

Mathletics

ARK Curriculum



Years R-3
January, 2023

Mathletics

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January, 2023

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Reception

Autumn

Courses and Activities

Outcome	Existing Course	Topic	Activity Name
1. Early mathematical experience	Reception	Measurement	Balancing Act
	Reception	Time, Money and Data	Same and Different
	Reception		Sort It
2. Pattern and early number	Reception	Patterns and Problem Solving	Complete the Pattern
	Reception		Simple Patterns
	Reception		Missing it!
	Reception		More, less or the same to 10
	Reception		Concept of zero
3. Numbers within 6	Reception	Numbers to 10	Count to 5
	Reception		How Many?
	Reception		Picture Graphs: More or Fewer
4. Addition and subtraction within 6	Reception	Operations with Number	Adding to 5
	Reception		Subtracting from 5
5. Measures	Reception	Measurement	Filling Fast!
	Reception		Everyday Mass
	Reception		Which Holds More?
6. Shape and sorting	Reception	Space & Shape	Where is it?
	Reception		Collect the Shapes

Spring

Courses and Activities

Outcome	Existing Course	Topic	Activity Name
7. Numbers within 10	Reception	Numbers to 10	Matching Numbers to 10
	Reception		Order Numbers to 10
	Reception		More, less or the same to 10
	Reception		Dot Display
8. Calendar and time	England Year 2	Number and Place Value to 100 (2)	1st to 31st
	Reception	Time, Money and Data	Days of the Week
9. Addition and subtraction within 10	Reception	Operations with Number	Model Addition
	Reception		Model Subtraction
	Reception		Adding to Ten
	Reception		Subtracting from Ten
10. Grouping and sharing	England Year 1	Multiplication and Division	Groups
	Reception	Operations with Number	Share the Treasure
11. Number patterns within 15	Reception	Numbers to 10	Ordinal Numbers
12. Doubling and halving	Reception	Operations with Number	Doubles and Halves to 10
13. Shape and pattern	Reception	Space & Shape	Match the Object
	Reception		Collect Simple Shapes

Summer

Courses and Activities

Outcome	Existing Course	Topic	Activity Name
14. Securing addition and subtraction facts	England Year 1	Addition and Subtraction	Addition Facts
	Reception	Patterns and Problem Solving	Adding to 10 Word Problems
	Reception	Operations with Number	Adding to Make 5 and 10
15. Number patterns within 20	Reception	Numbers to 20	Counting Up to 20
	Reception		Order Numbers to 20
	Reception		Make Numbers Count
	Reception		More, Less or the Same to 20
16. Number patterns beyond 20	England Year 1	Number and Place Value to 50	Reading Numbers to 30
	England Year 1		1 to 30
17. Money	Reception	Time, Money and Data	Who has the Goods?
18. Measures	Reception	Measurement	How Full?
	Reception		Everyday Length
	Reception		Comparing Length
19. Exploration of patterns within number	Reception	Operations with Number	Adding to 10 Word Problems

Year 1

Autumn

Courses and Activities

Outcome	Existing Course	Topic	Activity Name
1. Numbers to 10	England Year 1	Number and Place Value Review	How Many?
	England Year 1		Order Numbers to 10
	England Year 1		Matching Numbers to 10
	England Year 1	Fractions	Doubles and Halves to 10
2. Addition and subtraction within 10 (Combination and partitioning)	England Year 1	Addition and Subtraction	Adding to make 5 and 10
	England Year 1		Balance Numbers to 10
	England Year 1		Subtracting from Ten
3. Shapes and patterns	England Year 1	Properties of Shape and Position	Collect Simple Shapes
	England Year 1		Match the Solid 1
	England Year 1		Collect the Objects 1
	England Year 1		Flip, Slide, Turn
	England Year 1		Where is it?
4. Numbers to 20	England Year 1	Number and Place Value Review	Order Numbers to 20
	England Year 1		Compare Numbers to 20
	England Year 1		Matching Numbers to 20
	England Year 1		Counting Up to 20
	England Year 1		Making Teen Numbers
	England Year 1	Fractions	Doubles and Halves to 20
5. Addition and subtraction within 20 (Augmentation and reduction)	England Year 1	Addition and Subtraction	Addition
	England Year 1		Additive Addition
	England Year 1		All about Twenty
	England Year 1		Subtraction Facts to 18
	England Year 1		Simple Subtraction
	England Year 1		Balance Numbers to 20

Spring

Courses and Activities

Outcome	Existing Course	Topic	Activity Name
6. Time	England Year 1	Time and Money	Hour Times
	England Year 1		Tell Time to the Half Hour (UK)
	England Year 1		Days of the Week
	England Year 1		Weekdays and Weekends
	England Year 1		Months After and Before
	England Year 1		Months of the Year
7. Exploring calculation strategies within 20	England Year 1	Number and Place Value to 50	More, Less or the Same to 20
	England Year 2	Add and Subtract (2)	Magic Mental Addition
	England Year 2		Magic Mental Subtraction
8. Numbers to 50	England Year 1	Number and Place Value to 50	Counting Forwards
	England Year 1		Compare Numbers to 50
	England Year 1		Making Numbers Count
	England Year 1		Reading Numbers to 30
	England Year 1		1 to 30
9. Addition and subtraction within 20 (Comparison and difference)	England Year 1	Addition and Subtraction	Addition Facts
	England Year 1		Problems: Add and Subtract
10. Fractions	England Year 1	Fractions	Is it half?
	England Year 1		Halves and Quarters
	England Year 1		Doubles and Near Doubles
11. Measures (1): Length and mass	England Year 1	Length, Mass and Volume	Everyday Mass
	England Year 1		Everyday Length
	England Year 1		Comparing Length
	England Year 1		Measuring Length with Blocks

Summer

Courses and Activities

Outcome	Existing Course	Topic	Activity Name
12. Numbers 50 to 100 and beyond	England Year 1	Number and Place Value to 100	Going Up
	England Year 1		Going Down
	England Year 1		Number Lines
	England Year 1		Making Big Numbers Count
	England Year 1		Counting on a 100 grid
	England Year 1		Place Value 1
	England Year 1		Number Line Order
	England Year 1		Counting by Twos
	England Year 1		Counting by Fives
	England Year 1		Counting by Tens
	England Year 1		Before, After & Between to 100
	England Year 1		Greater or Less to 100
	England Year 1		Arranging Numbers
13. Addition and subtraction (Applying strategies and structures)	England Year 1	Problem Solving	Add and Subtract Problems
	England Year 1		Adding to 10 Word Problems
	England Year 2	Add and Subtract (1)	Add Three 1-Digit Numbers
14. Money	England Year 1	Time and Money	Everyday Money (GBP)
	England Year 2		Money - Who's got it? (GBP)
15. Multiplication and division	England Year 1	Multiplication and Division	Groups
	England Year 1		Groups of Two
	England Year 1		Groups of Ten
	England Year 1		Groups of Five
	England Year 1		Share the Treasure
	England Year 1		Multiplication Arrays
	England Year 1		Model Multiplication to 5×5
16. Measures (2): Capacity and volume	England Year 1	Length, Mass and Volume	Which Holds More?
	England Year 1		Filling Fast!
	England Year 1		Comparing Volume
	England Year 1		How Full?

Year 2

Autumn

Skill Quests

Outcome	Existing Course	Quests	Content
1. Number within 100	KS1 - Year 2	Count in number sequences	Counting in 2s
	KS1 - Year 2		Counting in 5s
	KS1 - Year 2		Counting in 10s
	KS1 - Year 2		Counting in 2s, 5s and 10s
	KS1 - Year 2		Counting in 3s
	KS1 - Year 2		Counting starting on any number
	KS1 - Year 2	Place value of 2-digit numbers	Tens and ones
	KS1 - Year 2		Partitioning tens and ones
	KS1 - Year 2		Non-standard partitioning of tens and ones
	KS1 - Year 2	Identify, represent and estimate numbers	Numbers to 100
	KS1 - Year 2		Ordinal numbers
	KS1 - Year 2	Compare and order numbers up to 100	Comparing and ordering collections to 20
	KS1 - Year 2	Compare and order numbers up to 101	Comparing and ordering numbers to 100
	KS1 - Year 2	Read and write numbers to 100	Reading and writing numbers to 100
	KS1 - Year 2	Use place value to solve problems	Using place value to solve problems
Addition and subtraction of 2-digit numbers	KS1 - Year 2	Addition and subtraction facts	Number bonds to 20
	KS1 - Year 2		Doubles and near doubles
	KS1 - Year 2		One more and one less within 100
	KS1 - Year 2		Number bonds to 100
	KS1 - Year 2		Adding zero to a number
	KS1 - Year 2		Subtracting zero from a number
	KS1 - Year 2	Add and subtract numbers	Adding 1-digit numbers
	KS1 - Year 2		Adding 1-digit and 2-digit numbers
	KS1 - Year 2		Adding 2-digit numbers and 10s

	KS1 - Year 2		Add two 2-digit numbers
	KS1 - Year 2		Subtracting 1-digit and 2-digit numbers
	KS1 - Year 2		Subtracting 2-digit numbers and 10s
	KS1 - Year 2		Subtracting two 2-digit numbers
	KS1 - Year 2		Introducing vertical addition and subtraction
	KS1 - Year 2		Using mental strategies to add and subtract
	KS1 - Year 2		Using the bar model within 20
3. Addition and subtraction word problems	KS1 - Year 2	Problem solving: addition/subtraction	Addition and subtraction problems within 20
	KS1 - Year 2		Addition and subtraction problems within 100
	KS2 - Year 4	Solve 2-step problems in context	Solving addition and subtraction two-step problems
	KS2 - Year 3	Solve problems: add and subtract	Problem solving with addition and subtraction
4. Measures: length	KS1 - Year 2	Measure lengths	Measuring lengths - informal
	KS1 - Year 2		Measuring lengths - cm
	KS1 - Year 2		Selecting appropriate units to measure length
	KS1 - Year 2		Word problems using length
	KS1 - Year 2	Compare lengths, mass and volume	Comparing lengths
5. Graphs	KS1 - Year 2	Interpret and construct graphs	Pictograms
	KS1 - Year 2		Tally charts
	KS1 - Year 2		Block diagrams
	KS1 - Year 2		Tables
	KS1 - Year 2		Mixed data displays
	KS1 - Year 2		Constructing graphs
	KS1 - Year 2	Answer questions about data	Answering questions by counting
	KS1 - Year 2	Ask questions and collect data	Asking questions and collecting data
6. Multiplication and division 2, 5, 10	KS1 - Year 2	Multiplication and division problems	Using arrays
	KS1 - Year 2		Adding to multiply
	KS1 - Year 2		Solving problems using multiplication and division

	KS1 - Year 2	Multiplication and division facts	2 times-tables
	KS1 - Year 2		5 times-tables
	KS1 - Year 2		10 times-tables
	KS1 - Year 2		Multiplying by 2s, 5s and 10s
	KS1 - Year 2		Dividing by 2
	KS1 - Year 2		Dividing by 5
	KS1 - Year 2		Dividing by 10
	KS1 - Year 2		Dividing by 2s, 5s and 10s
	KS1 - Year 2		Multiplying and dividing by 2, 5, and 10
	KS1 - Year 2	Create mathematical sentences	Creating mathematical sentences
	KS1 - Year 2	Rules of multiplication	The commutative law of multiplication
	KS1 - Year 2		Relationship between multiplication and division

Courses and Activities

Outcome	Existing Course	Topic	Activity Name
1. Number within 100	England Year 2	Number and Place Value to 100 (1)	Place value 1
	England Year 2		Number line order
	England Year 2		Compare Numbers to 100
	England Year 2		Before, After & Between to 100
	England Year 2		Repartition Two-digit Numbers
Addition and subtraction of 2-digit numbers	England Year 2	Add and Subtract (1)	1 more, 2 less
	England Year 2		1 more, 10 less
	England Year 2		All about Twenty
	England Year 2		Balance Additions to 20
	England Year 2		Simple Subtraction
	England Year 2		Fact Families: Add and Subtract
	England Year 2		Add Three 1-Digit Numbers
	England Year 2		Add 3 Single Digit Numbers
	England Year 2		Add 3 Numbers Using Bonds to 10
	England Year 2		Complements to 10, 20, 50
3. Addition and subtraction word problems	England Year 2	Add and Subtract (2)	Problems: Add and Subtract
	England Year 2		Bar Model Problems 1

	England Year 2	Problem Solving	Adding to 10 Word Problems
	England Year 2		Add and Subtract Problems
	England Year 2		Word Problems: Add and Subtract
4. Measures: length	England Year 2	Length, Mass and Volume	Measuring Length with Blocks
	England Year 2		How Long is That?
	England Year 2		Measure to the Nearest Half Centimetre
	England Year 2		Ordering Lengths (cm)
5. Graphs	England Year 2	Statistics	More or Less?
	England Year 2		Picture Graphs
	England Year 2		Column Graphs
	England Year 2		Sorting Data
	England Year 2		Tallies
	England Year 2		Making Graphs
	England Year 2		Reading from a Column Graph
6. Multiplication and division 2, 5, 10	England Year 2	Multiply and Divide	Groups of Ten
	England Year 2		Groups of Two
	England Year 2		Groups of Five
	England Year 2		Dividing Tens
	England Year 2		Dividing Twos
	England Year 2		Dividing Fives

Spring

Skill Quests

Outcome	Existing Course	Quests	Content
7. Time	KS1 - Year 2	Internals of time	Comparing and sequencing intervals of time
	KS1 - Year 2	Tell the time: digital and analogue	O'clock and half past (analogue clocks)
	KS1 - Year 2		O'clock and half past (digital clocks)
	KS1 - Year 2		Quarter past and quarter to (analogue clocks)
	KS1 - Year 2		Quarter past and quarter to (digital clocks)
	KS1 - Year 2		Telling time to 5 minutes (analogue clocks)
	KS1 - Year 2		Telling time to 5 minutes (digital clocks)
	KS1 - Year 2		Problem solving with hours and minutes
8. Fractions	KS1 - Year 2	Fractions	Halves
	KS1 - Year 2		Quarters
	KS1 - Year 2		Halves and quarters
	KS1 - Year 2		Thirds
	KS1 - Year 2		Counting in halves and quarters
	KS1 - Year 2		Counting in thirds
	KS1 - Year 2		Ordering and comparing simple fractions
	KS1 - Year 2		Finding quarters by halving
	KS1 - Year 2	Equivalence in fractions	Equivalence in fractions
9. Addition and subtraction of 2-digit numbers(regrouping and adjusting)	KS2 - Year 3	Solve problems: add and subtract	Problem solving with addition and subtraction
10. Money	KS1 - Year 2	Time and Money	Money - Who's got it? (GBP)
	KS1 - Year 2		How much Change? (GBP)
11. Faces, shapes and patterns; lines and turns	KS1 - Year 2	3D shapes	Introducing spheres
	KS1 - Year 2		Introducing cubes
	KS1 - Year 2		Introducing cylinders
	KS1 - Year 2		Introducing prisms
	KS1 - Year 2		Introducing cones
	KS1 - Year 2		Introducing pyramids

	KS1 - Year 2		Describing the properties of 3D shapes
	KS1 - Year 2		Building 3D shapes
	KS1 - Year 2	Identify 2D shapes on 3D shapes	Identifying 3D shapes in the environment
	KS1 - Year 2	Compare and sort 2D and 3D shapes	Sorting 2D shapes
	KS1 - Year 2		Sorting 3D shapes
	KS1 - Year 2		Comparing 2D shapes
	KS1 - Year 2		Comparing 3D shapes
	KS1 - Year 2	Patterns and sequences	Making patterns with shapes
	KS1 - Year 2		Number patterns
	KS1 - Year 2	Position, direction and movement	Describing position and movement
	KS1 - Year 2		Describing movement and turns

Courses and Activities

Outcome	Existing Course	Topic	Activity Name
7. Time	England Year 2	Time and Money	Tell Time to the Half Hour (UK)
	England Year 2		Five Minute Times
8. Fractions	England Year 2	Fractions	Shade Fractions
	England Year 2		Divide Into Equal Groups
	England Year 2		Model Fractions
	England Year 2		Halves and Quarters
	England Year 2		Fractions of a Collection 1
	England Year 2		Uneven partitioned shapes 1
9. Addition and subtraction of 2-digit numbers (regrouping and adjusting)	England Year 2	Add and Subtract (2)	Magic Mental Addition
	England Year 2		Adding to 2-digit numbers
	England Year 2		Magic Mental Subtraction
	England Year 2		Repartition to Subtract
	England Year 2		Bar Model Problems 1
10. Money	England Year 2	Combinations of coins	Combinations of money
	England Year 2	Add and subtract money	Adding and subtracting money
11. Faces, shapes and patterns; lines and turns	England Year 2	Properties of Shapes	Collect the Shapes 1
	England Year 2		Collect the Objects
	England Year 2		Relate Shapes and Solids
	England Year 2		Match the Solid 1
	England Year 2		How many Edges?
	England Year 2		How many Corners?
	England Year 2		How many Faces?

	England Year 2		Count Sides and Corners
	England Year 2		Symmetry
	England Year 2		Faces, Edges and Vertices

Summer

Skill Quests

Outcome	Existing Course	Quests	Content
12. Number within 1000	Year 4	Identify and represent numbers	Identifying up to 4-digit numbers
	Year 4		Identifying 3-digit numbers within 1,000
13. Measures: capacity and volume	KS1 - Year 2	Measure volume	Capacity and volume
	KS1 - Year 2		Measuring capacity using litres
	KS1 - Year 2		Measuring capacity using millilitres
	KS1 - Year 2		Selecting appropriate units to measure volume
	KS1 - Year 2	Reading a thermometer	Temperature
	KS1 - Year 2	Identify correct unit of measure	Choosing the right unit of measure
14. Measures: mass	KS1 - Year 2	Measure mass	Introducing weight and mass
	KS1 - Year 2		Measuring mass in kilograms
	KS1 - Year 2		Measuring mass in grams
15. Exploring calculation strategies	KS1 - Year 2	Commutativity in addition	Commutativity in addition
	KS1 - Year 2	Rules of addition and subtraction	Relationships between addition and subtraction
16. Multiplication and division(3x and 4x tables)	KS2 - Year 3	Multiply by 3	Exploring multiplication by 3
	KS2 - Year 3		Recalling and using multiplication by 3
	KS2 - Year 3	Multiply by 4	Exploring multiplication by 4
	KS2 - Year 3		Recalling and using multiplication by 4
	KS2 - Year 3	Divide by 3	Exploring division by 3
	KS2 - Year 3		Recalling and using division facts for 3
	KS2 - Year 3	Divide by 4	Exploring division by 4
	KS2 - Year 3		Recalling and using division by 4
	KS2 - Year 3	Multiply and divide by 3	Multiplying and dividing by 3
	KS2 - Year 3	Multiply and divide by 4	Multiplying and dividing by 4

Courses and Activities

Outcome	Existing Course	Topic	Activity Name
12. Number within 1000	England Year 3	Number and Place Value (2)	Place Value 2
	England Year 3		Model Numbers
	England Year 3		Place Value to Thousands
	England Year 3		Partition and Rename 1
	England Year 3		Place Value Partitioning
	England Year 3		Odd and Even Numbers 1
13. Measures: capacity and volume	England Year 2	Length, Mass and Volume	Temperature
	England Year 2		Using a Litre
	England Year 2		Ordering Volumes (l)
	England Year 2		Which Measuring Tool?
14. Measures: mass	England Year 2	Length, Mass and Volume	Ordering Mass (g)
	England Year 2		How Heavy?
15. Exploring calculation strategies	England Year 2	Problem Solving	Partition Puzzles 1
	England Year 2		Commutative Property of Addition
	England Year 2		Bar Model Problems 1
	England Year 2	Add and Subtract (2)	Commutative Property of Addition
	England Year 2	Number and Place Value to 100 (2)	Doubles and Halves to 20
16. Multiplication and division(3x and 4x tables)	England Year 3	Multiply and Divide	Groups of Three
	England Year 3		Groups of Four
	England Year 3		Dividing Threes
	England Year 3		Dividing Fours

Year 3

Autumn

Skill Quests

Outcome	Existing Course	Quests	Content
1. Number sense and exploring calculation strategies	KS1 - Year 2	Identify, represent and estimate numbers	Numbers to 100
	KS1 - Year 2		Ordinal numbers
	KS1 - Year 2	Compare and order numbers up to 100	Comparing and ordering numbers to 100
	KS1 - Year 2	Read and write numbers to 100	Reading and writing numbers to 100
	KS1 - Year 2	Use place value to solve problems	Using place value to solve problems
2. Place value	KS2 - Year 3	Find 10 or 100 more or less	Finding 10 or 100 more or less than a number
	KS2 - Year 3	Recognise place value of 3-digit numbers	Recognising place value of 3-digit numbers
	KS2 - Year 3	Compare and order numbers up to 1,000	Compare and order numbers up to 1,000
	KS2 - Year 3	Identify, represent and estimate numbers using different representations	Identify and represent numbers
	KS2 - Year 3	Read and write numbers up to 1,000 in numerals and in words	Read and write numbers up to 1,000
	KS2 - Year 3	Count from 0 in multiples of 4, 8, 50 and 100; find 10 or 100 more or less than a given number	Count in multiples of 4, 8, 50 and 100
3. Graphs	KS2 - Year 3	Interpret and present data: bar charts	Interpreting data in bar charts
	KS2 - Year 3	Interpret and present data: pictograms	Interpreting data in pictograms
	KS2 - Year 3	Interpret and present data: tables	Interpreting data in tables

	KS2 - Year 3	Solve problems related to data displays	Using data in tables and pictograms
	KS2 - Year 3	Interpret and present data: bar chart	Interpreting and presenting data in a bar chart
	KS2 - Year 3	Interpret and present data: line graph	Interpreting and presenting data in line graphs
	KS2 - Year 3	Solve comparison / sum / difference problems	Solving comparison, sum and difference problems
4. Addition and subtraction	KS2 - Year 3	Add and subtract numbers mentally, including: a three-digit number and 1s, a three-digit number and 10s, a three-digit number and 100s	Add with 3-digit numbers
	KS2 - Year 3		Subtract with 3-digit numbers
	KS2 - Year 3		Add and subtract 3-digit numbers
	KS2 - Year 3	Add and subtract numbers with up to 3 digits, using formal written methods of columnar addition and subtraction	Formal addition up to 3 digits
	KS2 - Year 3		Formal subtraction up to 3 digits
	KS2 - Year 3	Estimate the answer to a calculation and use inverse operations to check answers	Estimate calculations
5. Length and perimeter	KS2 - Year 4	Measure and calculate perimeter	Measuring and calculating perimeters
	KS2 - Year 3	Measure perimeter of 2-D shapes	Measuring perimeter in cm

Courses and Activities

Outcome	Existing Course	Topic	Activity Name
1. Number sense and exploring calculation strategies	England Year 3	Number and Place Value (1)	Number Lines
	England Year 3		Ascending Order
	England Year 3		Descending Order
	England Year 3		Compare Numbers to 100
	England Year 3		Which is Bigger?
	England Year 3		Which is Smaller?
	England Year 3		Place Value 1

	England Year 3		Repartition Two-digit Numbers
2. Place value	England Year 3	Number and Place Value (2)	Place Value 2
	England Year 3		Model Numbers
	England Year 3		Place Value to Thousands
	England Year 3		Partition and Rename 1
	England Year 3		Place Value Partitioning
3. Graphs	England Year 3	Statistics	Interpreting Tables
	England Year 3		Tallies
	England Year 3		Pictographs
	England Year 3		Bar Graphs 1
	England Year 3		Bar Graphs 2
	England Year 3		Add and Subtract Using Graphs
	England Year 3		Reading from a Bar Chart
4. Addition and subtraction	England Year 3	Add and Subtract Mental	Magic Mental Addition
	England Year 3		Magic Mental Subtraction
	England Year 3		Complements to 10, 20, 50
	England Year 3		Complements to 50 and 100
	England Year 3		Missing Numbers
	England Year 3		Estimate Sums
	England Year 3		Estimate Differences
	England Year 3		Pyramid Puzzles 1
	England Year 3		Commutative Property of Addition
	England Year 3		Add 3 Numbers: Bonds to Multiples of 10
	England Year 3		Add 3 Numbers: Bonds to 100
	England Year 3		Find the Missing Number 1
5. Length and perimeter	England Year 2	Length, Mass and Volume	How Long Is That?
	England Year 2		Measure to the Nearest Half Centimetre
	England Year 2		Ordering Lengths (cm)

Spring

Skill Quests

Outcome	Existing Course	Quests	Content
6. Multiplication and division	KS2 - Year 3	Multiply by 3	Exploring multiplication by 3
	KS2 - Year 3		Recalling and using multiplication by 3
	KS2 - Year 3	Multiply by 4	Exploring multiplication by 4
	KS2 - Year 3		Recalling and using multiplication by 4
	KS2 - Year 3	Divide by 3	Exploring division by 3
	KS2 - Year 3		Recalling and using division facts for 3
	KS2 - Year 3	Divide by 4	Exploring division by 4
	KS2 - Year 3		Recalling and using division by 4
7. Deriving multiplication and division facts	KS2 - Year 3	Multiply and divide by 3	Multiplying and dividing by 3
	KS2 - Year 3	Multiply and divide by 4	Multiplying and dividing by 4
8. Time	KS2 - Year 3	Tell the time: analogue clock	Telling the time to 5 minutes on analogue clocks
	KS2 - Year 3		Telling the time to the minute on analogue clocks
	KS2 - Year 3	Tell the time: Roman numerals	Telling the time and Roman numerals
	KS2 - Year 3	Tell the time: 12- and 24-hour clock	Telling the time in 12- and 24-hour clock
	KS2 - Year 3	Estimate and read time	Comparing and ordering time in seconds and minutes
	KS2 - Year 3	Use time vocabulary: a.m. and p.m.	Using a.m. and p.m. notation
	KS2 - Year 3	Relationships between units of time	Recalling relationships between units of time
	KS2 - Year 3		Using calendars to solve problems: months & years
	KS2 - Year 3		Using calendars to solve problems: hours & days
	KS2 - Year 3	Compare durations of events	Comparing durations in hours, minutes and seconds
	KS2 - Year 3		Calculating elapsed time

	KS2 - Year 3		Calculating start and end times
	KS2 - Year 4	Read, write and convert units of time	Reading, writing and converting units of time
9. Fractions	KS2 - Year 3	Count up and down in tenths	Introducing tenths
	KS2 - Year 3		Counting in tenths
	KS2 - Year 3		Ordering tenths
	KS2 - Year 3	Recognise, find and write fractions	Recognising, finding and writing fractions
	KS2 - Year 3		Identifying a fraction of a set of objects
	KS2 - Year 3	Recognise and use fractions as numbers	Recognising and using fractions as numbers
	KS2 - Year 3	Recognise and show equivalent fractions	Recognise fractions equivalent to 1
	KS2 - Year 3		Recognise equivalent fractions less than 1
	KS2 - Year 3	Add fractions up to 1 whole	Adding unit fractions with the same denominator
	KS2 - Year 3		Adding proper fractions with the same denominator
	KS2 - Year 3	Subtract fractions within 1 whole	Subtracting unit fractions with same denominator
	KS2 - Year 3		Subtracting proper fractions with same denominator
	KS2 - Year 3	Add & subtract fractions within 1 whole	Adding & subtracting fractions (same denominator)
	KS2 - Year 3	Compare and order simple fractions	Comparing and ordering fractions
	KS2 - Year 3	Solve problems: fractions	Estimating/adding to find fractions of sets
	KS2 - Year 3		Finding the whole amount
	KS2 - Year 3		Finding the fraction of an amount
	KS2 - Year 4	Add fractions: same denominator	Adding fractions with the same denominator
	KS2 - Year 4	Subtract fractions: same denominator	Subtracting fractions with the same denominator

Courses and Activities

Outcome	Existing Course	Topic	Activity Name
6. Multiplication and division	England Year 3	Number and Place Value (1)	Counting up in 4s
	England Year 3	Multiply and Divide	Groups of Three
7. Deriving multiplication and division facts	England Year 3	Multiply and Divide	Groups of Four
	England Year 3		Dividing Threes
	England Year 3		Dividing Fours
8. Time	England Year 3	Time	Five Minute Times
	England Year 3		Tell Time to the Half Hour
	England Year 3		What is the Time?
	England Year 3		24 Hour Time
	England Year 3		Using a Calendar
	England Year 3		
9. Fractions	England Year 3	Fractions (1)	Fractions of a Collection 2
	England Year 3		Model Fractions
	England Year 3		Part-whole rods 2
	England Year 3		Partition into equal parts
	England Year 3		Fraction Fruit Sets 1
	England Year 3		Unit Fractions
	England Year 3		What Fraction is Shaded?
	England Year 3		Uneven partitioned shapes 1
	England Year 3		Thirds and Sixths
	England Year 3	Fractions (2)	Uneven partitioned shapes 1
	England Year 3		Uneven partitioned shapes 2
	England Year 3		Add: Common Denominator
	England Year 3		Subtract: Common Denominator
	England Year 3		Equivalent Fraction Wall 1
	England Year 3		Compare fractions 1a
	England Year 3		Add subtract fractions 1
	England Year 3		Shading Equivalent Fractions
	England Year 3		Comparing Fractions 1
	England Year 3		Identifying Fractions on a Number Line

Summer

Skill Quests

Outcome	Existing Course	Quests	Content
10. Angles and shape	KS2 - Year 3	Recognise turns and angles	Recognising turns and angles
	KS2 - Year 3	Identify right angles	Identifying right angles in shapes
	KS2 - Year 3		Comparing angles
	KS2 - Year 3	Identify horizontal and vertical lines	Identifying horizontal and vertical lines
	KS2 - Year 3	Identify parallel & perpendicular lines	Identifying parallel and perpendicular lines
	KS2 - Year 3	Compare and describe 2-D shapes	Comparing and describing 2-D shapes
	KS2 - Year 3	Recognise 3-D shapes	Making models of 3-D shapes
	KS2 - Year 3		Comparing, sorting and naming 3-D shapes
11. Measures	KS2 - Year 3	Length: measure, compare, add & subtract	Introducing formal units for millimetres
	KS2 - Year 3		Measuring length in metres and centimetres
	KS2 - Year 3		Selecting appropriate units of measurement
	KS2 - Year 3		Comparing: length
	KS2 - Year 3		Ordering: length
	KS2 - Year 3		Adding and subtracting: length
	KS2 - Year 3	Mass: measure, compare, add & subtract	Measuring mass in kg & g
	KS2 - Year 3		Comparing and ordering: mass
	KS2 - Year 3		Adding and subtracting: mass
	KS2 - Year 3	Volume: measure, compare, add & subtract	Measuring volume in litres and millilitres
	KS2 - Year 3		Comparing and ordering: units of volume
	KS2 - Year 3		Adding and subtracting: volume
12. Securing multiplication & division	KS2 - Year 3	Solve problems: multiplication/division	Solving correspondence problems
	KS2 - Year 3		Using the commutative property of multiplication

	KS2 - Year 3		Solving multiplication problems using equal groups
	KS2 - Year 3		Solving measurement and scaling problems
	KS2 - Year 3		Using place value and related calculations
	KS2 - Year 3		Efficient strategies to solve division problems
	KS2 - Year 3	Multiply and divide by 8	Multiplying and dividing by 8
	KS2 - Year 3	Multiply 2 digits by 1 digit	Multiplying 2 digits by 1 digit
	KS2 - Year 3	Divide 2 digits by 1 digit	Dividing 2 digit by 1 digit
	KS2 - Year 3	Multiply by 8	Exploring multiplication by 8
	KS2 - Year 3		Recalling and using multiplication facts for 8
	KS2 - Year 3	Divide by 8	Exploring division by 8
	KS2 - Year 3		Recalling and using division by 8
	KS2 - Year 4	Multiply two-digit & three-digit numbers	Multiplying 2- and 3-digit numbers by 1-digit
13. Exploring calculation strategies and place value (2 weeks)	KS2 - Year 3	Solve problems: efficient methods	Add 3-digit & 1-digit numbers (efficient addition)
	KS2 - Year 4	Recognise place value in 4-digit numbers	Recognising the place value of 4-digit numbers
	KS2 - Year 4	Order and compare numbers beyond 1,000	Ordering numbers beyond 1,000
	KS2 - Year 4		Comparing numbers beyond 1,000
	KS2 - Year 4	Identify and represent numbers	Identifying up to 4-digit numbers
	KS2 - Year 4		Representing 4-digit numbers in numerals and words
	KS2 - Year 4		Estimating numbers
	KS2 - Year 4		Partitioning 4-digit numbers
	KS2 - Year 4	Round numbers	Rounding numbers to the nearest 10, 100 or 1,000
	KS2 - Year 4	Find 1,000 more/less than a given number	Finding 1,000 more or less than a given number
	KS2 - Year 4	Add and subtract multiples of 1,000	Adding and subtracting multiples of 1,000

Courses and Activities

Outcome	Existing Course	Topic	Activity Name
10. Angles and shape	England Year 3	Properties of Shapes	Right Angle Relation
	England Year 3		Sides, Angles and Diagonals
	England Year 3		What Line am I?
11. Measures	England Year 2	Length, Mass and Volume	How Heavy?
	England Year 2		Ordering Mass (g)
	England Year 2		Ordering Volumes (l)
	England Year 3		Measuring Length
	England Year 3		How Long is That?
	England Year 3		How Heavy?
12. Securing multiplication & division	England Year 3	Multiply and Divide	Groups of Eight
	England Year 3		Dividing Eights
	England Year 3		Multiply: 2-Digit by 1-Digit
	England Year 3		Related Facts 2
	England Year 3		Fact Families: Multiply and Divide
	England Year 3		Times Tables
13. Exploring calculation strategies and place value (2 weeks)	England Year 3	Number and Place Value	Place Value to Thousands
	England Year 4		Place Value 3
	England Year 4		Expanding Numbers
	England Year 4		Missing Numbers 1
	England Year 4		Which Is Greater?
	England Year 4		Which Is Less?
	England Year 4		Greater Than or Less Than?
	England Year 4		Put In Order 1
	England Year 4	Number and Place Value Rounding	Nearest 10?
	England Year 4		Nearest 100?
	England Year 4		Nearest 1000?
	England Year 4		Rounding Numbers



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