Mathletics
Mathematics Mastery Curriculum Alignment Tool
Skill Quests

Years 4 – 6

June, 2022

Mathematics Mastery

Mathletics

Mathletics
Mathematics Mastery Curriculum Alignment Tool

Skill Quests

August, 2022

The aim of this document is to support Mathletics teachers, who use the Mathematics Mastery programme of learning, to make full use of the resources available within Mathletics. These resources can complement the learning taking place and teachers should use the curriculum alignment map provided to find 'best fit' activities.

Teachers should note that Problem Solving and Reasoning activities are not linked as part of this document and so there will be other suitable activities that will be worth exploring and directing pupils to.

Year 4

Mathematics Mastery Yearly Overview: Year 4												
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Autumn	Unit 1: Reasoning with 4-digit numbers		Unit 2: Addition and subtraction			Unit 3: Multiplication and division			Unit 4: Interpreting and presenting data		Consolidation	

Autumn

Outcome	Existing Course	Quests	Content
1. Reasoning with 4-digit numbers	KS2 - Year 4	Count in multiples (6, 7, 9, 25 & 1,000)	Counting in multiples of 6
	KS2 - Year 4		Counting in multiples of 7
	KS2 - Year 4		Counting in multiples of 9
	KS2 - Year 4		Counting in multiples of 25
	KS2 - Year 4		Counting in multiples of 1,000
	KS2 - Year 4		Counting in multiples of 6, 7, 9, 25 and 1,000
	KS2 - Year 4	Find 1,000 more or less than a given number	Finding 1,000 more or less than a given number
	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
2. Addition and subtraction	KS2 - Year 4	Add and subtract multiples of 1,000	Adding and subtracting multiples of 1,000
	KS2 - Year 4	Formal addition: up to 4-digits	Adding two 4-digit numbers - no exchange
	KS2 - Year 4		Adding two 4-digit numbers - one exchange

Year 4

	KS2 - Year 4		Adding two 4-digit numbers: more than one exchange
	KS2 - Year 4	Formal subtraction: up to 4-digits	Subtracting two 4-digit numbers - no exchange
	KS2 - Year 4		Subtracting two 4-digit numbers - one exchange
	KS2 - Year 4		Subtracting two 4-digit number- with exchange
	KS2 - Year 4	Estimate & use inverse operations	Estimating and using inverse operations
	KS2 - Year 4		Checking accuracy of calculations
	KS2 - Year 4		Estimating additions and subtractions
	KS2 - Year 4	Solve 2-step problems in context	Solving addition and subtraction two-step problems
3. Multiplication and division	KS2 - Year 4	Explore multiplication by 6	Exploring multiplication by 6
	KS2 - Year 4		Recalling and using multiplication by 6
	KS2 - Year 4	Explore multiplication by 7	Exploring multiplication by 7
	KS2 - Year 4		Recalling and using multiplication by 7
	KS2 - Year 4	Explore multiplication by 9	Exploring multiplication by 9
	KS2 - Year 4		Recalling and using multiplication by 9
	KS2 - Year 4	Recall multiplication by 11	Recalling multiplication by 11
	KS2 - Year 4	Recall multiplication by 12	Recalling multiplication by 12
	KS2 - Year 4	Explore division by 6	Exploring division by 6
	KS2 - Year 4		Recalling and using division by 6
	KS2 - Year 4	Explore division by 7	Exploring division by 7
	KS2 - Year 4		Recalling and using division by 7
	KS2 - Year 4	Explore division by 9	Exploring division by 9
	KS2 - Year 4		Recalling and using division by 9
	KS2 - Year 4	Divide by 11	Dividing by 11
	KS2 - Year 4	Divide by 12	Dividing by 12
	KS2 - Year 4	Use place value to multiply and divide	Multiplying by 1 and 0
	KS2 - Year 4		Dividing by 1
	KS2 - Year 4		Multiplying 3 numbers

Year 4

	KS2 - Year 4	Find and use factor pairs	Finding and using factor pairs
	KS2 - Year 4	Multiply two-digit & three-digit numbers	Multiplying 2- and 3-digit numbers by 1-digit
4. Interpreting and presenting data	KS2 - Year 4	Interpret and present data: bar chart	Interpreting and presenting data in a bar chart
	KS2 - Year 4	Interpret and present data: line graph	Interpreting and presenting data in line graphs
	KS2 - Year 4	Solve comparison/ sum/difference problems	Solving comparison, sum and difference problems

Activities

Outcome	Existing Course	Topic	Activity Name
1. Reasoning with 4-digit numbers	England Year 4	N - Number and Place Value	Counting up in 6s
	England Year 4		Counting up in 7s
	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		Place Value to Thousands
	England Year 4		Place Value 3
	England Year 4		Partition and Rename 3
	England Year 4		Expanding Numbers
	England Year 4		Missing Numbers 1
	England Year 4	N - Number and Place Value Rounding	Nearest 10?
	England Year 4		Nearest 100?
	England Year 4		Nearest 1000?
	England Year 4		Rounding Numbers
2. Addition and subtraction	England Year 4	N - Add and Subtract Mental	Estimate Sums
	England Year 4		Estimate Differences
	England Year 4		Split Add and Subtract
	England Year 4		Bump Add and Subtract
	England Year 4		Pyramid Puzzles 2
	England Year 4		Count Forward Patterns
	England Year 4		Count Backward Patterns
	England Year 4	N - Add and Subtract Written	Strategies for Column Addition
	England Year 4		Add 3-Digit Numbers
	England Year 4		Add 3-Digit Numbers: Regroup (UK)

Year 4

	England Year 4		Add Three 3-Digit Numbers: Regroup (UK)
	England Year 4		3-Digit Differences with Zeros
	England Year 4		Adding Colossal Columns (UK)
	England Year 4		Subtracting Colossal Columns
3. Multiplication and division	England Year 4	N - Multiply and Divide Facts	Groups of Six
	England Year 4		Groups of Seven
	England Year 4		Groups of Nine
	England Year 4		Dividing Sixes
	England Year 4		Dividing Sevens
	England Year 4		Dividing Nines
	England Year 4		Division Facts to Twelve
	England Year 4		Multiplication Turn-Abouts
4. Interpreting and presenting data	England Year 4	S - Statistics	Add and Subtract Using Graphs
	England Year 4		Interpreting Tables
	England Year 4		Bar Graphs 2
	England Year 4		Reading from a Bar Chart
	England Year 4		Reading from a Column Graph
	England Year 4		Venn Diagram1

Year 4

Mathematics Mastery Yearly Overview: Year 4												
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Spring	Unit 5: Securing multiplication facts	Unit 6: Fractions				Unit 7: Time	Unit 8: Decimals			Unit 9: Area and perimeter		Consolidation

Spring

Outcome	Existing Course	Quests	Content
5. Securing multiplication facts	KS2 - Year 4	Multiply and divide by 6	Multiplying and dividing by 6
	KS2 - Year 4	Multiply and divide by 7	Multiplying and dividing by 7
	KS2 - Year 4	Multiply and divide by 9	Multiplying and dividing by 9
	KS2 - Year 4	Multiply and divide by 11	Multiplying and dividing by 11
	KS2 - Year 4	Multiply and divide by 12	Multiplying and dividing by 12
6. Fractions	KS2 - Year 4	Recognise & show equivalent fractions	Investigating common equivalent fractions
	KS2 - Year 4	Count in hundredths	Counting in hundredths
	KS2 - Year 4	Connect tenths and hundredths	Reading and writing tenths & hundredths
	KS2 - Year 4	Solve problems: fractions	Making a whole
	KS2 - Year 4		Calculating fractions of a quantity
	KS2 - Year 4		Problem solving: bar models to calculate the whole
	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
	KS2 - Year 5	Recognise mixed numbers and improper fractions	Recognising mixed numbers
	KS2 - Year 5		Converting improper fractions and mixed numbers
7. Time	KS2 - Year 4	Convert units of measure - Time	Converting units of time
	KS2 - Year 4	Read, write and convert units of time	Reading, writing and converting units of 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: 12- and 24-hour clock	Telling the time in 12- and 24-hour clock

Year 4

8. Decimals	KS2 - Year 4	Write tenths as decimals	Introducing tenths as decimals
	KS2 - Year 4		Counting in tenths as decimals
	KS2 - Year 4	Write hundredths as decimals	Introducing decimal hundredths
	KS2 - Year 4	Recognise and write decimal equivalents	Recognising and write decimal equivalents
	KS2 - Year 4	Divide by 10 and 100	Dividing by 10
	KS2 - Year 4		Dividing by 100
	KS2 - Year 4	Round decimals with one decimal place	Rounding decimals to the nearest whole number
	KS2 - Year 4	Compare and order decimal numbers to 2dp	Comparing and ordering decimal numbers
9. Area and perimeter	KS2 - Year 4	Measure and calculate perimeter	Measuring and calculating perimeters
	KS2 - Year 4	Find the area of rectilinear shapes	Finding the area of rectilinear shapes
	KS2 - Year 3	Measure perimeter of 2-D shapes	Measuring perimeter in cm
	KS2 - Year 5	Calculate and compare area	Introducing the square centimetre and square metre
	KS2 - Year 5		Comparing and ordering areas
	KS2 - Year 5		Estimating and comparing areas of irregular shapes

Activities

Outcome	Existing Course	Topic	Activity Name
5. Securing multiplication facts	England Year 4	N - Multiply and Divide	Mental Methods Multiplication
	England Year 4		Multiply 3 single-digit numbers
	England Year 4		Related Facts 2
	England Year 4		Grid Methods 1
	England Year 4		Multiply: 2-Digit by 1-Digit
	England Year 4		Multiply: 1-Digit Number
	England Year 4		Multiply: 1-Digit Number, Regroup
6. Fractions	England Year 4	N - Fractions	Counting with Fractions on a Number Line

Year 4

	England Year 4		Shading Equivalent Fractions
	England Year 4		Equivalent Fraction Wall 2
	England Year 4		Add Like Fractions
	England Year 4		Subtract Like Fractions
	England Year 4		Common Denominator
	England Year 4		One take Fraction
7. Time	England Year 4	M - Time	24 Hour Time
	England Year 4		Using Timetables
	England Year 4		Elapsed Time
	England Year 4		What Time Will it Be?
	England Year 4		Hours and Minutes
8. Decimals	England Year 4	N - Decimals	Decimal Place Value
	England Year 4		Comparing Decimals
	England Year 4		Comparing Decimals 1
	England Year 4		Decimal Order
9. Area and perimeter	England Year 4	M - Length, Perimeter and Area	Biggest Shape
	England Year 4		Equal Areas
	England Year 4		Area of Shapes
	England Year 4		Perimeter of Shapes
	England Year 4		Perimeter: Squares and Rectangles 1
	England Year 4		Measuring Length

Year 4

Mathematics Mastery Yearly Overview: Year 4											
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Summer	Unit 10: Solving measure and money problems			Unit -2 :11D Shape and Symmetry		Unit 11: 2-D Shape and Symmetry	Unit 12: Position and Direction	Unit 13: Reasoning with patterns and sequences		Unit 3 :14D Shape	Consolidation	

Summer

Outcome	Existing Course	Quests	Content
10. Solving measure and money problems	KS2 - Year 4	Convert units of measure - Length	Converting - km, m, cm and mm
	KS2 - Year 4	Convert units of measure - Time	Converting units of time
	KS2 - Year 4	Money: Estimate, compare, calculate	Estimating and rounding amounts of money
	KS2 - Year 4		Comparing amounts of money (inequality symbols)
	KS2 - Year 4		Solving word problems involving money
11. 2-D shape and symmetry	KS2 - Year 4	Compare and classify geometric shapes	Comparing and classifying quadrilaterals
	KS2 - Year 4		Comparing and classifying triangles
	KS2 - Year 4	Identify, compare and order angles	Identifying, comparing and ordering angles
	KS2 - Year 4	Identify lines of symmetry in 2-D shapes	Identifying lines of symmetry in 2-D shapes
	KS2 - Year 4	Draw lines of symmetry	Drawing lines of symmetry
12. Position and direction	KS2 - Year 4	Describe position - first quadrant	Describing positions on a 2-D grid as coordinates
	KS2 - Year 4	Describe translations - coordinate grid	Describing movement between positions
	KS2 - Year 4	Find missing coordinates on polygons	Plotting specified points to complete a polygon
13. Reasoning with patterns and sequences	KS2 - Year 4	Read Roman numerals to 100	Reading Roman numerals to 100
	KS2 - Year 4	Count using negative numbers	Counting using negative numbers
	KS2 - Year 5	Describe square & cube numbers	Introducing & describing square numbers
14. 3-D shape	KS2 - Year 3	Recognise 3-D shapes	Making models of 3-D shapes
	KS2 - Year 3		Comparing, sorting and naming 3-D shapes

Year 4

Activities

Outcome	Existing Course	Topic	Activity Name
10. Solving measure and money problems	England Year 4	M- Length, Perimeter and Area	Operations with Length
	England Year 4	M - Units of Measurement	Converting cm and mm
	England Year 4		Centimetres and Metres
	England Year 4		Kilometre Conversions
	England Year 4		Metres and Kilometres
	England Year 4		Grams and Milligrams
	England Year 4		Grams and Kilograms
	England Year 4		Kilogram Conversions
	England Year 4		Litre Conversions
	England Year 4		Millilitres and Litres
	England Year 4	N - Add and Subtract Measures	Money (GBP)
	England Year 3	N - Add and Subtract Measures	How much Change? (GBP)
11. 2-D shape and symmetry	England Year 4	G - Properties of Shapes	Collect the Polygons
	England Year 4		Collect More Shapes
	England Year 4		Collect the Objects 2
	England Year 4		Symmetry or Not?
	England Year 4		Triangle Tasters
	England Year 4		Equal Angles
	England Year 4		What Type of Angle?
	England Year 4		Classifying Angles
	England Year 4		Symmetry
12. Position and direction	England Year 4	G - Position and Direction	Map Coordinates
	England Year 4		Following Directions
	England Year 4		Coordinate Meeting Place
	England Year 4		Coordinate Graphs: 1st Quadrant
	England Year 4		Using a Key
13. Reasoning with patterns and sequences	England Year 4	N - Number and Place Value	Converting to Roman Numerals to 100
14. 3-D shape	England Year 3	G - Properties of Shapes	Collect the Objects
	England Year 5		What Prism am I?

Year 5

Mathematics Mastery Yearly Overview: Year 5												
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Autumn	Unit 1: Reasoning with large whole numbers		Unit 2: Problem solving with integer addition and subtraction		Unit 3: Line graphs and timetables		Unit 4: Multiplication and division			Unit 5: Perimeter and area	Consolidation	

Autumn

Outcome	Existing Course	Quests	Content
1. Reasoning with large whole numbers	KS2 - Year 5	Read and write numbers to 1,000,000	Reading and writing numbers to 1,000,000
	KS2 - Year 5		Identifying place value, numbers to 1,000,000
	KS2 - Year 5		Comparing and ordering numbers to 1,000,000
	KS2 - Year 5		Using place value to partition numbers
	KS2 - Year 5		Using non-standard partitioning
	KS2 - Year 5	Count in steps of powers of 10	Counting in steps of powers of 10 up to 1,000,000
	KS2 - Year 5	Round numbers within 1,000,000	Rounding numbers within 1,000,000
	KS2 - Year 5	Read and write Roman numerals to 1,000	Reading and writing Roman numerals to 1,000
2. Problem solving with integer addition and subtraction	KS2 - Year 5	Add/subtract numbers up to 5 digits	Adding whole numbers up to 5 digits
	KS2 - Year 5		Adding whole numbers up to 5 digits
	KS2 - Year 5	Apply efficient add/subtract strategies	Applying efficient add/subtract strategies
	KS2 - Year 5	Use rounding to check calculations	Checking accuracy: addition/subtraction
	KS2 - Year 5	Solve multi-step add/subtract problems	Solving two-step addition and subtraction problems
3. Line graphs and timetables	KS2 - Year 5	Convert units of time	Converting units of time
	KS2 - Year 5	Solve problems using line graphs	Solving problems using line graphs
	KS2 - Year 5	Solve problems with tables	Reading and interpreting data in tables
	KS2 - Year 5		Representing bivariate data in two-way tables
	KS2 - Year 5		Using timetables
4. Multiplication and division	KS2 - Year 5	Identify multiples and factors	Identifying multiples up to 100

Year 5

	KS2 - Year 5		Identifying factors and common factors
	KS2 - Year 5	Introduce prime and composite numbers	Introducing prime and composite numbers
	KS2 - Year 5	Use known facts to multiply and divide	Using known facts to multiply
	KS2 - Year 5		Using known facts to divide
	KS2 - Year 5		Using known facts to multiply and divide
	KS2 - Year 5	Multiply and divide by 10, 100 and 1,000	Multiplying whole numbers by 10, 100 and 1,000
	KS2 - Year 5		Dividing whole numbers by 10, 100 and 1,000
	KS2 - Year 5	Describe square & cube numbers	Introducing & describing square numbers
	KS2 - Year 5		Introducing & describing cube numbers
	KS2 - Year 5	Solve multiplication/division problems 1	Solving problems using factors and multiples
	KS2 - Year 5		Solving multiplication word problems
	KS2 - Year 5		Solving division word problems
	KS2 - Year 5		Comparing square and cube numbers
	KS2 - Year 5	Solve add/sub, mult/div problems	Using distributive properties
	KS2 - Year 5		Solving missing number problems
5. Perimeter and area	KS2 - Year 5	Calculate perimeter	Calculating perimeter
	KS2 - Year 5	Calculate and compare area	Introducing the square centimetre and square metre
	KS2 - Year 5		Comparing and ordering areas
	KS2 - Year 5		Estimating and comparing areas of irregular shapes
	KS2 - Year 5		Calculating the area of a rectangle

Activities

Outcome	Existing Course	Topic	Activity Name
1. Reasoning with large whole numbers	England Year 5	N - Number and Place Value	Place Value to Millions
	England Year 5		Rounding Numbers

Year 5

	England Year 5		Converting to Roman Numerals to 1000
	England Year 5		Converting from Roman Numerals to 1000
2. Problem solving with integer addition and subtraction	England Year 5	N - Add and Subtract Written	Adding Colossal Columns (UK)
	England Year 5		Subtracting Colossal Columns
3. Line graphs and timetables	England Year 5	M – Time	Using Timetables
4. Multiplication and division	England Year 5	N - Multiply and Divide Facts	Multiples
	England Year 5		Factors
	England Year 5	N - Multiply and Divide Mental	Mental Methods Multiplication
	England Year 5		Mental Methods Division 1
	England Year 5		Multiplying by 10, 100, and 1000
	England Year 5		Dividing by 10, 100, 1000
	England Year 5	N - Multiply and Divide Written	Short Multiplication
	England Year 5		Contracted Multiplication
	England Year 5		Multiply 2 Digits Area Model
	England Year 5		Long Multiplication
	England Year 5		Divide: 1-Digit Divisor 1
	England Year 5		Divide: 1-Digit Divisor, Remainder
	England Year 5		Short Division
	England Year 5		Remainders by Tables
	England Year 5		Word Problems: Multiply and Divide
5. Perimeter and area	England Year 5	M - Length, Perimeter and Area	Perimeter of Shapes
	England Year 5		Calculate Perimeter of Squares and Rectangles
	England Year 5		Area: Squares and Rectangles

Year 5

Mathematics Mastery Yearly Overview: Year 5												
Spring	**Week 1**	**Week 2**	**Week 3**	**Week 4**	**Week 5**	**Week 6**	**Week 7**	**Week 8**	**Week 9**	**Week 10**	**Week 11**	**Week 12**
	Unit 6: Fractions and decimals			Unit 7: Angles		Unit 8: Fractions and percentages			Unit 9: Transformations		Consolidation	

Spring

Outcome	Existing Course	Quests	Content
6. Fractions and decimals	KS2 - Year 5	Compare and order fractions	Comparing/ordering fractions, related denominators
	KS2 - Year 5	Investigate equivalent fractions	Investigating equivalent fractions
	KS2 - Year 5	Recognise mixed numbers and improper fractions	Recognising mixed numbers
	KS2 - Year 5		Converting improper fractions and mixed numbers
	KS2 - Year 5	Round decimals	Rounding decimals
	KS2 - Year 5	Order and compare decimals	Ordering/comparing decimals,up to 3 decimal places
7. Angles	KS2 - Year 5	Compare angles	Comparing angles
	KS2 - Year 5	Measure angles	Measuring angles
	KS2 - Year 5	Classify angles	Classifying angles
8. Fractions, decimals and percentages	KS2 - Year 5	Add fractions	Adding fractions with the same denominator
	KS2 - Year 5		Adding fractions with related denominators
	KS2 - Year 5		Adding 3 or more fractions using models
	KS2 - Year 5		Adding whole numbers & fractions
	KS2 - Year 5		Adding mixed numbers with the same denominator
	KS2 - Year 5	Subtract fractions	Subtracting fractions with the same denominator
	KS2 - Year 5		Subtracting fractions from a whole number, models
	KS2 - Year 5		Subtracting fractions and mixed numbers
	KS2 - Year 5		Subtracting mixed numbers: same denominator
	KS2 - Year 5		Subtracting mixed numbers: related denominators
	KS2 - Year 5		Adding and subtracting fractions: same denominator
	KS2 - Year 5	Multiply fractions by whole numbers	Multiplying fractions by whole numbers

Year 5

	KS2 - Year 5	Multiply mixed numbers by whole numbers	Multiplying mixed numbers by whole numbers
	KS2 - Year 5	Introduce percentages	Introducing percentages
	KS2 - Year 5	Solve percentage equivalence problems	Converting common fractions to percentages
	KS2 - Year 6	Fractions, decimals and percentages	Representing simple fractions as percentages
	KS2 - Year 6		Representing percentages and decimals
	KS2 - Year 6		Fraction, decimal and percentage equivalence
	KS2 - Year 6	Use common factors and multiples	Equivalent simple fractions, related denominators
	KS2 - Year 6		Using common factors to simplify proper fractions
	KS2 - Year 5	Solve multiplication/division problems 2	Scaling by fractions
	KS2 - Year 5		Solving problems involving simple rates
	KS2 - Year 5	Solve measure problems with decimals	Equivalent measures to 3 decimal places
	KS2 - Year 5		Solving money problems, multiplication & division
9. Transformations	KS2 - Year 5	Reflections and translations	Reflections with coordinates
	KS2 - Year 5		Translations with coordinates
	KS2 - Year 5	Interpret negative numbers in context	Interpreting negative numbers in context
	KS2 - Year 6	Positive & negative numbers in context	Positive and negative numbers in context

Activities

Outcome	Existing Course	Topic	Activity Name
6. Fractions and decimals	England Year 5	N - Fractions, Decimals and Percentage	Decimals to Fractions 1
	England Year 5		Fractions to Decimals
	England Year 5		Decimals on a Number Line
	England Year 5		Comparing Decimals 2
	England Year 5		Decimal Order
	England Year 5		Decimals from Words to Digits 1

Year 5

			Rounding Decimals
7. Angles	England Year 5	G - Properties of Shapes	Comparing Angles
	England Year 5		Measuring Angles
8. Fractions, decimals and percentages	England Year 5	N - Fractions	Equivalent Fractions
	England Year 5		Ordering Fractions
	England Year 5		Equivalent Fractions 1
	England Year 5		Compare Fractions 1b
	England Year 5		Compare Fractions 2
	England Year 5		Shading Equivalent Fractions
	England Year 5		What Mixed Number Is Shaded?
	England Year 5		Mixed to Improper
	England Year 5		Improper to Mixed
	England Year 5		Converting Mixed and Improper
	England Year 5		Mixed and Improper Fractions on a Number Line
	England Year 5		Identifying fractions beyond 1
	England Year 5	N - Fraction Calculations	Add Like Fractions
	England Year 5		Subtract Like Fractions
	England Year 5		Fraction by Whole Number
	England Year 5		Model fractions to multiply
	England Year 5	N - Fractions, Decimals and Percentage	Modelling Percentages
	England Year 5		Decimal to Percentage
	England Year 5		Match Decimals and Percentages
	England Year 5		Percentage to Fraction
	England Year 5	N - Problem Solving	Fraction Word Problems
	England Year 5		Fraction Length Models 2
	England Year 5		Percentage Word Problems
	England Year 5		Money Problems: Four Operations with Pounds
9. Transformations	England Year 5	G - Position and Direction	Transformations

Year 5

Mathematics Mastery Yearly Overview: Year 5											
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Summer	Unit 10: Converting units of measure		Unit 11: Calculating with whole numbers and decimals			Unit 12: 2-D and 3-D shape		Unit 13: Volume		Unit 14: Problem solving		Consolidation

Summer

Outcome	Existing Course	Quests	Content
10. Converting units of measure	KS2 - Year 5	Convert units of mass	Converting between kilograms and grams
	KS2 - Year 5	Convert units of length	Converting between m, cm & mm
	KS2 - Year 5	Convert units of capacity	Converting between litres & millilitres
	KS2 - Year 5	Convert between metric & imperial units	Converting between metric and imperial (length)
	KS2 - Year 5		Converting between metric and imperial (capacity)
	KS2 - Year 5	Multiply and divide by 10, 100 and 1,000	Multiplying whole numbers by 10, 100 and 1,000
	KS2 - Year 5		Dividing whole numbers by 10, 100 and 1,000
11. Calculating with whole numbers and decimals	KS2 - Year 5	Solve measure problems with decimals	Equivalent measures to 3 decimal places
	KS2 - Year 5		Solving money problems, multiplication & division
	KS2 - Year 5	Multiply and divide by 10, 100 and 1,000	Multiplying decimals by 10, 100 and 1,000
	KS2 - Year 5		Dividing decimals by 10, 100 and 1,000
	KS2 - Year 5	Multiply numbers up to 4 digits	Multiplying numbers up to 4 digits: expanded form
	KS2 - Year 5		Multiplying numbers up to 4 digits: area model
	KS2 - Year 5		Multiplying numbers up to 4-digits: algorithm
	KS2 - Year 5	Divide up to 4-digit numbers	Dividing numbers up to 4-digit, no remainders
	KS2 - Year 5		Introducing remainders in division problems
	KS2 - Year 5		Dividing numbers up to 4-digit, remainders
12. 2-D and 3-D shape	KS2 - Year 4	Compare and classify geometric shapes	Comparing and classifying quadrilaterals

Year 5

	KS2 - Year 4		Comparing and classifying triangles
	KS2 - Year 4	Identify, compare and order angles	Identifying, comparing and ordering angles
	KS2 - Year 5	Identify 3-D shapes from 2-D representations	Connecting nets of 3-D shapes
	KS2 - Year 6	Name the parts of circles	Naming the parts of circles
13. Volume	KS2 - Year 5	Estimate volume	Estimating volume using 1 cm³ blocks
	KS2 - Year 5	Estimate capacity	Estimating and comparing capacity
14. Problem solving	KS2 - Year 5	Solve multi-step add/subtract problems	Solving two-step addition and subtraction problems
	KS2 - Year 5	Solve problems using line graphs	Solving problems using line graphs
	KS2 - Year 5	Solve problems with tables	Reading and interpreting data in tables
	KS2 - Year 5		Representing bivariate data in two-way tables
	KS2 - Year 5		Using timetables
	KS2 - Year 5	Solve multiplication/division problems 1	Solving problems using factors and multiples
	KS2 - Year 5		Solving multiplication word problems
	KS2 - Year 5		Solving division word problems
	KS2 - Year 5		Comparing square and cube numbers
	KS2 - Year 5	Solve add/sub, mult/div problems	Using distributive properties
	KS2 - Year 5		Solving missing number problems
	KS2 - Year 5	Solve multiplication/division problems 2	Scaling by fractions
	KS2 - Year 5		Solving problems involving simple rates
	KS2 - Year 5	Solve measure problems with decimals	Equivalent measures to 3 decimal places
	KS2 - Year 5		Solving money problems, multiplication & division

Year 5

Activities

Outcome	Existing Course	Topic	Activity Name
10. Converting units of measure	England Year 5	M - Length, Perimeter and Area	Converting Units of Length
	England Year 5		Converting Units of Area
	England Year 5	M - Volume, Capacity and Mass	Converting Units of Mass
	England Year 5		Converting Volume
11. Calculating with whole numbers and decimals	England Year 5	N - Multiply and Divide Mental	Multiplying by 10, 100, and 1000
	England Year 5		Dividing by 10, 100, 1000
	England Year 5	N - Fractions, Decimals and Percentage	Multiply Decimals 10 100 1000
	England Year 5	N - Problem Solving	Money Problems: Four Operations with Pounds
	England Year 5	M - Volume, Capacity and Mass	Capacity Word Problems
	England Year 5		Mass Word Problems
12. 2-D and 3-D shape	KS2 - Year 5	G - Properties of Shapes	What Prism am I?
	KS2 - Year 5		What Pyramid am I?
	KS2 - Year 5		Prisms and Pyramids
	KS2 - Year 5		Nets
	KS2 - Year 5		Comparing Angles
	KS2 - Year 5		Measuring Angles
	KS2 - Year 5		Triangles: Acute, Right, Obtuse
13. Volume	N/A	Teacher directed	Teacher directed
14. Problem solving	England Year 5	M - Volume, Capacity and Mass	Capacity Word Problems
	England Year 5		Mass Word Problems
	England Year 5	N - Problem Solving	Money Problems: Four Operations with Pounds
	England Year 5		Capacity Word Problems

Year 6

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
	Mathematics Mastery Yearly Overview: Year 6											
Autumn	Unit 1: Integers & Decimals		Unit 2: Multiplication and division			Unit 3: Calculation problems		Unit 4: Fractions		Unit 5: Missing angles and lengths	Consolidation	

Autumn

Outcome	Existing Course	Quests	Content
1. Integers and decimals	KS2 - Year 6	Read and write numbers to 10,000,000	Reading and writing numbers to 10,000,000
	KS2 - Year 6		Identifying place value up to 10,000,000
	KS2 - Year 6		Using place value to partition 7-digit numbers
	KS2 - Year 6		Comparing and ordering numbers to 10,000,000
	KS2 - Year 6	Round numbers of any size	Rounding numbers of any size
	KS2 - Year 6	Solve add/sub multi-step problems	Solving add/sub word problems
2. Multiplication and division	KS2 - Year 6	Multiply multi-digit numbers	Multiplying 3-digits by 2-digits: expanded form
	KS2 - Year 6		Multiplying 4-digits by 2-digits: algorithm
	KS2 - Year 6	Divide by 2-digits, long division	Dividing by 2-digits, expanded form: long division
	KS2 - Year 6		Dividing by 2-digits, algorithm (long division)
	KS2 - Year 6	Divide by 2-digits, short division	Dividing by 2-digits, algorithm (short division)
	KS2 - Year 6	Identify common factors/ multiples/ primes	Identifying prime and composite numbers
	KS2 - Year 6		Finding common factors for two numbers
	KS2 - Year 6		Finding multiples up to 144
	KS2 - Year 6	Multiply/divide decimals by powers of 10	Multiplying decimals by 10, 100 and 1,000
	KS2 - Year 6		Dividing decimals by 10, 100 and 1,000
	KS2 - Year 6	Multiply decimals and whole numbers	Multiplying decimals and whole numbers

Year 6

	KS2 - Year 6	Divide decimals and whole numbers	Dividing decimals and whole numbers
3. Calculation problems	KS2 - Year 6	Equations with 2 unknowns	Equations with 2 unknowns
	KS2 - Year 6	Write and solve missing number problems	Writing and solving equations
	KS2 - Year 6	Generate linear number sequences	Generating linear number sequences
	KS2 - Year 6		Finding the rule for a linear number sequence
	KS2 - Year 6		Finding the nth term of simple linear sequences
	KS2 - Year 6	Introduce order of operations	Introducing order of operations
	KS2 - Year 6		Grouping symbols in order of operations
	KS2 - Year 6	Solve problems with the 4 operations	Solving multiplication and division word problems
	KS2 - Year 6		Solving addition and subtraction word problems
4. Fractions	KS2 - Year 6	Compare and order fractions	Comparing and ordering proper fractions
	KS2 - Year 6		Comparing and ordering mixed numbers
	KS2 - Year 6		Comparing and ordering improper fractions
	KS2 - Year 6		Comparing and ordering fractions and mixed numbers
	KS2 - Year 6	Use common factors and multiples	Using common factors to simplify proper fractions
	KS2 - Year 6	Interpret fractions as division	Interpreting fractions as division
	KS2 - Year 6	Convert simple fractions to decimals	Converting simple fractions to decimals
	KS2 - Year 6	Add and subtract fractions	Adding fractions, related denominators
	KS2 - Year 6		Adding fractions, unrelated denominators
	KS2 - Year 6		Subtracting fractions, related denominators

Year 6

	KS2 - Year 6		Subtracting fractions, unrelated denominators
	KS2 - Year 6		Adding/subtracting fractions, related denominators
	KS2 - Year 6		Add/subtract fractions, unrelated denominators
5. Missing angles and lengths	KS2 - Year 6	Classify geometric shapes	Classifying triangles by their sides and angles
	KS2 - Year 6		Classifying quadrilaterals by their features
	KS2 - Year 6		Classifying shapes in a hierarchy
	KS2 - Year 6	Find unknown angles	Calculating interior angles of triangles
	KS2 - Year 6		Calculating interior angles of quadrilaterals
	KS2 - Year 6		Calculating interior angles of regular polygons
	KS2 - Year 6	Find missing angles	Adjacent, straight, and vertically opposite angles

Activities

Outcome	Existing Course	Topic	Activity Name
1. Integers and decimals	England Year 6	N - Number and Place Value	Put in Order 1
	England Year 6		Nearest 100?
	England Year 6		Nearest 1000?
	England Year 6		Rounding Numbers
2. Multiplication and division	England Year 6	N - Multiply and Divide Mental	Mental Methods Multiplication
	England Year 6		Mental Methods Division 1
	England Year 6		Multiplying by 10, 100, 1000
	England Year 6		Dividing by 10, 100, 1000
	England Year 6	N - Multiply and Divide Written	Integers: Multiply and Divide
	England Year 6		Long Multiplication
	England Year 6		Divide: 1-Digit Divisor 1
	England Year 6		Divide: 1-Digit Divisor, Remainder
	England Year 6		Divide: 2-Digit Divisor, Remainder
	England Year 6		Long Division

Year 6

	England Year 6		Factors
	England Year 6		Multiples
3. Calculation problems	England Year 6	N - Patterns and Algebra	Number Sequences up to 1 million
	England Year 6		Word problems with letters
	England Year 6	N - Problem Solving	Order of Operations 1 (BIDMAS)
4. Fractions	England Year 6	N – Fractions	Identifying fractions beyond 1
	England Year 6		Converting Mixed and Improper
	England Year 6		Fractions to Decimals
	England Year 6		Compare fractions 2
	England Year 6		Comparing Fractions 2
	England Year 6		Ordering Fractions 1
	England Year 6		Equivalent Fractions on a Number Line 2
	England Year 6		Counting with Fractions on a Number Line
	England Year 6		Simplifying Fractions
	England Year 6	N - Fractions Calculating	Subtract Like Mixed Numbers
	England Year 6		Add Like Mixed Numbers
	England Year 6		Add Unlike Fractions
	England Year 6		Add Unlike Mixed Numbers
	England Year 6		Subtract Unlike Fractions
	England Year 6		Subtract Unlike Mixed Numbers
	England Year 6		No Common Denominator
	England Year 6		Mixed Numerals
5. Missing angles and lengths	England Year 6	G - Properties of Shapes and Angles	Angle Sum of a Quadrilateral
	England Year 6		Angle Sum of a Triangle
	England Year 6		Angles in a Revolution
	England Year 6	G - Properties of Shapes and Position	Triangles: Acute, Right, Obtuse

Year 6

Mathematics Mastery Yearly Overview: Year 6												
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Spring	Unit 6: Coordinates and shape		Unit 7: Fractions	Unit 8: Decimals and measures			Unit 9: Percentages and statistics		Unit 10: Proportion problems		Consolidation	

Spring

Outcome	Existing Course	Quests	Content
6. Coordinates and shape	KS2 - Year 6	Describe positions, 4 quadrants	Describing positions, 4 quadrants
	KS2 - Year 6		Drawing polygons on the coordinate grid
	KS2 - Year 6	Translations & reflections, 4 quadrants	Reflections, 4 quadrants
	KS2 - Year 6		Understanding translations, 4 quadrants
	KS2 - Year 6	Recognise and describe simple 3-D shapes	Describing and naming prisms and pyramids
	KS2 - Year 6		Investigating cross-sections of prisms & pyramids
	KS2 - Year 6		Connecting 3-D shapes with their nets
	KS2 - Year 6	Name the parts of circles	Naming the parts of circles
7. Fractions	KS2 - Year 6	Multiply proper fractions	Multiplying proper fractions
	KS2 - Year 6	Divide proper fractions by whole numbers	Dividing proper fractions by whole numbers
8. Decimals and measures	KS2 - Year 6	Convert measurements, decimal notation	Converting between common metric units of length
	KS2 - Year 6		Converting between standard metric units of mass
	KS2 - Year 6		Converting between common metric units of capacity
	KS2 - Year 6	Convert between miles and kilometres	Converting between miles and kilometres
	KS2 - Year 6	Area of parallelograms and triangles	Calculating the area of a triangle
	KS2 - Year 6		Calculating the area of a parallelogram
	KS2 - Year 6	Find the volume of cubes and cuboids	Calculating the volume of cubes and cuboids
9. Percentages and statistics	KS2 - Year 6	Fractions, decimals and percentages	Representing simple fractions as percentages
	KS2 - Year 6		Representing percentages and decimals

Year 6

	KS2 - Year 6		Fraction, decimal and percentage equivalence
	KS2 - Year 6	Calculate percentages	Calculating simple percentages
	KS2 - Year 6		Calculating simple percentages of quantities
	KS2 - Year 6	Identifying pie charts and line graphs	Interpreting and constructing pie charts
	KS2 - Year 6		Interpreting and constructing line graphs
	KS2 - Year 6	Calculate and interpret the mean	Calculating and interpreting the mean
10. Proportion problems	KS2 - Year 6	Solve problems involving scale factor	Solving problems involving scale factor
	KS2 - Year 6	Solve problems with unequal quantities	Solving problems involving unequal quantities
	KS2 - Year 6	Solve multiplication/division problems 1	Solving problems using factors and multiples
	KS2 - Year 6	Challenge problems involving ratio	Solving problems involving ratios

Activities

Outcome	Existing Course	Topic	Activity Name
6. Coordinates and shape	England Year 6	G - Properties of Shapes and Position	Coordinate Graphs
	England Year 6		Transformations: Coordinate Plane
	England Year 6		Rotations: Coordinate Plane
	England Year 6		Horizontal and Vertical Change
	England Year 6		Identify Parts of Circles 1
	England Year 6		Identify Parts of Circles 2
	England Year 6		Nets
7. Fractions	England Year 6	N – Fractions	Fractions to Decimals 2
	England Year 6	N - Fractions Calculating	Multiply Two Fractions 1
	England Year 6		Divide fractions visual model
	England Year 6	N - Decimals and Percentages	Decimals to Fractions 1
8. Decimals and measures	England Year 6	M - Units of Measurement	Grams and Kilograms
	England Year 6		Grams and Milligrams
	England Year 6		Metres and Kilometres

Year 6

	England Year 6		Converting Units of Mass
	England Year 6		Centimetres and Metres
	England Year 6		Operations with Length
	England Year 6		Millilitres and Litres
	England Year 6		Converting Volume
	England Year 6	M - Perimeter, Area and Volume	Perimeter Detectives 2
	England Year 6		Volume: Cuboid 1
	England Year 6		Volume: Rectangular Prisms 1
	England Year 6		Area: Right Angled Triangles
9. Percentages and statistics	England Year 6	S - Statistics	Finding the Average
	England Year 6		Mean
	England Year 6		Pie Charts
10.Proportion problems	N/A	Teacher directed	Teacher directed

Mathletics

For more information about Mathletics,
contact our friendly team.

www.mathletics.com/contact

A 3P Learning Product