

# White Rose Maths on Sumdog

Scheme of Learning - Year 2



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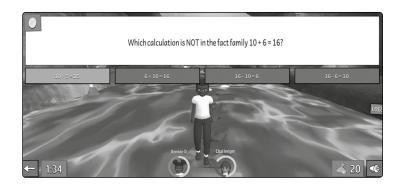
#### Introduction



#### **Sumdog and White Rose Maths**

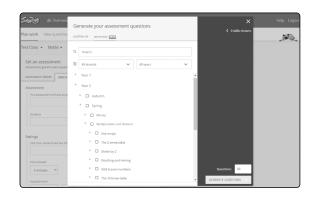
Sumdog is an interactive maths and spelling platform for children aged between 5 and 14 years old that combines pupil engagement with quality question content and comprehensive curriculum alignment. Our huge bank of curriculum-aligned maths questions help children to build fluency through regular practice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

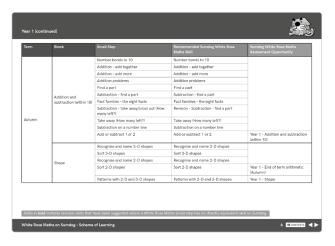
Sumdog that exactly matches your in-class teaching. These skills not only draw from our usual broad range of Sumdog questions, but also offer access to approximately 500 brand new question sets that have been designed specifically for WRM by teachers and educational consultants.



#### **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.

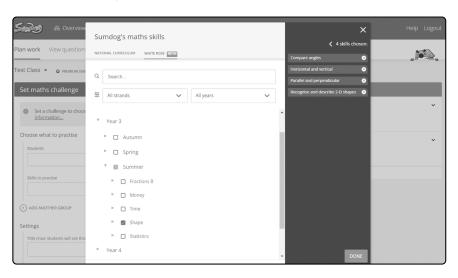


#### **Use Case**

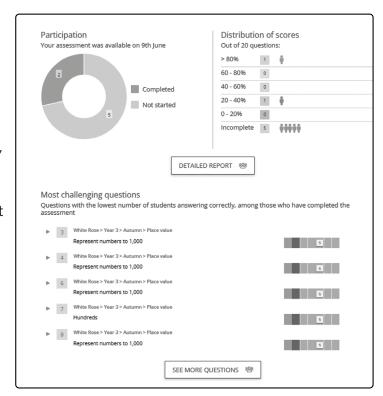


Teacher A is a Year 3 teacher who is about to start teaching the 'Shape' block in the Summer term of Year 3. Using the Sumdog White Rose Maths scheme of learning document to set work on Sumdog to complement their teaching, they follow these simple steps:

- **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 2



Term	Block	Small Step	Recommended Sumdog White Rose Maths Skill	Sumdog White Rose Maths Assessment Opportunity
		Numbers to 20	Revision - Year 1 - Place Value (within 20)	Year 2 Sumdog Diagnostic
		Count objects to 100 by making 10s	Count objects to 100 by making 10s	Year 1: Summer – Place value (within 100)
		Recognise tens and ones	Recognise tens and ones	
		Use a place value chart	Revision - Recognise tens and ones	
		Partition numbers to 100	Partition numbers to 100	
		Write numbers to 100 in words	Write numbers to 100 in words	
		Flexibly partition numbers to 100	Flexibly partition numbers to 100	
	Place Value	Write numbers to 100 in expanded form	Write numbers to 100 in expanded form	
Autumn		10s on the number line to 100	Revision - Year 1 - Place Value (within 20)	
		10s and 1s on the number line to 100	10s and 1s on the number line to 100	
		Estimate numbers on a number line	Revision – 10s and 1s on a number line	
		Compare objects	Compare objects	
		Compare numbers	Compare numbers	
		Order objects and numbers	Order objects and numbers	
		Count in 2s, 5s and 10s	Count in 2s, 5s and 10s	
		Count in 3s	Count in 3s	Year 2 - Place value
	Addition and subtraction	Bonds to 10	Revision - Year 1 - Addition and subtraction (within 20)	Year 1 - Addition and subtraction (within 20)
		Fact families – addition and subtraction bonds within 20	Fact families – addition and subtraction bonds within 20	
		Related facts	Related facts	





Term	Block	Small Step	Recommended Sumdog White Rose Maths Skill	Sumdog White Rose Maths Assessment Opportunity
		Bonds to 100 (tens)	Bonds to 100 (tens)	
		Add and subtract 1s	Add and subtract 1s	
		Add by making 10	Add by making 10	
		Add three 1-digit numbers	Add three 1-digit numbers	
		Add to the next 10	Revision - Add by making 10	
		Add across a 10	Add across a 10	
		Subtract across 10	Subtract across 10	
		Subtract from a 10	Subtract from a 10	
		Subtract a 1-digit number from a 2-digit number (across a 10)	Subtract a 1-digit number from a 2-digit number (across a 10)	
Autumn Addition and subtraction		10 more and 10 less	10 more and 10 less	
	Subtraction	Add and subtract 10s - addition	Add and subtract 10s – addition	
		Add and subtract 10s - subtraction	Add and subtract 10s - subtraction	
		Add two 2-digit numbers (not across a 10)	Add two 2-digit numbers (not across a 10)	
		Add two 2-digit numbers (across a 10)	Add two 2-digit numbers (across a 10)	
		Subtract two 2-digit numbers (not across a 10)	Subtract two 2-digit numbers (not across a 10)	
		Subtract two 2-digit numbers (across a 10)	Subtract two 2-digit numbers (across a 10)	
		Mixed addition and subtraction	Revision – Subtract two 2-digit numbers (across a 10) & Add two 2-digit numbers (across a 10)	





Term	Block	Small Step	Recommended Sumdog White Rose Maths Skill	Sumdog White Rose Maths Assessment Opportunity
	Addition and	Compare number sentences	Compare number sentences	
	subtraction	Missing number problems	Missing number problems	Year 2 - Addition and subtraction
		Recognise 2-D and 3-D shapes	Recognise 2-D and 3-D shapes	Year 1 - Shape
		Count sides on 2-D shapes	Count sides on 2-D shapes	
		Count vertices on 2-D shapes	Count vertices on 2-D shapes	
		Draw 2-D shapes	Revision - Recognise 2-D and 3-D shapes	
		Lines of symmetry on shapes	Lines of symmetry on shapes	
Autumn	Shape	Use lines of symmetry to complete shapes	Revision - Lines of symmetry on shapes	
		Sort 2-D shapes	Sort 2-D shapes	
		Count faces on 3-D shapes	Count faces on 3-D shapes	
		Count edges on 3-D shapes	Count edges on 3-D shapes	
		Count vertices on 3-D shapes	Count vertices on 3-D shapes	_
		Sort 3-D shapes	Sort 3-D shapes	Year 2 – End of term arithmetic (Autumn)
		Make patterns with 2-D and 3-D shapes	Make patterns with 2-D and 3-D shapes	Year 2 - Shape
		Count money - pence	Count money - pence	Year 2 Sumdog Diagnostic
		Count money - pounds (notes and coins)	Count money - pounds (notes and coins)	Year 1 - Money
Spring	Money	Count money - pounds and pence	Count money - pounds and pence	
		Choose notes and coins	Choose notes and coins	
		Make the same amount	Make the same amount	





Term	Block	Small Step	Recommended Sumdog White Rose Maths Skill	Sumdog White Rose Maths Assessment Opportunity
		Compare amounts of money	Compare amounts of money	
		Calculate with money	Calculate with money	
	Money	Make a pound	Revision - Calculate with money	
		Find change	Find change	
		Two-step problems	Two-step problems	Year 2 - Money
		Recognise equal groups	Recognise equal groups	Year 1 – Multiplication and division
		Make equal groups	Make equal groups	
		Add equal groups	Add equal groups	
		Introduce the multiplication symbol	Introduce the multiplication symbol	
		Multiplication sentences	Multiplication sentences	
Spring		Use arrays	Use arrays	
		Make equal groups – sharing	Revision - Use arrays	
	Multiplication and division	Make equal groups - grouping		
		The 2 times-table	The 2 times-table	
		Divide by 2	Divide by 2	
		Doubling and halving	Doubling and halving	
		Odd & even numbers	Odd & even numbers	
		The 10 times-table	The 10 times-table	
		Divide by 10	Divide by 10	
		The 5 times-table	The 5 times-table	
		Divide by 5	Divide by 5	

#### Year 2 (continued)



Term	Block	Small Step	Recommended Sumdog White Rose Maths Skill	Sumdog White Rose Maths Assessment Opportunity
	Multiplication and division	The 5 and 10 times-tables	Revision – The 5 times-table and The 10 times-table	Year 2 - Multiplication and division
		Measure in centimetres	Measure in centimetres	Year 1 - Length and height
		Measure in metres	Measure in metres	
	Length and height	Compare lengths and heights	Compare lengths and heights	_
		Order lengths and heights	Order lengths and heights	
		Four operations with lengths and heights	Four operations with lengths and heights	Year 2 - Length and height
	Mass, capacity and temperature	Compare mass	Compare mass	Year 1 - Mass and volume
Spring		Measure in grams	Measure in grams	
Opring		Measure in kilograms	Measure in kilograms	
		Four operations with mass	Revision - Compare mass	
		Compare volume and capacity	Compare volume and capacity	
		Measure in millilitres	Measure in millilitres	
		Measure in litres	Measure in litres	
		Four operations with volume and capacity	Revision – Compare volume and capacity	Year 2 – End of term arithmetic (Spring)
		Temperature	Temperature	Year 2 - Mass, capacity and temperature
		Introduction parts and wholes	Revision - Year 1 - Fractions	Year 2 Sumdog Diagnostic
C	Frantiana	Equal and unequal parts	Equal and unequal parts	Year 1 - Fractions
Summer	Fractions	Recognise a half	Recognise a half	
		Find a half	Find a half	1



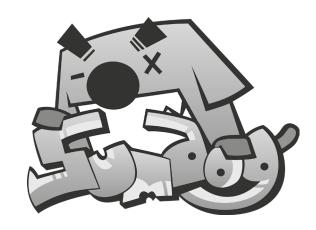


Term	Block	Small Step	Recommended Sumdog White Rose Maths Skill	Sumdog White Rose Maths Assessment Opportunity
		Recognise a quarter	Recognise a quarter	
		Find a quarter	Find a quarter	
		Recognise a third	Recognise a third	
		Find a third	Find a third	
		Find the whole	Revision – Find a half, Find a quarter & Find a third	
	Fractions	Unit fractions	Unit fractions	
		Non-unit fractions	Revision - Unit fractions	
		Recognise the equivalence of a half and two quarters		
_		Recognise three quarters		
Summer		Find three quarters	Find three quarters	
		Count in fractions up to a whole	Revision - Find three quarters	Year 2 - Fractions
	Time	O'clock and half past	O'clock and half past	Year 1 - Time
		Quarter past and quarter to	Quarter past and quarter to	
		Tell time past the hour	Revision - O'clock and half past & Quarter past and quarter to	
		Tell time to the hour		
		Tell the time to 5 minutes	Tell the time to 5 minutes	
		Minutes in an hour	Minutes in an hour	
		Hours in a day	Revision – Tell the time to 5 minutes	Year 2 - Time
	Statistics	Make tally charts	Make tally charts	





Term	Block	Small Step	Recommended Sumdog White Rose Maths Skill	Sumdog White Rose Maths Assessment Opportunity
		Tables	Tables	
		Block diagrams	Block diagrams	
	Ctatiatiaa	Draw pictograms (1-1)	Revision - Make tally charts	_
	Statistics	Interpret pictograms (1-1)	Interpret pictograms (1-1)	_
		Draw pictograms (2, 5 and 10)	Revision - Interpret pictograms (1-1)	_
Summer		Interpret pictograms (2, 5 and 10)	Interpret pictograms (2, 5 and 10)	Year 2 - Statistics
Cummer		Language of position	Revision - Year 1 - Position and Direction	
	Position and direction	Describe movement		
		Describe turns		
		Describe movement and turns		Year 2 - End of term arithmetic (Summer)
		Shape patterns with turns	Shape patterns with turns	Year 2 - Position and direction



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

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