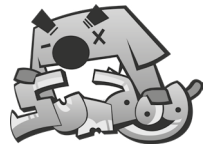


**FULLY ALIGNED TO THE
NEW V3.0 SCHEME!**



White Rose Maths on Sumdog

Scheme of Learning – Year 5



Contents

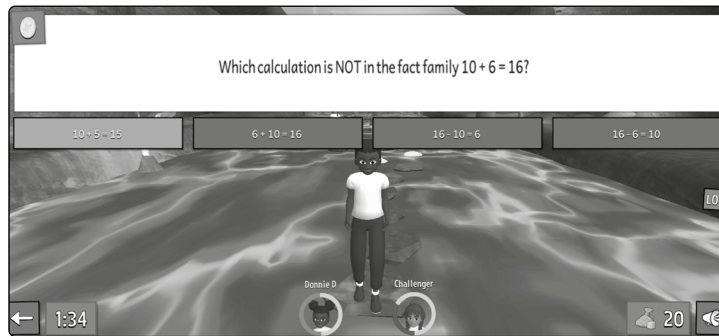
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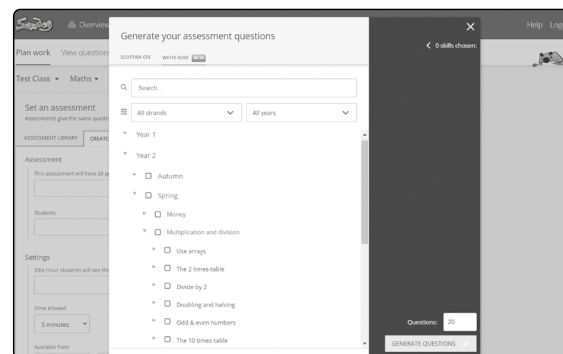
Introduction

Sumdog and White Rose Maths

Sumdog is an interactive maths and spelling platform for children aged between 5 and 14 years old that combines pupil engagement with quality question content and comprehensive curriculum alignment. Our huge bank of curriculum-aligned maths questions help children to build fluency through regular practice and teachers to diagnose, assess and identify areas for improvement. Questions can be answered in one of over 30 varied and exciting games or in a low-stakes test format, and answering questions earns children coins that can be used to upgrade their 3D avatars, houses and gardens.



Over the past year at Sumdog, we have developed, reviewed and released an entire curriculum of skills and question content aligned to the new White Rose Maths (WRM) Version 3.0 scheme, with the aim of helping you to set work on Sumdog that exactly matches your in-class teaching. These skills not only draw from our usual broad range of Sumdog questions, but also offer access to approximately 500 brand new question sets that have been designed specifically for WRM by teachers and educational consultants.



Our Scheme of Learning

This document has been created to help you set work on Sumdog to complement your use of WRM and to identify which of the WRM small steps are covered on Sumdog. To use this document, simply find the WRM small step that you are teaching, then check across for matching Sumdog skills to set work on. The WRM curriculum hierarchy is matched exactly by our skills chooser and wherever we have exactly matching skills, our skill name will match the WRM small step name.

For any small steps that we don't have directly aligned skills for (in **bold**), we've recommended suitable previous skills within the curriculum to provide opportunities for consolidation. In the final column, we've also highlighted the best times to use our ready-made WRM-aligned tests and Sumdog diagnostics, both to revise prior learning and identify areas for improvement when starting a new unit and to assess understanding at the end.

Term	Block	Small Step	Recommended Sumdog White Rose Maths Skill	Sumdog White Rose Maths Assessment Opportunity
Year 1 (continued)	Autumn	Number bonds to 10	Number bonds to 10	
		Addition - add together	Addition - add together	
		Addition - add more	Addition - add more	
		Addition problems	Addition problems	
		Find a part	Find a part	
		Subtraction - find a part	Subtraction - find a part	
		Fact families - the eight facts	Fact families - the eight facts	
		Subtraction - take away/cross out (How many left?)	Revision - Subtraction - find a part	
		Take away (How many left?)	Take away (How many left?)	
		Subtraction on a number line	Subtraction on a number line	
Add or subtract 1 or 2	Add or subtract 1 or 2	Year 1 - Addition and subtraction (within 10)		
Shape	Recognise and name 3-D shapes	Recognise and name 3-D shapes		
	Sort 3-D shapes	Sort 3-D shapes		
	Recognise and name 2-D shapes	Recognise and name 2-D shapes		
	Sort 2-D shapes	Sort 2-D shapes	Year 1 - End of term arithmetic (Autumn)	
Patterns with 2-D and 3-D shapes	Patterns with 2-D and 3-D shapes	Year 1 - Shape		

Skills in bold indicate revision skills that have been suggested where a White Rose Maths small step has no directly equivalent skill on Sumdog.

White Rose Maths on Sumdog - Scheme of Learning

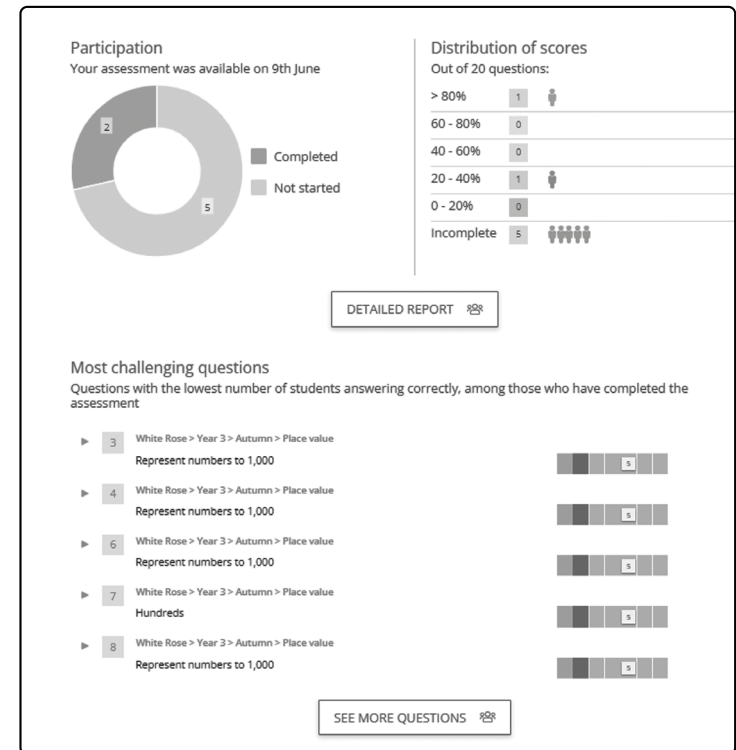
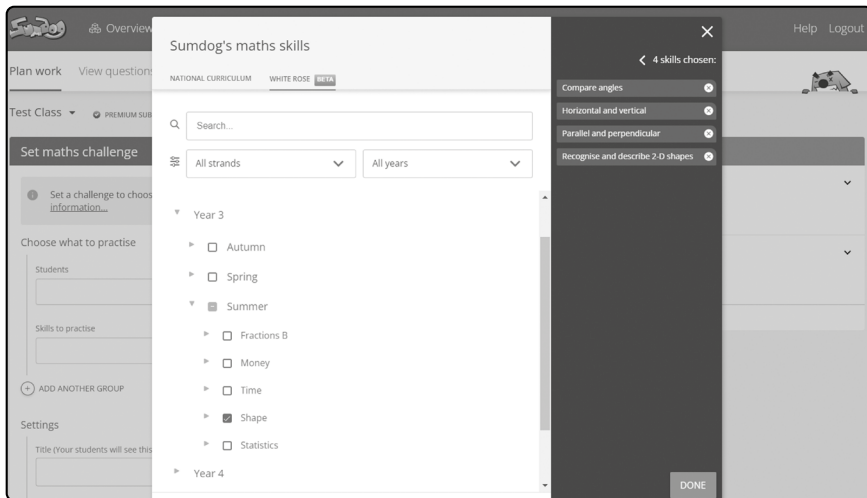


Use Case

Teacher A is a Year 3 teacher who is about to start teaching the 'Shape' block in the Summer term of Year 3. Using the Sumdog White Rose Maths scheme of learning document to set work on Sumdog to complement their teaching, they follow these simple steps:

1. As recommended by the document, they set the WRM-aligned test on Shape from the previous year, 'Year 2 - Shape', to prepare their pupils for upcoming learning.
2. Using Sumdog's enhanced assessment reporting, they then reveal any areas for improvement that need to be addressed before moving on to the more complex Year 3 content.
3. Once they have started teaching the first small step in the block, 'Turns and angles', they consolidate their in-class teaching by setting in-game practice on Sumdog question steps aligned to that exact small step, either in-class or as homework.

4. They then repeat step 3 for the first 3 small steps in the block - using White Rose Maths' teaching resources to introduce new learning, before using Sumdog challenges for practice and consolidation.
5. As the 4th small step in the block, 'Measure and draw accurately', is almost entirely practical in nature, there is no directly aligning skill on Sumdog. As recommended by this document however, Teacher A uses this time to set a Sumdog challenge covering the previous 3 small steps - providing a valuable opportunity for additional revision as in-class teaching moves swiftly on to the next small step.
6. Finally, at the end of the block, they use the corresponding Sumdog test, 'Year 3 - Shape', to assess learning across the block in a low-stakes, familiar environment. Once again, Sumdog's assessment report enables them to easily identify any remaining gaps in understanding so they can plan intervention as required.





Term	Block	Small Step	Recommended Sumdog White Rose Maths Skill	Sumdog White Rose Maths Assessment Opportunity	
Autumn	Place value	Roman numerals to 1,000	Roman numerals to 1,000	Year 5 Sumdog Diagnostic	
		Numbers to 10,000	Numbers to 10,000	Year 4 - Place value	
		Numbers to 100,000	Numbers to 100,000		
		Numbers to 1,000,000	Numbers to 1,000,000		
		Read and write numbers to 1,000,000	Revision - Numbers to 1,000,000		
		Powers of 10			
		10/100/1,000/10,000/100,000 more or less	10/100/1,000/10,000/100,000 more or less		
		Partition numbers to 1,000,000	Revision - 10/100/1,000/10,000/100,000 more or less		
		Number line to 1,000,000			
		Compare and order numbers to 100,000	Compare and order numbers to 100,000		
		Compare and order numbers to 1,000,000	Compare and order numbers to 1,000,000		
		Round to the nearest 10, 100 or 1,000	Round to the nearest 10, 100 or 1,000		
		Round within 100,000	Round within 100,000		
	Round within 1,000,000	Round within 1,000,000	Year 5 - Place value		
	Addition and subtraction		Mental strategies	Revision - Year 4 - Addition and subtraction	Year 4 - Addition and subtraction
			Add whole numbers with more than four digits	Add whole numbers with more than four digits	
Subtract whole numbers with more than four digits			Subtract whole numbers with more than four digits		

Skills in **bold** indicate revision skills that have been suggested where a White Rose Maths small step has no directly equivalent skill on Sumdog.



Term	Block	Small Step	Recommended Sumdog White Rose Maths Skill	Sumdog White Rose Maths Assessment Opportunity
Autumn	Addition and subtraction	Round to check answers	Round to check answers	
		Inverse operations (addition and subtraction)	Inverse operations (addition and subtraction)	
		Multi-step addition and subtraction problems	Multi-step addition and subtraction problems	
		Compare calculations	Compare calculations	
		Find missing numbers	Find missing numbers	
	Multiplication and division A	Multiples	Multiples	Year 4 - Multiplication and division A
		Common multiples	Revision - Multiples	
		Factors	Factors	
		Common Factors	Common Factors	
		Prime Numbers	Prime Numbers	
		Square Numbers	Square Numbers	
		Cube Numbers	Cube Numbers	
		Multiply by 10, 100 and 1,000	Multiply by 10, 100 and 1,000	
		Divide by 10, 100 and 1,000	Divide by 10, 100 and 1,000	
		Multiples of 10, 100 and 1,000	Multiples of 10, 100 and 1,000	
	Fractions A	Find fractions equivalent to a unit fraction	Revision - Year 4 - Fractions	Year 4 - Fractions
		Find fractions equivalent to a non-unit fraction	Find fractions equivalent to a non-unit fraction	
		Recognise equivalent fractions	Recognise equivalent fractions	

Skills in **bold** indicate revision skills that have been suggested where a White Rose Maths small step has no directly equivalent skill on Sumdog.



Term	Block	Small Step	Recommended Sumdog White Rose Maths Skill	Sumdog White Rose Maths Assessment Opportunity
Autumn	Fractions A	Convert improper fractions to mixed numbers	Revieion - Find fractions equivalent to a non-unit fraction & Recognise equivalent fractions	
		Convert mixed numbers to improper fractions		
		Compare fractions less than 1	Compare fractions less than 1	
		Order fractions less than 1	Order fractions less than 1	
		Compare and order fractions greater than 1	Compare and order fractions greater than 1	
		Add and subtract fractions with the same denominator	Add and subtract fractions with the same denominator	
		Add fractions within 1	Add fractions within 1	
		Add fractions with total greater than 1	Add fractions with total greater than 1	
		Add to a mixed number	Add to a mixed number	
		Add two mixed numbers	Add two mixed numbers	
		Subtract fractions	Subtract fractions	
		Subtract from a mixed number	Subtract from a mixed number	
		Subtract from a mixed number - breaking the whole	Subtract from a mixed number - breaking the whole	Year 5 - End of term arithmetic (Autumn)
Subtract two mixed numbers	Subtract two mixed numbers	Year 5 - Fractions A		
Spring	Multiplication and division B	Multiply up to a 4-digit number by a 1-digit number	Multiply up to a 4-digit number by a 1-digit number	Year 5 Sumdog Diagnostic
		Multiply a 2-digit number by a 2-digit number (area model)	Multiply a 2-digit number by a 2-digit number (area model)	Year 4 - Multiplication and division B

Skills in **bold** indicate revision skills that have been suggested where a White Rose Maths small step has no directly equivalent skill on Sumdog.



Term	Block	Small Step	Recommended Sumdog White Rose Maths Skill	Sumdog White Rose Maths Assessment Opportunity
Spring	Multiplication and division B	Multiply a 2-digit number by a 2-digit number	Multiply a 2-digit number by a 2-digit number	
		Multiply a 3-digit number by a 2-digit number	Multiply a 3-digit number by a 2-digit number	
		Multiply a 4-digit number by a 2-digit number	Multiply a 4-digit number by a 2-digit number	
		Solve problems with multiplication	Revision - Multiply a 4-digit number by a 2-digit number	
		Short division	Short division	
		Divide a 4-digit number by a 1-digit number	Divide a 4-digit number by a 1-digit number	
		Divide with remainders	Divide with remainders	
		Efficient division	Revision - Divide a 4-digit number by a 1-digit number & Divide with remainders	
		Solve problems with multiplication and division		
	Fractions B	Multiply a unit fraction by an integer	Multiply a unit fraction by an integer	Year 5 - Fractions A
		Multiply a non-unit fraction by an integer	Revision - Multiply a unit fraction by an integer	
		Multiply a mixed number by an integer	Multiply a mixed number by an integer	
		Calculate a fraction of a quantity	Calculate a fraction of a quantity	
		Fraction of an amount	Fraction of an amount	
		Find the whole	Find the whole	
Use fractions as operators	Use fractions as operators	Year 5 - Fractions B		

Skills in **bold** indicate revision skills that have been suggested where a White Rose Maths small step has no directly equivalent skill on Sumdog.



Term	Block	Small Step	Recommended Sumdog White Rose Maths Skill	Sumdog White Rose Maths Assessment Opportunity
Spring	Decimals & percentages	Decimals up to 2 decimal places	Decimals up to 2 decimal places	Year 4 - Decimals B
		Equivalent fractions and decimals (tenths)	Revision - Year 5 - Tenths as fractions & Tenths as decimals	
		Equivalent fractions and decimals (hundredths)	Equivalent fractions and decimals (hundredths)	
		Equivalent fractions and decimals	Equivalent fractions and decimals	
		Thousandths as fractions	Thousandths as fractions	
		Thousandths as decimals	Thousandths as decimals	
		Thousandths on a place value chart	Thousandths on a place value chart	
		Order and compare decimals (same number of decimal places)	Order and compare decimals (same number of decimal places)	
		Order and compare any decimals with up to 3 decimal places	Order and compare any decimals with up to 3 decimal places	
		Round to the nearest whole number	Round to the nearest whole number	
		Round to 1 decimal place	Round to 1 decimal place	
		Understand percentages	Understand percentages	
		Percentages as fractions	Percentages as fractions	
		Percentages as decimals	Percentages as decimals	
	Equivalent fractions, decimals and percentages	Equivalent fractions, decimals and percentages	Year 5 - Decimals & percentages	
	Perimeter and area	Perimeter and area	Perimeter of rectangles	Revision - Year 4 - Length and perimeter
Perimeter of rectilinear shapes				
Perimeter of polygons			Perimeter of polygons	

Skills in **bold** indicate revision skills that have been suggested where a White Rose Maths small step has no directly equivalent skill on Sumdog.



Term	Block	Small Step	Recommended Sumdog White Rose Maths Skill	Sumdog White Rose Maths Assessment Opportunity
Spring	Perimeter and area	Area of rectangles	Area of rectangles	Year 5 - Perimeter and area
		Area of compound Shapes	Area of compound Shapes	
		Estimate area	Estimate area	
	Statistics	Draw line graphs	Revision - Year 4 - Statistics	Year 4 - Statistics
		Read and interpret line graphs	Read and interpret line graphs	Year 5 - End of term arithmetic (Spring)
		Read and interpret tables	Revision - Read and interpret line graphs	
		Two-way tables	Two-way tables	
	Timetables	Timetables	Year 5 - Statistics	
Summer	Shape	Understand and use degrees	Understand and use degrees	Year 5 Sumdog Diagnostic
		Classify angles	Revision - Year 4 - Identify angles	Year 4 - Shape
		Estimate angles	Estimate angles	Year 5 - Shape
		Measure angles up to 180	Measure angles up to 180	
		Draw lines and angles accurately	Revision - Measure angles up to 180	
		Calculate angles around a point	Calculate angles around a point	
		Calculate angles on a straight line	Calculate angles on a straight line	
		Lengths and angles in shapes	Revision - Calculate angles around a point & Calculate angles on a straight line	
		Regular and irregular polygons	Regular and irregular polygons	
		3-D shapes	3-D shapes	
	Position and direction	Read and plot coordinates	Revision - Year 4 - Position and direction	Year 4 - Position and direction
		Problem solving with coordinates		Year 5 - Shape
		Translation	Translation	

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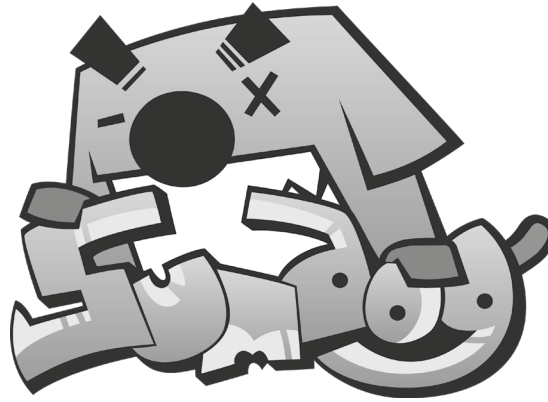
Term	Block	Small Step	Recommended Sumdog White Rose Maths Skill	Sumdog White Rose Maths Assessment Opportunity
Summer	Position and direction	Translation with coordinates	Translation with coordinates	Year 5 - Position and direction
		Lines of symmetry	Revision - Year 4 - Lines of symmetry	
		Reflection in horizontal and vertical lines	Reflection in horizontal and vertical lines	
	Decimals	Use known facts to add and subtract decimals within 1	Use known facts to add and subtract decimals within 1	Year 4 - Decimals B
		Complements to 1	Complements to 1	
		Add and subtract decimals across 1	Add and subtract decimals across 1	
		Add decimals with the same number of decimal places	Add decimals with the same number of decimal places	
		Subtract decimals with the same number of decimal places	Subtract decimals with the same number of decimal places	
		Add decimals with a different number of decimal places	Add decimals with a different number of decimal places	
		Subtract decimals with a different number of decimal places	Subtract decimals with a different number of decimal places	
		Efficient strategies for adding and subtracting decimals	Efficient strategies for adding and subtracting decimals	
		Decimal sequences	Decimal sequences	
		Multiplying by 10, 100 and 1,000	Multiplying by 10, 100 and 1,000	
		Dividing by 10, 100 and 1,000	Dividing by 10, 100 and 1,000	
		Multiply and divide decimals - missing values	Multiply and divide decimals - missing values	
	Negative numbers	Understand negative numbers	Understand negative numbers	
Count through zero in 1s		Count through zero in 1s		

Skills in **bold** indicate revision skills that have been suggested where a White Rose Maths small step has no directly equivalent skill on Sumdog.



Term	Block	Small Step	Recommended Sumdog White Rose Maths Skill	Sumdog White Rose Maths Assessment Opportunity
Summer	Negative numbers	Count through zero in multiples	Count through zero in multiples	Year 5 - Negative numbers
		Compare and order negative numbers	Compare and order negative numbers	
		Find the difference	Revision - Compare and order negative numbers	
	Converting units	Kilograms and kilometres	Kilograms and kilometres	Year 5 - Converting units
		Milligrams and millilitres	Milligrams and millilitres	
		Convert units of length	Convert units of length	
		Convert between metric and imperial units	Convert between metric and imperial units	
		Convert units of time	Convert units of time	
		Calculate with timetables	Calculate with timetables	
	Volume	Cubic centimetres	Cubic centimetres	Year 5 - End of term arithmetic (Summer) Year 5 - Volume
		Compare volume	Compare volume	
		Estimate volume	Revision - Compare volume	
		Estimate capacity	Estimate capacity	

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Interested in trying our new fully aligned White Rose Maths scheme?

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