

White Rose Maths on Sumdog

Scheme of Learning - Year 3



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Introduction



Sumdog and White Rose Maths

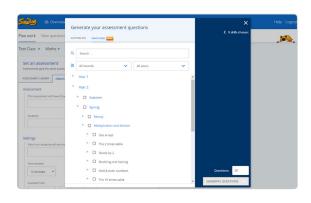
Sumdog is an interactive maths and spelling platform for children aged between 5 and 14 years old that combines pupil engagement with quality question content and comprehensive curriculum alignment. Our huge bank of curriculum-aligned maths questions help children to build fluency through regular practice 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

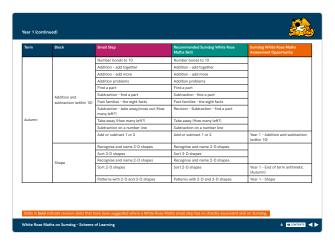
Sumdog that exactly matches your in-class teaching. These skills not only draw from our usual broad range of Sumdog questions, but also offer access to approximately 500 brand new question sets that have been designed specifically for WRM by teachers and educational consultants.



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.

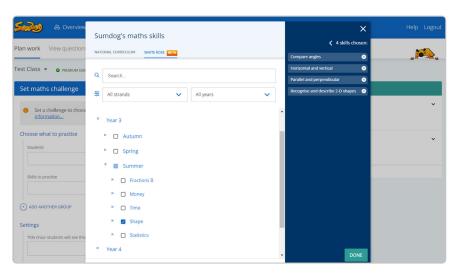


Use Case

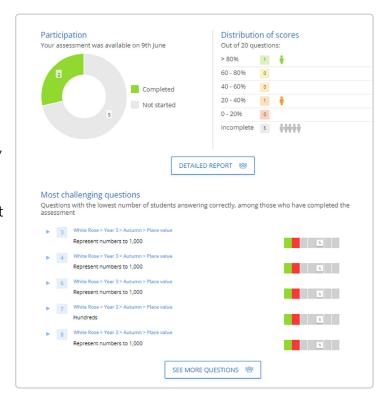


Teacher A is a Year 3 teacher who is about to start teaching the 'Shape' block in the Summer term of Year 3. Using the Sumdog White Rose Maths scheme of learning document to set work on Sumdog to complement their teaching, they follow these simple steps:

- **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.



Year 3



Term	Block	Small Step	Recommended Sumdog White Rose Maths Skill	Sumdog White Rose Maths Assessment Opportunity
		Represent numbers to 100	Revision - Year 2 - Place Value	Year 3 Sumdog Diagnostic
		Partition numbers to 100		Year 2 - Place value
		Number line to 1,000		
		Hundreds	Hundreds	
		Represent numbers to 1,000	Represent numbers to 1,000	_
		Partition numbers to 1,000	Partition numbers to 1,000	
	Diagonalus	Flexible partitioning of numbers to 1,000	Flexible partitioning of numbers to 1,000	
	Place value	Hundreds, tens and ones	Hundreds, tens and ones	_
		Find 1, 10, 100 more or less	Find 1, 10, 100 more or less	_
		Number line to 1,000	Number line to 1,000	
Autumn		Estimating on a number line to 1,000	Revision – Number line to 1,000	_
		Compare numbers to 1,000	Compare numbers to 1,000	
		Order numbers to 1,000	Order numbers to 1,000	_
		Count in 50s	Count in 50s	Year 3 - Place value
		Apply number bonds within 10	Revision - Year 2 - Addition and subtraction	Year 2 - Addition and subtraction
		Add and subtract 1s	Add and subtract 1s	_
	Addition and subtraction	Add and subtract 10s	Add and subtract 10s	
		Add and subtract 100s	Add and subtract 100s	
		Spot the pattern	Revision - Add and subtract 1s, Add and subtract 10s & Add and subtract 100s	



Term	Block	Small Step	Recommended Sumdog White Rose Maths Skill	Sumdog White Rose Maths Assessment Opportunity
		Add 1s across a 10	Add 1s across a 10	
		Add 10s across a 100	Add 10s across a 100	
		Subtract 1s across a 10	Subtract 1s across a 10	
		Subtract 10s across a 100	Subtract 10s across a 100	
		Make connections	Make connections	
		Add two numbers (no exchange)	Add two numbers (no exchange)	
		Subtract two numbers (no exchange)	Subtract two numbers (no exchange)	
		Add two numbers (across a 10)	Add two numbers (across a 10)	
		Add two numbers (across a 100)	Add two numbers (across a 100)	
	Addition and subtraction	Subtract two numbers (across a 10)	Subtract two numbers (across a 10)	
Autumn	Subtraction	Subtract two numbers (across a 100)	Subtract two numbers (across a 100)	
		Add 2-digit and 3-digit numbers	Add 2-digit and 3-digit numbers	
		Subtract a 2-digit number from a 3-digit number	Subtract a 2-digit number from a 3-digit number	
		Complements to 100	Complements to 100	
		Estimate answers	Estimate answers	
		Inverse operations	Revision – Add 2-digit and 3-digit numbers	
		Make decisions	Revision – Subtract a 2-digit number from a 3-digit number	Year 3 - Addition and subtraction
	Multiplication and division A	Multiplication – equal groups	Revision - Year 2 - Multiplication and Division	Year 2 – Multiplication and division



Term	Block	Small Step	Recommended Sumdog White Rose Maths Skill	Sumdog White Rose Maths Assessment Opportunity
		Use arrays	Use arrays	
		Multiples of 2	Revision Year 2 – The 2-times table	
		Multiples of 5 and 10	Multiples of 5 and 10	
		Sharing and grouping	Sharing and grouping	
		Multiply by 3	Multiply by 3	
		Divide by 3	Divide by 3	
		The 3 times-table	The 3 times-table	
Autumn	Multiplication and	Multiply by 4	Multiply by 4	
	division A	Divide by 4	Divide by 4	
		The 4 times-table	The 4 times-table	
		Multiply by 8	Multiply by 8	
		Divide by 8	Divide by 8	
		The 8 times-table	The 8 times-table	Year 2 – End of term arithmetic (Autumn)
		The 2, 4 and 8 times tables	The 2, 4 and 8 times tables	Year 3 – Multiplication and division A
	Multiplication and division B	Multiples of 10	Revision - Multiples of 5 and 10	Year 3 Sumdog Diagnostic
Spring		Related calculations	Related calculations	
		Multiply a 2-digit number by a 1-digit number – no exchange	Multiply a 2-digit number by a 1-digit number – no exchange	
		Multiply a 2-digit number by a 1-digit number – with exchange	Multiply a 2-digit number by a 1-digit number – with exchange	



Term	Block	Small Step	Recommended Sumdog White Rose Maths Skill	Sumdog White Rose Maths Assessment Opportunity
		Comparing statements	Comparing statements	
		Divide a 2-digit number by a 1-digit number – no exchange	Divide a 2-digit number by a 1-digit number – no exchange	
	Multiplication and	Divide a 2-digit number by a 1-digit number – flexible partitioning	Revision – Divide a 2-digit number by a 1-digit number – no exchange	
	division B	Divide a 2-digit number by a 1-digit number – with remainders		
		Scaling	Scaling	
		How many ways?	Revision - Scaling	Year 3 – Multiplication and division B
Spring		Measure in metres and centimetres	Revision - Year 2 - Length and height	Year 2 – Length and height
		Measure in millimetres		
		Measure in centimetres and millimetres		
		Metres, centimetres and millimetres		
		Equivalent lengths (metres and centimetres)	Equivalent lengths (metres and centimetres)	
	Length and perimeter	Equivalent lengths (centimetres and millimetres)	Equivalent lengths (centimetres and millimetres)	
		Compare lengths	Compare lengths	
		Add lengths	Add lengths	
		Subtract lengths	Subtract lengths	
		What is perimeter?	Revision - Add lengths	
		Measure perimeter	Measure perimeter	



Term	Block	Small Step	Recommended Sumdog White Rose Maths Skill	Sumdog White Rose Maths Assessment Opportunity
	Length and perimeter	Calculate perimeter	Calculate perimeter	Year 3 - Length and perimeter
		Understand the denominators of unit fractions	Understand the denominators of unit fractions	Year 2 - Fractions
		Compare and order unit fractions	Compare and order unit fractions	
		Understand the numerators of non-unit fractions	Understand the numerators of non-unit fractions	
		Understand the whole	Understand the whole	
	Fractions A	Compare and order non-unit fractions	Compare and order non-unit fractions	
		Fractions and scales	Revision - Compare and order non-unit fractions	
		Fractions on a number line	Fractions on a number line	
Spring		Count in fractions on a number line	Count in fractions on a number line	
		Equivalent fractions on a number line	Equivalent fractions on a number line	
		Equivalent fractions as bar models	Equivalent fractions as bar models	Year 3 - Fractions A
		Use scales	Revision - Year 1 - Mass, capacity and temperature	Year 2 - Mass, capacity and temperature
		Measure mass in grams	Measure mass in grams	
	Mass and canacity	Measure mass in kilograms and grams	Measure mass in kilograms and grams	
	Mass and capacity	Equivalent masses (kilograms and grams)	Revision - Measure mass in kilograms and grams	
		Compare mass	Compare mass	
		Add and subtract mass	Add and subtract mass	



Term	Block	Small Step	Recommended Sumdog White Rose Maths Skill	Sumdog White Rose Maths Assessment Opportunity
		Measure capacity and volume in millilitres	Measure capacity and volume in millilitres	
		Measure capacity and volume in litres and millilitres	Measure capacity and volume in litres and millilitres	
Spring	Mass and capacity	Equivalent capacities and volumes (litres and millilitres)	Equivalent capacities and volumes (litres and millilitres)	
		Compare capacity and volume	Compare capacity and volume	Year 3 – End of term arithmetic (Spring)
		Add and subtract capacity and volume	Add and subtract capacity and volume	Year 3 - Mass and capacity
	Fractions B	Add fractions	Add fractions	Year 3 Sumdog Diagnostic
		Subtract fractions	Subtract fractions	Year 3 - Fractions A
		Partition the whole	Revision - Add fractions & Subtract fractions	
		Unit fractions of a set of objects	Unit fractions of a set of objects	
		Non-unit fractions of a set of objects	Non-unit fractions of a set of objects	
		Reasoning with fractions of an amount	Reasoning with fractions of an amount	Year 3 - Fractions B
Summer		Pounds and pence	Pounds and pence	Year 2 - Money
		Convert pounds and pence	Convert pounds and pence	
	Money	Add money	Add money	
		Subtract money	Subtract money	
		Find change	Find change	Year 3 - Money
	Time	Roman numerals to 12	Roman numerals to 12	Year 2 - Time
	Time	Tell the time to 5 minutes	Tell the time to 5 minutes	





Term	Block	Small Step	Recommended Sumdog White Rose Maths Skill	Sumdog White Rose Maths Assessment Opportunity
		Tell the time to the minute	Tell the time to the minute	
		Read time on a digital clock	Read time on a digital clock	
		Use a.m. and p.m.	Revision – Read time on a digital clock	
		Years, months and days	Years, months and days	
		Days and hours	Revision - Years, months and days	
	Time	Hours and minutes – use start and end times	Hours and minutes – use start and end times	
		Hours and minutes - use durations	Hours and minutes – use durations	
		Minutes and seconds	Minutes and seconds	
		Units of time	Units of time	
Summer		Solve problems with time	Solve problems with time	Year 3 - Time
Cultimer	Shape	Turns and angles	Turns and angles	Year 2 - Shape
		Right angles	Right angles	
		Compare angles	Compare angles	
		Measure and draw accurately	Revision – Turns and angles, Right angles, Compare angles	
		Horizontal and vertical	Horizontal and vertical	
		Parallel and perpendicular	Parallel and perpendicular	
		Recognise and describe 2-D shapes	Recognise and describe 2-D shapes	
		Draw polygons	Revision - Recognise and describe 2-D shapes	
		Recognise and describe 3-D shapes	Recognise and describe 3-D shapes	





Term	Block	Small Step	Recommended Sumdog White Rose Maths Skill	Sumdog White Rose Maths Assessment Opportunity
	Shape	Make 3-D shapes	Revision - Recognise and describe 3-D shapes	Year 3 - Shape
		Interpret pictograms	Interpret pictograms	Year 2 - Statistics
Summer	Statistics	Draw pictograms	Revision - Interpret pictograms	
		Interpret bar charts	Interpret bar charts	
		Draw bar charts	Revision - Interpret bar charts	
		Collect and represent data	Collect and represent data	Year 3 – End of term arithmetic (Summer)
		Two-way tables	Two-way tables	Year 3 - Statistics



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

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