# Mathletics White Rose Maths Aligned

Skill Quests & Activities



Years 1-3

September 2023



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# Year 1

## Autumn

Number: Place value (within 10)	
Course Topic	Activities Title
Autumn: Number (place	Dot Display
value within 10)	How Many?
	Matching Numbers to 10
	Order Numbers to 10
	Picture Graphs: More or Less
	Pictograms: Who has the Goods?
	More, Less or the Same to 10

Number: Addition and subtraction (within 10)	
Course Topic	Activities Title
Autumn: Number	Adding to make 5 and 10
(addition and subtraction	Adding to Ten
within 10)	Adding to 10 Word Problems
	Model Addition
	Model Subtraction
	All about Ten
	Subtracting from Ten
	Balance Numbers to 10

Geometry: Shape	
Course Topic	Activities Title
Autumn: Geometry	Collect Simple Shapes
(shape)	Match the Solid 1
	Collect the Objects 1
	Complete the Pattern

## Spring

Number: Place value (within 20)	
Course Topic	Activities Title
Spring: Number (place	Counting Up to 20
value within 20)	Making Teen Numbers
	Before, After and Between to 20
	More, Less or the Same to 20
	1 more 2 less
	Matching Numbers to 20
	Order Numbers to 20
	Compare Numbers to 20
	Concept of Zero

Number: Addition and subtraction (within 20)	
Course Topic	Activities Title
Spring: Number (add and	Addictive Addition
subtract within 20)	Simple Subtraction
	All about Twenty
	Doubles and halves to 20
	Doubles and Near Doubles
	Adding in any order
	Related Facts 1
	Add and Subtract Problems

Number: Place value (within 50)	
Course Topic	Activities Title
Spring: Number (place	Counting Forwards
value within 50)	Counting Backwards
	Making Numbers Count
	Compare Numbers to 50

Measurement: Length and height	
Course Topic	Activities Title
Spring: Measurement	Everyday Length
(length and height)	Compare Length

Measurement: Mass and volume	
Course Topic	Activities Title
Spring: Measurement	Everyday Mass
(mass and volume)	How Full?
	Which Holds More?
	Filling Fast!

### Summer

Number: Multiplication and division	
Course Topic	Activities Title
Summer: Number	Grouping in Twos
(multiply and divide)	Grouping in Tens
	Grouping in Fives
	Groups
	Share the Treasure

Number: Fractions	
Course Topic	Activities Title
Summer: Number	Halves
(fractions)	Is it Half?
	Halves and Quarters

Geometry: Position and direction	
Course Topic	Activities Title
Summer: Geometry	Left or Right?
(position and direction)	Where is it?
	Following Directions
	Ordinal Numbers

Number: Place value (within 100)	
Course Topic	Activities Title
Summer: Number (place	Going Up
value within 100)	Going Down
	Making Big Numbers Count
	Number Lines
	Number line order
	1 More, 2 Less
	Compare Numbers to 100
	Arranging Numbers

Measurement: Money	
Course Topic	Activities Title
Summer: Measurement	Identify Everyday Money (GBP)
(money)	

Measurement: Time	
Course Topic	Activities Title
Summer: Measurement	Tell Time to the Half Hour (UK)
(time)	Tell Time to the Hour (UK)
	Tomorrow and Yesterday (Scaffolded)
	Tomorrow and Yesterday (without scaffold)
	Days of the Week

Days: After and Before
Calendar: Days and Dates
Months of the Year
Weekdays and Weekends

# Year 2

### Autumn

Number: Place value	
Course Topic	Activities Title
Autumn: Number (place	Matching Numbers to 20
value)	Compare Numbers to 20
	Reading Numbers to 30
	Making Numbers Count
	Make Big Numbers Count
	Place Value 1
	Repartition Two-digit Numbers
	Number Lines
	Before, After & Between to 100
	Compare Numbers to 50
	Compare Numbers to 100
	Arranging Numbers
	Count by Twos
	Count by Fives
	Count by Tens
	Count by 2s, 5s and 10s
	Counting on a 100 grid

Number: Addition and subtraction	
Course Topic	Activities Title
Autumn: Number	Adding to Make 5 and 10
(addition and	Adding In Any Order
subtraction)	Commutative Property of Addition
	Fact Families: Add and Subtract
	Complements to 10, 20, 50
	Add 3 Numbers Using Bonds to 10
	Add 3 Single Digit Numbers
	1 More, 2 less
	Adding to 2-digit numbers
	10 More, 10 Less
	Subtract Tens
	Magic Mental Addition
	Subtract Numbers
	Subtract Numbers: Regroup
	Magic Mental Subtraction
	Repartition to Subtract
	Balance Additions to 20
	All about Twenty

Geometry: Shape	
Course Topic	Activities Title
Autumn: Geometry	Collect Simple Shapes
(shape)	Count Sides and Corners
	Symmetry
	Faces, Edges and Vertices
	Collect the Objects 1
	Pattern Error

## Spring

Measurement: Money	
Course Topic	Activities Title
Spring: Measurement	Skip Counting with Coins
(money)	How much Change? (GBP)

Number: Multiplication and division	
Course Topic	Activities Title
Spring: Number	Groups
(multiplication and	Frog Jump Multiplication
division)	Multiplication Arrays
	Arrays 1
	Arrays 2
	Share the Treasure
	Fill the Jars
	Multiplication Turnarounds
	Groups of Two
	Dividing Twos
	Doubles and Halves to 20
	Odd or Even
	Groups of Ten
	Dividing Tens
	Groups of Five
	Dividing Fives

Measurement: Length and height	
Course Topic	Activities Title
Spring: Measurement	How Long is That?
(length and height)	Ordering Lengths (cm)

Measurement: Mass, capacity and temperature	
Course Topic	Activities Title
Spring: Measurement	Balancing Objects
(mass, capacity and	How Heavy?
temperature)	How Heavy is it?
	Ordering Mass (g)
	How Full?
	Using a Litre
	What's the Temperature (Celsius)?

### Summer

Number: Fractions	
Course Topic	Activities Title
Summer: Number	Is it Half?
(fractions)	Halves
	Thirds and Sixths
	Shade Fractions
	Halves and Quarters

Measurement: Time	
Course Topic	Activities Title
Summer: Measurement	Tell Time to the Hour (UK)
(time)	Tell Time to the Half Hour (UK)
	Quarter To and Quarter Past
	Five Minute Times

Statistics	
Course Topic	Activities Title
Summer: Statistics	Tallies
	Interpreting Tables
	Picture Graphs: single-unit scale
	Pictograms: Who has the Goods?
	Pictographs

Geometry: Position and direction	
Course Topic	Activities Title
Summer: Geometry	Left or Right?
(position and direction)	Where is it?
	Following Directions
	Ordinal Numbers

Problem solving	
Course Topic	Activities Title
Problem solving	Partition Puzzles 1
	Missing Numbers
	Bar Model Problems 1
	Add and Subtract Problems
	Problems: Add and Subtract

# Year 3

## Autumn

	Number: Place value
Skill Quests	Skills
A1 Place value review	Represent numbers to 100
	Partition numbers to 100
	Number line to 100
A1 Place value	Hundreds
	Represent numbers to 1,000
	Partition numbers to 1,000
	Flexible partitioning to 1000
	Hundreds, tens & ones
	Find 1, 10 or 100 more or less than a number
	Number line to 1,000
A1 Ordering & comparing	Compare numbers to 1,000
numbers	Order numbers to 1,000
A1 Skip counting in 50s	Count in 50s
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Course Topic	Activities Title
Course Topic Autumn: Number (place	Activities Title Before, After & Between to 100
	Before, After & Between to 100 Compare Numbers to 100
Autumn: Number (place	Before, After & Between to 100
Autumn: Number (place	Before, After & Between to 100 Compare Numbers to 100
Autumn: Number (place	Before, After & Between to 100 Compare Numbers to 100 Place Value 1
Autumn: Number (place	Before, After & Between to 100 Compare Numbers to 100 Place Value 1 Number Line Order
Autumn: Number (place	Before, After & Between to 100 Compare Numbers to 100 Place Value 1 Number Line Order Place Value 2
Autumn: Number (place	Before, After & Between to 100 Compare Numbers to 100 Place Value 1 Number Line Order Place Value 2 Model Numbers
Autumn: Number (place	Before, After & Between to 100 Compare Numbers to 100 Place Value 1 Number Line Order Place Value 2 Model Numbers Place Value to Thousands
Autumn: Number (place	Before, After & Between to 100 Compare Numbers to 100 Place Value 1 Number Line Order Place Value 2 Model Numbers Place Value to Thousands Partition and Rename 1 Place Value Partitioning Repartition Two-digit Numbers
Autumn: Number (place	Before, After & Between to 100 Compare Numbers to 100 Place Value 1 Number Line Order Place Value 2 Model Numbers Place Value to Thousands Partition and Rename 1 Place Value Partitioning
Autumn: Number (place	Before, After & Between to 100 Compare Numbers to 100 Place Value 1 Number Line Order Place Value 2 Model Numbers Place Value to Thousands Partition and Rename 1 Place Value Partitioning Repartition Two-digit Numbers
Autumn: Number (place	Before, After & Between to 100 Compare Numbers to 100 Place Value 1 Number Line Order Place Value 2 Model Numbers Place Value to Thousands Partition and Rename 1 Place Value Partitioning Repartition Two-digit Numbers Which is Bigger?

Number: Addition and Subtraction	
Skill Quests	Skills
A2 Addition & subtraction	Number bonds within 10
review	Add & subtract 1s
	Add & subtract 10s
	Add & subtract 100s
	Spot the pattern - making it explicit
A2 Addition & subtraction	Add 1s across a 10
with exchanges	Add 10s across 100
	Subtract 1s across a 10
	Add/subtract two numbers-not crossing 100
	Add two numbers - crossing 10 & 100
	Subtract two numbers - crossing 10 & 100

	Add/subtract 2/3-digit numbers-not crossing 10/100
	Add 2 & 3-digit numbers - crossing 10 or 100
	Subtract 2-digits from 3-digits crossing 10 or 100
A2 Addition & Subtraction	Complements to 100
Strategies	Estimate answers to calculations
	Inverse operations
	Making decisions
Course Topic	Activities Title
Autumn: Number (addition	Add 3 Numbers Using Bonds to 10
and subtraction)	Add 3 Numbers: Bonds to Multiples of 10
	Columns that Add
	Add Two 2-Digit Numbers
	Add 3-Digit Numbers
	Columns that Subtract
	Subtract Numbers
	3-Digit Differences
	Add Numbers: Exchange a Ten (UK)
	Column Addition 1 (UK)
	Add 3-Digit Numbers: Exchanging (UK)
	2-Digit Differences: Exchanging (UK)
	Add Multi-Digit Numbers 1 (UK)
	Magic Mental Addition
	Magic Mental Subtraction
	Bump Add and Subtract

Nun	nber: Multiplication and division A
Skill Quests	Skills
A3 Multiplication & division	Equal groups
review	Arrays
	Multiples of 2
	Multiples of 5 & 10
	Sharing & grouping
A3 Multiplication & division	Multiply by 3
facts	Divide by 3
	The 3 times-table
	Multiply by 4
	Divide by 4
	The 4 times-tables
	Multiply by 8
	Divide by 8
	The 8 times-table
	The 2,4 & 8 times-tables
Course Topic	Activities Title
Autumn: Number	Arrays 1
(multiplication and division	Arrays 2
A)	Fill the Jars
	Groups of Three
	Groups of Four
	Groups of Eight
	Dividing Threes
	Dividing Fours

	Dividing Eights
	Frog Jump Multiplication
	Frog Jump Division

## Spring

Nun	nber: Multiplication and division B
Skill Quests	Skills
Sp1 Multiplication	Multiples of 10
	Related calculations
	Reasoning about multiplication
	2-digits by 1-digit (with exchange)
Sp1 Division	Linking multiplication & division
	Divide 2-digit by 1-digit-no exchange or remainder
	Divide 2-digit by 1-digit-exchange, no remainder
	Divide 2-digits by 1-digit (with a remainder)
Sp1 Scaling & combinations	Scaling
	How many ways?
Course Topic	Activities Title
Spring: Number	Grouping in Tens
(multiplication and division	Multiplication Turnarounds
B)	Mental Methods Multiplication 1
	Related facts 2
	Remainders by Arrays

Measurement: Length and perimeter	
Skill Quests	Skills
Sp2 Length	Measure in m & cm
	Measure in mm
	Measure in cm & mm
	Metres, centimetres & millimetres
	Equivalent lengths - m & cm
	Equivalent lengths - mm & cm
	Compare lengths
	Add & subtract lengths
Sp2 Perimeter	Introducing perimeter
	Measure perimeter
	Calculate perimeter
Course Topic	Activities Title
Spring: Measurement	Which Unit of Measurement?
(length and perimeter)	Measure to the Nearest Half Centimetre
	How Long is That?
	Perimeter

Number: Fractions A	
Skill Quests	Skills
Sp3 Fractions A	Understand denominators & numerators
	Compare & order unit fractions
	Understand the whole
	Compare & order non-unit fractions
	Counting with fractions on a number line
	Equivalent fractions on a number line

	Equivalent fractions on a bar model
Course Topic	Activities Title
Spring: Number (fractions	Model Fractions
A)	Partition into Equal Parts
	Fraction Length Models 2
	Identifying Fractions on a Number Line
	Compare Fractions 1a
	Equivalent Fraction Wall 1

Measurement: Mass and capacity	
Skill Quests	Skills
Sp4 Mass	Use scales
	Measure mass in grams
	Measure mass in kilograms & grams
	Compare & order mass
	Add & subtract mass
Sp4 Capacity	Measure capacity & volume in mL
	Measure capacity & volume in L
	Measure capacity & volume in mL & L
	Compare capacity & volume
	Add & subtract capacity
Course Topic	Activities Title
Spring: Measurement (mass	How Heavy is it?
and capacity)	Grams and Kilograms
	Kilogram Conversions
	Using a Litre

#### Summer

Number: Fractions B	
Skill Quests	Skills
Sum1 Fractions B	Add fractions
	Subtract fractions
	Partition the whole
	Find a unit fraction of a set
	Find a non-unit fraction of a set
	Reasoning with fractions of amounts
Course Topic	Activities Title
Summer: Number (fractions B)	Add Subtract Fractions 1
	Add Like Fractions
	Subtract Like Fractions
	Fractions of a Collection 1

Measurement: Money	
Skill Quests	Skills
Sum2 Money	Pounds & pence
	Convert pounds & pence
	Add & subtract money
	Give change
Course Topic	Activities Title
Summer: Measurement	Money - adding (GBP)
(money)	How much Change? (GBP)

Measurement: Time	
Skill Quests	Skills
Sum3 Time	Telling the time to 5 minutes incl roman numerals
	Telling the time to the minute incl roman numerals
	Read time on a digital clock
	Using a.m. & p.m.
	Years, months & days
	Days & hours
	Hours & minutes: use start & end times
	Hours & minutes: use duration
	Minutes & seconds
	Units of time
	Solve problems with time
Course Topic	Activities Title
Summer: Measurement	Five Minute Times
(time)	What is the Time?
	Months After and Before
	Using a Calendar
	Elapsed Time
	What Time Will it Be?
	Time Conversions: Whole Numbers 1

Geometry: Shape	
Skill Quests	Skills
Sum4 Shape	Turns & angles
	Right angles in shapes
	Compare angles
	Horizontal & vertical
	Parallel & perpendicular
	Recognise & describe 2-D shapes
	Recognise & describe 3-D shapes
	Make 3-D shapes
Course Topic	Activities Title
Course Topic Summer: Geometry (shape)	Activities Title Right Angle Relation
	Right Angle Relation
	Right Angle Relation What Type of Angle 2?
	Right Angle Relation What Type of Angle 2? What Line am I?
	Right Angle Relation What Type of Angle 2? What Line am I? Collect More Shapes
	Right Angle Relation What Type of Angle 2? What Line am I? Collect More Shapes Collect the Objects
	Right Angle Relation What Type of Angle 2? What Line am I? Collect More Shapes Collect the Objects Count the Edges

Statistics	
Skill Quests	Skills
Sum5 Statistics	Interpreting pictograms
	Interpreting bar charts
	Collect & represent data
	Two-way tables
Course Topic	Activities Title
Summer: Statistics	Making Picture Graphs: With Scale
	Bar Chart
	Reading from a Bar Chart
	Interpreting Tables

Problem Solving	
Course Topic	Activities Title
Problem solving	Pick the Next Number
	Commutative Property of Addition
	Bar Model Problems 1
	Pyramid Puzzles 1
	Magic Symbols 1
	Problems: Multiply and Divide



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