

Mathletics

England Key Stage 2

Activities (Courses) and Skill Quests



May, 2026



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Activities (Courses) & Skill Quests

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Year 3

Number

Place Value

Count from 0 in multiples of 4, 8, 50 and 100; find 10 or 100 more or less than a given number

Activities

N - Number and Place Value (1)

Counting up in 4s

Counting up in 8s

Skill Quets

Count in multiples of 4, 8, 50 and 100

Counting in multiples of 4

Counting in multiples of 8

Counting in multiples of 50

Counting in multiples of 100

Find 10 or 100 more or less

Finding 10 or 100 more or less than a number

Recognise the place value of each digit in a 3-digit number (100s, 10s, 1s)

Activities

N - Number and Place Value (1)

Place Value 1

Repartition Two-digit Numbers

Place Value 2

Partition and Rename 1

Place Value Partitioning

Skill Quets

Recognise place value of 3-digit numbers

Recognising place value of 3-digit numbers

Compare and order numbers up to 1,000

Activities

N - Number and Place Value (1)

Ascending Order

Descending Order

Compare Numbers to 100

Which is Bigger?

Which is Smaller?

Skill Quets

Compare and order numbers up to 1,000

Comparing numbers up to 1,000

Ordering numbers up to 1,000

Identify, represent and estimate numbers using different representations

Activities

N - Number and Place Value (1)

Number Lines

N - Number and Place Value (2)



Odd and Even Numbers 1



Skill Quets

Identify and represent numbers



Identifying 3-digit numbers within 1,000

Using place value to partition 3-digit numbers

Read and write numbers up to 1,000 in numerals and in words	
 Activities	
N - Number and Place Value (2)	Model Numbers
 Skill Quests	
Read and write numbers up to 1,000	Reading and writing numbers up to 1,000

Solve number problems and practical problems involving these ideas	
 Activities	
Teacher directed	
 Skill Quests	

Addition and subtraction

Add and subtract numbers mentally, including: a three-digit number and 1s; a three-digit number and 10s; a three-digit number and 100s	
 Activities	
N - Add and Subtract Mental	Magic Mental Addition
	Magic Mental Subtraction
	Complements to 10, 20, 50
	Complements to 50 and 100
	Missing Numbers
	Pyramid Puzzles 1
	Add 3 Numbers: Bonds to Multiples of 10
	Add 3 Numbers: Bonds to 100
	Find the Missing Number 1
	Add 3 Numbers Using Bonds to 10
	Partition Puzzles 2
	Pyramid Puzzles 1
	Commutative Property of Addition
N - Problem Solving	Commutative Property of Addition
 Skill Quests	
Add with 3-digit numbers	Adding a 3-digit number and 1s using models
	Adding a three-digit number and 10s using models
	Adding up to 3 digits (bridging strategy)
	Adding up to 3 digits (jump strategy)
	Adding up to 3-digit numbers (split strategy)
Subtract with 3-digit numbers	Subtracting a 3-digit number and 1s using models
	Subtracting a 3-digit number and 10s using models
	Subtracting up to 3-digit numbers (bridging to 10)
	Subtracting up to 3-digit numbers (jump strategy)
	Subtracting up to 3-digit numbers (split strategy)
Add and subtract 3-digit numbers	Adding and subtracting multiples
	Add & subtract 3-digit numbers (split strategy)

Add and subtract numbers with up to 3 digits, using formal written methods of columnar addition and subtraction

Activities	
N - Add and Subtract Written (Review)	Columns that Add
	Columns that Subtract
	Column Addition
	Column Subtraction
	Add Two 2-Digit Numbers
	Subtract Numbers
N - Add and Subtract Written	2-Digit Differences
	Add Two 2-Digit Numbers: Regroup
	2-Digit Differences: Regroup
	Add Three 2-Digit Numbers: Regroup (UK)
	Add 3-Digit Numbers
	Add Multi-Digit Numbers 1 (UK)
	Add 3-Digit Numbers: Regroup
	3-Digit Differences
	3-Digit Differences: 1 Regrouping
	3-Digit Differences: 2 Regroupings
Strategies for Column Addition	
Skill Quests	
Formal addition up to 3 digits	Adding numbers up to 3 digits (no exchanging)
	Adding numbers up to 3 digits (exchanging)
Formal subtraction up to 3 digits	Subtracting numbers up to 3-digits
	Subtracting numbers up to 3 digits (decomposing)

Estimate the answer to a calculation and use inverse operations to check answers

Activities	
N - Add and Subtract Mental	Estimate Sums
	Estimate Differences
	Commutative Property of Addition
N - Problem Solving	Commutative Property of Addition
Skill Quests	
Estimate calculations	Recognising and using inverse relationship
	Estimating answers to calculations

Solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction

Activities	
N - Problem Solving	Pick the Next Number
	Bar Model Problems 1
	Bar Model Problems 2
Skill Quests	
Solve problems: add and subtract	Problem solving with addition and subtraction
	Comparing 3-digit and 2-digit number sentences
	Describing addition and subtraction patterns
	Word problems - subtracting from 3-digit numbers
Solve problems: efficient methods	Add 3-digit & 1-digit numbers (efficient addition)
	Subtract up to 3-digit numbers (efficient methods)

Multiplication and division

Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables

Activities

N - Multiply and Divide

Groups of Three
Groups of Four
Groups of Eight
Dividing Threes
Dividing Fours
Dividing Eights

Skill Quests

Multiply by 3

Exploring multiplication by 3
Recalling and using multiplication by 3

Multiply by 4

Exploring multiplication by 4
Recalling and using multiplication by 4

Multiply by 8

Exploring multiplication by 8
Recalling and using multiplication facts for 8

Divide by 3

Exploring division by 3
Recalling and using division facts for 3

Divide by 4

Exploring division by 4
Recalling and using division by 4

Divide by 8

Exploring division by 8
Recalling and using division by 8

Multiply and divide by 3

Multiplying and dividing by 3

Multiply and divide by 4

Multiplying and dividing by 4

Multiply and divide by 8

Multiplying and dividing by 8

Write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods

Activities

N - Multiply and Divide

Related Facts 2
Multiply: 2-Digit by 1-Digit
Multiply Multiples of 10
Fact Families: Multiply and Divide
Frog Jump Multiplication

Skill Quests

Multiply 2 digits by 1 digit

Multiplying 2 digits by 1 digit

Divide 2 digits by 1 digit

Dividing 2 digit by 1 digit

Solve problems, including missing number problems, involving multiplication and division, including positive integer scaling problems and correspondence problems in which n objects are connected to m objects

Activities

N - Problem Solving

Fit the Conditions 1
Problems: Multiply and Divide



Skill Quests



Solve problems: multiplication/division



Solving correspondence problems
Using the commutative property of multiplication
Solving multiplication problems using equal groups
Solving measurement and scaling problems



	Using place value and related calculations
	Efficient strategies to solve division problems


Fractions

Count up and down in tenths; recognise that tenths arise from dividing an object into 10 equal parts and in dividing one-digit numbers or quantities by 10	
 Activities	
Teacher directed	
 Skill Quests	
Count up and down in tenths	Introducing tenths
	Counting in tenths
	Ordering tenths

Recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators	
 Activities	
N - Fractions (1)	Fractions of a Collection 2
	Partition into equal parts
	Fraction Fruit Sets 1
	Uneven partitioned shapes 2
 Skill Quests	
Recognise, find and write fractions	Recognising, finding and writing fractions
	Identifying a fraction of a set of objects
	Recognising and using fractions as numbers

Recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators	
 Activities	
N - Fractions (1)	Model Fractions
	Part-whole rods 2
	Unit Fractions
	Thirds and Sixths
	Identifying Fractions on a Number Line
 Skill Quests	
Recognise and use fractions as numbers	Recognising and using fractions as numbers

Recognise and show, using diagrams, equivalent fractions with small denominators	
 Activities	
N - Fractions (2)	Equivalent Fraction Wall 1
	Shading Equivalent Fractions
 Skill Quests	
Recognise and show equivalent fractions	Recognise fractions equivalent to 1
	Recognise equivalent fractions less than 1

Add and subtract fractions with the same denominator within one whole [for example, $\frac{5}{7} + \frac{1}{7} = \frac{6}{7}$]	
 Activities	
N - Fractions (2)	Add: Common Denominator
	Subtract: Common Denominator

	Add subtract fractions 1
👑 Skill Quests	
Add fractions up to 1 whole	Adding unit fractions with the same denominator
	Adding proper fractions with the same denominator
Subtract fractions within 1 whole	Subtracting unit fractions with same denominator
	Subtracting proper fractions with same denominator
Add & subtract fractions within 1 whole	Adding & subtracting fractions (same denominator)

Compare and order unit fractions, and fractions with the same denominators	
☰ Activities	
N - Fractions (2)	Compare fractions 1a
	Comparing Fractions 1
👑 Skill Quests	
Compare and order simple fractions	Comparing and ordering fractions

Solve problems that involve all of the above	
☰ Activities	
N - Problem Solving	Fraction Length Models 1
	Fraction Word Problems
👑 Skill Quests	
Solve problems: fractions	Estimating/adding to find fractions of sets
	Finding the whole amount
	Finding the fraction of an amount

Measurement

Measurement

Measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml)	
☰ Activities	
N - Problem Solving	Which Unit of Measurement?
	Mass Word Problems
M - Length, Mass and Volume	Measuring Length
	How Long is That?
	How Heavy?
👑 Skill Quests	
Length: measure, compare, add & subtract	Introducing formal units for millimetres
	Measuring length in metres and centimetres
	Selecting appropriate units of measurement
	Comparing: length
	Ordering: length
Mass: measure, compare, add & subtract	Adding and subtracting: length
	Measuring mass in kg & g
	Comparing and ordering: mass
Volume: measure, compare, add & subtract	Adding and subtracting: mass
	Measuring volume in litres and millilitres
	Comparing and ordering: units of volume
	Adding and subtracting: volume

Measure the perimeter of simple 2-D shapes

 Activities

Teacher directed

 Skill Quests

Measure perimeter of 2-D shapes

Measuring perimeter in cm

Add and subtract amounts of money to give change, using both £ and p in practical contexts

 Activities

N - Number and Place Value (1)

Skip Counting with Coins

N - Add and Subtract Measures

Money (GBP)

How much Change? (GBP)

 Skill Quests

Add and subtract amounts of money

Adding and subtracting amounts of money

Tell and write the time from an analogue clock, including using Roman numerals from I to XII, and 12-hour and 24-hour clocks

 Activities

Teacher directed

 Skill Quests

Tell the time: analogue clock

Telling the time to 5 minutes on analogue clocks

Telling the time to the minute on analogue clocks

Tell the time: Roman numerals

Telling the time and Roman numerals

Tell the time: 12- and 24-hour clock

Telling the time in 12- and 24-hour clock

Estimate and read time with increasing accuracy to the nearest minute; record and compare time in terms of seconds, minutes and hours; use vocabulary such as o'clock, am/pm, morning, afternoon, noon and midnight

 Activities

M - Time

Five Minute Times

Tell Time to the Half Hour

What is the Time?

24 Hour Time

 Skill Quests

Estimate and read time

Comparing and ordering time in seconds and minutes

Use time vocabulary: a.m. and p.m.

Using a.m. and p.m. notation

Know the number of seconds in a minute and the number of days in each month, year and leap year

 Activities

Teacher directed

 Skill Quests

Relationships between units of time

Recalling relationships between units of time

Using calendars to solve problems: months & years

Using calendars to solve problems: hours & days

Compare durations of events [for example, to calculate the time taken by particular events or tasks]

 Activities

Teacher directed

Skill Quests	
Compare durations of events	Comparing durations in hours, minutes and seconds
	Calculating elapsed time
	Calculating start and end times

Geometry

Properties of shapes

Draw 2-D shapes and make 3-D shapes using modelling materials; recognise 3-D shapes in different orientations and describe them	
Activities	
G - Properties of Shapes	Collect the Polygons
	Collect the Objects
	Match the Solid 2
	Faces, Edges, and Vertices 1
	Faces, Edges and Vertices 2
Skill Quests	
Compare and describe 2-D shapes	Comparing and describing 2-D shapes
Recognise 3-D shapes	Making models of 3-D shapes
	Comparing, sorting and naming 3-D shapes



Recognise angles as a property of shape or a description of a turn	
Activities	
Teacher directed	
Skill Quests	
Recognise turns and angles	Recognising turns and angles



Identify right angles, recognise that 2 right angles make a half-turn, 3 make three-quarters of a turn and 4 a complete turn; identify whether angles are greater than or less than a right angle	
Activities	
G - Properties of Shapes	Right Angle Relation
Skill Quests	
Identify right angles	Identifying right angles in shapes
	Comparing angles

Identify horizontal and vertical lines and pairs of perpendicular and parallel lines	
Activities	
G - Properties of Shapes	Sides, Angles and Diagonals
	What Line am I?
Skill Quests	
Identify horizontal and vertical lines	Identifying horizontal and vertical lines
Identify parallel & perpendicular lines	Identifying parallel and perpendicular lines

Statistics

Statistics



Interpret and present data using bar charts, pictograms and tables	
 Activities	
S - Statistics	Tallies
 Skill Quests	
Interpret and present data: bar charts	Interpreting data in bar charts
Interpret and present data: pictograms	Interpreting data in pictograms
Interpret and present data: tables	Interpreting data in tables



Solve one-step and two-step questions [for example 'How many more?' and 'How many fewer?'] using information presented in scaled bar charts and pictograms and tables	
 Activities	
S - Statistics	Interpreting Tables
	Pictographs
	Bar Graphs 1
	Bar Graphs 2
	Add and Subtract Using Graphs
	Reading from a Bar Chart
 Skill Quests	
Solve problems related to data displays	Using data in tables and pictograms



Year 4



Number



Place Value

Count in multiples of 6, 7, 9, 25 and 1,000	
 Activities	
N - Number and Place Value	Counting up in 6s
	Counting up in 7s
 Skill Quests	
Count in multiples (6, 7, 9, 25 & 1,000)	Counting in multiples of 6
	Counting in multiples of 7
	Counting in multiples of 9
	Counting in multiples of 25
	Counting in multiples of 1,000
Counting in multiples of 6, 7, 9, 25 and 1,000	



Find 1,000 more or less than a given number	
 Activities	
Teacher directed	
 Skill Quests	
Find 1,000 more/less than a given number	Finding 1,000 more or less than a given number



Count backwards through 0 to include negative numbers	
 Activities	
N - Number and Place Value	Integers on a Number Line
 Skill Quests	
Count using negative numbers	Counting using negative numbers



Recognise the place value of each digit in a four-digit number (1,000s, 100s, 10s, and 1s)	
 Activities	
N - Number and Place Value	Place Value to Thousands
	Place Value 3
	Expanding Numbers
 Skill Quests	
Recognise place value in 4-digit numbers	Recognising the place value of 4-digit numbers



Order and compare numbers beyond 1,000	
 Activities	
N - Number and Place Value	Which Is Greater?
	Which Is Less?
	Greater Than or Less Than?
	Put in Order 1
 Skill Quests	

Order and compare numbers beyond 1,000	Ordering numbers beyond 1,000
	Comparing numbers beyond 1,000


Identify, represent and estimate numbers using different representations	
 Activities	
N - Number and Place Value	Missing Numbers 1
 Skill Quests	
Identify and represent numbers	Identifying up to 4-digit numbers
	Representing 4-digit numbers in numerals and words
	Partitioning 4-digit numbers

Round any number to the nearest 10, 100 or 1,000	
 Activities	
N - Number and Place Value Rounding	Nearest 10?
	Nearest 100?
	Nearest 1000?
	Rounding Numbers
 Skill Quests	
Round numbers	Rounding numbers to the nearest 10, 100 or 1,000
Round Roman numerals	Rounding Roman numerals

Solve number and practical problems that involve all of the above and with increasingly large positive numbers	
 Activities	
Teacher directed	
 Skill Quests	
Teacher directed	

Read Roman numerals to 100 (I to C) and know that over time, the numeral system changed to include the concept of 0 and place value	
 Activities	
N - Number and Place Value	Converting to Roman Numerals to 100
 Skill Quests	
Read Roman numerals to 100	Reading Roman numerals to 100

Addition and subtraction

Add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate	
 Activities	
N - Add and Subtract Mental	Split Add and Subtract
	Bump Add and Subtract
	Count Forward Patterns
	Count Backward Patterns
	Pyramid Puzzles 2
N - Add and Subtract Written	Strategies for Column Addition
	Add 3-Digit Numbers
	Add 3-Digit Numbers: Regroup (UK)


	Add Three 3-Digit Numbers: Regroup (UK)
	3-Digit Differences with Zeros
	Adding Colossal Columns (UK)
	Subtracting Colossal Columns
N - Problem Solving	Bar Model Problems 2
	Find the Missing Number 1
	Pyramid Puzzles 2
👑 Skill Quests	
Add and subtract multiples of 100	Adding and subtracting multiples of 100
Add and subtract multiples of 1,000	Adding and subtracting multiples of 1,000
Formal addition: up to 4-digits	Adding two 4-digit numbers - no exchange
	Adding two 4-digit numbers - one exchange
	Adding two 4-digit numbers: more than one exchange
Formal subtraction: up to 4-digits	Subtracting two 4-digit numbers - no exchange
	Subtracting two 4-digit numbers - one exchange
	Subtracting two 4-digit number- with exchange

Estimate and use inverse operations to check answers to a calculation	
☰ Activities	
N - Add and Subtract Mental	Estimate Sums
	Estimate Differences
👑 Skill Quests	
Estimate & use inverse operations	Estimating and using inverse operations
	Checking accuracy of calculations
	Estimating additions and subtractions



Solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why	
☰ Activities	
N - Problem Solving	Magic Symbols 1
	Magic Symbols 2
	I am Thinking of a Number!
	Pyramid Puzzles 2
N - Add and Subtract Mental	Pyramid Puzzles 2
👑 Skill Quests	
Solve 2-step problems in context	Solving addition and subtraction two-step problems

Multiplication and division


Recall multiplication and division facts for multiplication tables up to 12×12	
☰ Activities	
N - Multiply and Divide Facts	Groups of Six
	Groups of Seven
	Groups of Nine
	Dividing Sixes
	Dividing Sevens
	Dividing Nines
	Division Facts to Twelve
N - Multiply and Divide	Related Facts 2

 Skill Quests	
Explore multiplication by 6	Exploring multiplication by 6
	Recalling and using multiplication by 6
Explore multiplication by 7	Exploring multiplication by 7
	Recalling and using multiplication by 7
Explore multiplication by 9	Exploring multiplication by 9
	Recalling and using multiplication by 9
Recall multiplication by 11	Recalling multiplication by 11
Recall multiplication by 12	Recalling multiplication by 12
Explore division by 6	Exploring division by 6
	Recalling and using division by 6
Explore division by 7	Exploring division by 7
	Recalling and using division by 7
Explore division by 9	Exploring division by 9
	Recalling and using division by 9
Divide by 11	Dividing by 11
Divide by 12	Dividing by 12
Multiply and divide by 6	Multiplying and dividing by 6
Multiply and divide by 7	Multiplying and dividing by 7
Multiply and divide by 9	Multiplying and dividing by 9
Multiply and divide by 11	Multiplying and dividing by 11
Multiply and divide by 12	Multiplying and dividing by 12



Use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together 3 numbers



 Activities	
N - Multiply and Divide	Mental Methods Multiplication
	Multiply 3 single-digit numbers
	Grid Methods 1
 Skill Quests	
Use place value to multiply and divide	Multiplying by 1 and 0
	Dividing by 1
	Multiplying 3 numbers

Recognise and use factor pairs and commutativity in mental calculations



 Activities	
Teacher directed	
 Skill Quests	
Find and use factor pairs	Finding and using factor pairs



Multiply two-digit and three-digit numbers by a one-digit number using formal written layout



 Activities	
N - Multiply and Divide	Multiply: 2-Digit by 1-Digit
	Multiply: 1-Digit Number
	Multiply: 1-Digit Number, Regroup
 Skill Quests	
Multiply two-digit & three-digit numbers	Multiplying 2- and 3-digit numbers by 1-digit



Solve problems involving multiplying and adding, including using the distributive law to multiply two-digit numbers by 1 digit, integer scaling problems and harder correspondence problems such as n objects are connected to m objects	
 Activities	
N - Problem Solving	Fit the conditions 1
 Skill Quests	
Teacher directed	


Fractions and decimals

Recognise and show, using diagrams, families of common equivalent fractions	
 Activities	
N - Fractions	Shading Equivalent Fractions
	Equivalent Fraction Wall 2
 Skill Quests	
Recognise & show equivalent fractions	Investigating common equivalent fractions

Count up and down in hundredths; recognise that hundredths arise when dividing an object by 100 and dividing tenths by 10	
 Activities	
Teacher directed	
 Skill Quests	
Count in hundredths	Counting in hundredths
	Reading and writing tenths & hundredths

Solve problems involving increasingly harder fractions to calculate quantities, and fractions to divide quantities, including non-unit fractions where the answer is a whole number	
 Activities	
Teacher directed	
 Skill Quests	
Solve problems: fractions	Making a whole
	Calculating fractions of a quantity
	Problem solving: bar models to calculate the whole

Add and subtract fractions with the same denominator	
 Activities	
N - Fractions	Add Like Fractions
	Subtract Like Fractions
	Common Denominator
	One take Fraction
 Skill Quests	
Add fractions: same denominator	Adding fractions with the same denominator
Subtract fractions: same denominator	Subtracting fractions with the same denominator

Recognise and write decimal equivalents of any number of tenths or hundreds	
 Activities	
N - Decimals	Decimal Place Value

👑 Skill Quests	
Write tenths as decimals	Introducing tenths as decimals
	Counting in tenths as decimals
Write hundredths as decimals	Introducing decimal hundredths

Recognise and write decimal equivalents to $\frac{1}{4}$, $\frac{1}{2}$, $\frac{3}{4}$	
☰ Activities	
Teacher directed	
👑 Skill Quests	
Recognise and write decimal equivalents	Recognising and write decimal equivalents

Find the effect of dividing a one- or two-digit number by 10 and 100, identifying the value of the digits in the answer as ones, tenths and hundredths	
☰ Activities	
Teacher directed	
👑 Skill Quests	
Divide by 10 and 100	Dividing by 10
	Dividing by 100

Round decimals with 1 decimal place to the nearest whole number	
☰ Activities	
Teacher directed	
👑 Skill Quests	
Round decimals with one decimal place	Rounding decimals to the nearest whole number

Compare numbers with the same number of decimal places up to 2 decimal places	
☰ Activities	
N - Decimals	Comparing Decimals
	Comparing Decimals 1
👑 Skill Quests	
Compare and order decimal numbers to 2dp	Comparing and ordering decimal numbers

Solve simple measure and money problems involving fractions and decimals to 2 decimal places	
☰ Activities	
N - Problem Solving	Fraction Length Models 1
	Fraction Word Problems
👑 Skill Quests	
Add and subtract decimals	Adding and subtract decimals

Measurement

Measurement

Convert between different units of measure [for example, kilometre to metre; hour to minute]

Activities

M - Units of Measurement	Converting cm and mm
	Centimetres and Metres
	Kilometre Conversions
	Metres and Kilometres
	Grams and Milligrams
	Grams and Kilograms
	Kilogram Conversions
	Litre Conversions

Skill Quests

Convert units of measure - Length	Converting - km, m, cm and mm
Convert units of measure - Time	Converting units of time

Measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres

Activities

M - Length, Perimeter and Area	Perimeter of Shapes
	Perimeter: Squares and Rectangles 1

Skill Quests

Measure and calculate perimeter	Measuring and calculating perimeters
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Find the area of rectilinear shapes by counting squares

Activities

M - Length, Perimeter and Area	Biggest Shape
	Equal Areas
	Area of Shapes

Skill Quests

Find the area of rectilinear shapes	Finding the area of rectilinear shapes
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Estimate, compare and calculate different measures, including money in pounds and pence

Activities

M - Length, Perimeter and Area	Measuring Length
	Operations with Length

Skill Quests

Money: Estimate, compare, calculate	Estimating and rounding amounts of money
	Comparing amounts of money (inequality symbols)
	Solving word problems involving money

Read, write and convert time between analogue and digital 12- and 24-hour clocks

Activities

M - Time	24 Hour Time
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Skill Quests

Read, write and convert units of time	Reading, writing and converting units of time
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Solve problems involving converting from hours to minutes, minutes to seconds, years to months, weeks to days

 **Activities**

M - Time

Using Timetables

Elapsed Time

What Time Will it Be?

Hours and Minutes

 **Skill Quests**

Teacher directed

Geometry

Properties of shapes

Compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes

 **Activities**

G - Properties of Shapes

Collect the Polygons

Collect More Shapes

Collect the Objects 2

 **Skill Quests**

Compare and classify geometric shapes

Comparing and classifying quadrilaterals

Comparing and classifying triangles

Identify acute and obtuse angles and compare and order angles up to 2 right angles by size

 **Activities**

G - Properties of Shapes

Equal Angles

What Type of Angle?

Classifying Angles

 **Skill Quests**

Identify, compare and order angles

Identifying, comparing and ordering angles

Identify lines of symmetry in 2-D shapes presented in different orientations

 **Activities**

G - Properties of Shapes

Symmetry or Not?

Symmetry

 **Skill Quests**

Identify lines of symmetry in 2-D shapes

Identifying lines of symmetry in 2-D shapes

Complete a simple symmetric figure with respect to a specific line of symmetry

 **Activities**



Teacher directed



 **Skill Quests**



Draw lines of symmetry

Drawing lines of symmetry

Position and direction



Describe positions on a 2-D grid as coordinates in the first quadrant	
 Activities	
G - Position and Direction	Map Coordinates
	Coordinate Meeting Place
	Coordinate Graphs: 1st Quadrant
	Using a Key
 Skill Quests	
Describe position - first quadrant	Describing positions on a 2-D grid as coordinates



Describe movements between positions as translations of a given unit to the left/right and up/down	
 Activities	
G - Position and Direction	Following Directions
 Skill Quests	
Describe translations - coordinate grid	Describing movement between positions

Plot specified points and draw sides to complete a given polygon	
 Activities	
Teacher directed	
 Skill Quests	
Find missing coordinates on polygons	Plotting specified points to complete a polygon

Statistics

Statistics



Interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs	
 Activities	
Teacher directed	
 Skill Quests	
Interpret and present data: bar chart	Interpreting and presenting data in a bar chart
Interpret and present data: line graph	Interpreting and presenting data in line graphs



Solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs	
 Activities	
S - Statistics	Add and Subtract Using Graphs
	Interpreting Tables
	Bar Graphs 2
	Reading from a Bar Chart
	Reading from a Column Graph
	Venn Diagram1
 Skill Quests	
Solve comparison/sum/difference problems	Solving comparison, sum and difference problems



Year 5



Number



Place Value



Read, write, order and compare numbers to at least 1,000,000 and determine the value of each digit	
 Activities	
N - Number and Place Value	Place Value to Millions
	Expanded Notation
	Partition and rename 3
	Numbers from Words to Digits 1
 Skill Quests	
Read and write numbers to 1,000,000	Reading and writing numbers to 1,000,000
	Identifying place value, numbers to 1,000,000
	Comparing and ordering numbers to 1,000,000
	Using place value to partition numbers
	Using non-standard partitioning

Count forwards or backwards in steps of powers of 10 for any given number up to 1,000,000	
 Activities	
Teacher directed	
 Skill Quests	
Count in steps of powers of 10	Counting in steps of powers of 10 up to 1,000,000



Interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through 0	
 Activities	
N - Number and Place Value	Integers on a Number Line
	Comparing Integers
 Skill Quests	
Interpret negative numbers in context	Interpreting negative numbers in context



Round any number up to 1,000,000 to the nearest 10, 100, 1,000, 10,000 and 100,000	
 Activities	
N - Number and Place Value	Rounding Numbers
	Compatible Numbers
 Skill Quests	
Round numbers within 1,000,000	Rounding numbers within 1,000,000



Solve number problems and practical problems that involve all of the above	
 Activities	
Teacher directed	
 Skill Quests	
Teacher directed	



Read Roman numerals to 1,000 (M) and recognise years written in Roman numerals	
 Activities	
N - Number and Place Value	Converting to Roman Numerals to 1000
	Converting from Roman Numerals to 1000
 Skill Quests	
Read and write Roman numerals to 1,000	Reading and writing Roman numerals to 1,000

Addition and subtraction



Add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction)	
 Activities	
N - Add and Subtract Written	Add 3-Digit Numbers: Regroup (UK)
	Add Three 3-Digit Numbers: Regroup (UK)
	Adding Colossal Columns (UK)
	Add Multi-Digit Numbers 1 (UK)
	3-Digit Differences with Zeros
	3-Digit Differences: 1 Regrouping
	Subtracting Colossal Columns
 Skill Quests	
Add/subtract numbers up to 5 digits	Adding whole numbers up to 5 digits
	Subtracting whole numbers up to 5 digits



Add and subtract numbers mentally with increasingly large numbers	
 Activities	
N - Add and Subtract Mental	Split Add and Subtract
	Jump Add and Subtract
	Compensation - Add
	Compensation - Subtract
	Pyramid Puzzles 2
	Count Forward Patterns
	Count Backward Patterns
N - Problem Solving	Find the Missing Number 2
	Pyramid Puzzles 2
	Bar Model Problems 2
	I am Thinking of a Number!
 Skill Quests	
Apply efficient add/subtract strategies	Applying efficient add/subtract strategies



Use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy	
 Activities	
N - Add and Subtract Mental	Estimate Sums
	Estimate Differences
	Estimation: Add and Subtract
 Skill Quests	
Use rounding to check calculations	Checking accuracy: addition/subtraction



Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why	
 Activities	
N - Add and Subtract Mental	Find the Missing Number 2
N - Problem Solving	Find the Missing Number 2
 Skill Quests	
Solve multi-step add/subtract problems	Solving two-step addition and subtraction problems

Multiplication and division

Identify multiples and factors, including finding all factor pairs of a number, and common factors of 2 numbers	
 Activities	
N - Multiply and Divide Facts	Division Facts
	Fact Families: Multiply and Divide
	Multiples
	Factors
N - Problem Solving	Missing Numbers: \times and \div facts
 Skill Quests	
Identify multiples and factors	Identifying multiples up to 100
	Identifying factors and common factors

Know and use the vocabulary of prime numbers, prime factors and composite (non-prime) numbers	
 Activities	
Teacher directed	
 Skill Quests	
Teacher directed	

Establish whether a number up to 100 is prime and recall prime numbers up to 19	
 Activities	
Teacher directed	
 Skill Quests	
Introduce prime and composite numbers	Introducing prime and composite numbers

Multiply numbers up to 4 digits by a one- or two-digit number using a formal written method, including long multiplication for two-digit numbers	
 Activities	
N - Multiply and Divide Written	Short Multiplication
	Contracted Multiplication
	Multiply 2 Digits Area Model
	Long Multiplication
 Skill Quests	
Multiply numbers up to 4 digits	Multiplying numbers up to 4 digits: expanded form
	Multiplying numbers up to 4 digits: area model
	Multiplying numbers up to 4-digits: algorithm

Multiply and divide numbers mentally, drawing upon known facts

 **Activities**

N - Multiply and Divide Mental

- Estimate Products
- Mental Methods Multiplication
- Mental Methods Division 1
- Estimation: Multiply and Divide
- Divisibility Tests (2, 5, 10)
- Divisibility Tests (3, 4, 9)
- Double and Halve to Multiply
- Word Problems: Multiply and Divide

 **Skill Quests**

Use known facts to multiply and divide

- Using known facts to multiply
- Using known facts to divide
- Using known facts to multiply and divide

Divide numbers up to 4 digits by a one-digit number using the formal written method of short division and interpret remainders appropriately for the context

 **Activities**

N - Multiply and Divide Written

- Divide: 1-Digit Divisor 1
- Divide: 1-Digit Divisor, Remainder
- Short Division
- Remainders by Tables

 **Skill Quests**

Divide up to 4-digit numbers

- Dividing numbers up to 4-digit, no remainders
- Introducing remainders in division problems
- Dividing numbers up to 4-digit, remainders

Multiply and divide whole numbers and those involving decimals by 10, 100 and 1,000

 **Activities**

N - Multiply and Divide Mental

- Multiplying by 10, 100, and 1000
- Dividing by 10, 100, 1000

N - Fractions, Decimals and Percentage

- Multiply Decimals 10 100 1000

 **Skill Quests**

Multiply and divide by 10, 100 and 1,000

- Multiplying whole numbers by 10, 100 and 1,000
- Dividing whole numbers by 10, 100 and 1,000
- Multiplying decimals by 10, 100 and 1,000
- Dividing decimals by 10, 100 and 1,000

Recognise and use square numbers and cube numbers, and the notation for squared (2) and cubed (3)



 **Activities**



Teacher directed



 **Skill Quests**

Describe square & cube numbers



- Introducing & describing square numbers
- Introducing & describing cube numbers



Solve problems involving multiplication and division, including using their knowledge of factors and multiples, squares and cubes	
 Activities	
Teacher directed	
 Skill Quests	
Solve multiplication/division problems 1	Solving problems using factors and multiples
	Comparing square and cube numbers
	Solving multiplication word problems
	Solving division word problems


Solve problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign	
 Activities	
Teacher directed	
 Skill Quests	
Solve add/sub, mult/div problems	Using distributive properties
	Solving missing number problems

Solve problems involving multiplication and division, including scaling by simple fractions and problems involving simple rates	
 Activities	
Teacher directed	
 Skill Quests	
Solve multiplication/division problems 2	Scaling by fractions
	Solving problems involving simple rates

Fractions, decimals and percentages

Compare and order fractions whose denominators are all multiples of the same number	
 Activities	
N - Fractions	Ordering Fractions
	Compare Fractions 1b
	Compare Fractions 2
 Skill Quests	
Compare and order fractions	Comparing/ordering fractions, related denominators

Identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths	
 Activities	
N - Fractions	Equivalent Fractions
	Equivalent Fractions 1
	Shading Equivalent Fractions
 Skill Quests	
Investigate equivalent fractions	Investigating equivalent fractions

Recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements > 1 as a mixed number [for example, $2/5 + 4/5 = 6/5 = 1 \frac{1}{5}$]	
 Activities	
N - Fractions	What Mixed Number Is Shaded?

	Mixed to Improper
	Improper to Mixed
	Converting Mixed and Improper
	Mixed and Improper Fractions on a Number Line
	Identifying fractions beyond 1
👑 Skill Quests	
Recall mixed numbers/improper fractions	Recognising mixed numbers
	Converting improper fractions and mixed numbers

Add and subtract fractions with the same denominator, and denominators that are multiples of the same number	
☰ Activities	
N - Fraction Calculations	Add Like Fractions
	Subtract Like Fractions
👑 Skill Quests	
Add fractions	Adding fractions with the same denominator
	Adding fractions with related denominators
	Adding 3 or more fractions using models
	Adding whole numbers & fractions
	Adding mixed numbers with the same denominator
Subtract fractions	Subtracting fractions with the same denominator
	Subtracting fractions from a whole number, models
	Subtracting fractions and mixed numbers
	Subtracting mixed numbers: same denominator
	Subtracting mixed numbers: related denominators
	Adding and subtracting fractions: same denominator

Multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams	
☰ Activities	
N - Fraction Calculations	Fraction by Whole Number
	Model fractions to multiply
👑 Skill Quests	
Multiply fractions by whole numbers	Multiplying fractions by whole numbers
Multiply mixed numbers by whole numbers	Multiplying mixed numbers by whole numbers

Read and write decimal numbers as fractions [for example, $0.71 = \frac{71}{100}$]	
☰ Activities	
Teacher directed	
👑 Skill Quests	
Teacher directed	

Recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents	
☰ Activities	
Teacher directed	
👑 Skill Quests	
Introduce thousandths	Introducing thousandths

Round decimals with 2 decimal places to the nearest whole number and to 1 decimal place

 **Activities**

N - Fractions, Decimals and Percentage Rounding Decimals

 **Skill Quests**

Round decimals Rounding decimals

Read, write, order and compare numbers with up to 3 decimal places

 **Activities**

N - Fractions, Decimals and Percentage	Decimals on a Number Line
	Comparing Decimals 2
	Decimal Order
	Decimals from Words to Digits 1

 **Skill Quests**

Order and compare decimals Ordering/comparing decimals, up to 3 decimal places

Solve problems involving number up to 3 decimal places

 **Activities**

N - Add and Subtract Decimals	Decimal Complements
	Adding Decimals
	Add Decimals 1
	Add Decimals 2
	Estimate Decimal Sums 1
	Missing Values: Decimals
	Subtract Decimals 1
	Subtract Decimals 2

N - Fraction Calculations	Adding Decimals
	Subtracting Decimals
	Estimate Decimal Sums 1
	Estimate Decimal Differences 1
	Add Decimals 1
	Subtract Decimals 1

N - Problem Solving Magic Symbols 2

 **Skill Quests**

Add decimals	Adding decimals to 1 decimal place
	Adding decimals to 2 decimal places
	Adding decimals to 3 decimal places
	Investigating decimal compliments to 1

Subtract decimals	Subtracting decimals within 1
	Subtracting decimals up to 3 decimal places

Identify decimal sequences Identifying & creating decimal sequences

Recognise the per cent symbol (%) and understand that per cent relates to 'number of parts per 100', and write percentages as a fraction with denominator 100, and as a decimal fraction

 **Activities**

N - Fractions, Decimals and Percentage Modelling Percentages

 **Skill Quests**

Introduce percentages Introducing percentages

Solve problems which require knowing percentage and decimal equivalents of $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{5}$, $\frac{2}{5}$, $\frac{4}{5}$ and those fractions with a denominator of a multiple of 10 or 25

Activities

N - Fractions, Decimals and Percentage

- Decimal to Percentage
- Decimals to Fractions 1
- Fractions to Decimals
- Match Decimals and Percentages
- Percentage to Fraction

N - Problem Solving

- Fraction Word Problems
- Fraction Length Models 2
- Percentage Word Problems

Skill Quests

Solve percentage equivalence problems

Converting common fractions to percentages

Measurement

Measurement

Convert between different units of metric measure [for example, kilometre and metre; centimetre and metre; centimetre and millimetre; gram and kilogram; litre and millilitre]

Activities

M - Length, Perimeter and Area

- Converting Units of Length
- Converting Units of Area
- Converting Units of Mass
- Converting Volume

Skill Quests

Convert units of mass

Converting between kilograms and grams

Convert units of length

Converting between m, cm & mm

Convert units of capacity

Converting between litres & millilitres

Understand and use approximate equivalences between metric units and common imperial units such as inches, pounds and pints

Activities

Teacher directed

Skill Quests

Convert between metric & imperial units

- Converting between metric and imperial (length)
- Converting between metric and imperial (capacity)

Measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres

Activities

M - Length, Perimeter and Area

- Perimeter of Shapes
- Calculate Perimeter of Squares and Rectangles
- Perimeter Detectives 1

Skill Quests

Calculate perimeter

Calculating perimeter

Calculate and compare the area of rectangles (including squares), including using standard units, square centimetres (cm²) and square metres (m²), and estimate the area of irregular shapes

Activities

M - Length, Perimeter and Area	Area: Squares and Rectangles
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Skill Quests

Calculate and compare area	Introducing the square centimetre and square metre
	Comparing and ordering areas
	Estimating and comparing areas of irregular shapes
	Calculating the area of a rectangle

Estimate volume [for example, using 1 cm³ blocks to build cuboids (including cubes)] and capacity [for example, using water]

Activities

Teacher directed

Skill Quests

Estimate capacity	Estimating and comparing capacity
Estimate volume	Estimating volume using 1 cm ³ blocks

Solve problems involving converting between units of time

Activities

M - Time	What Time Will it Be?
	Elapsed Time
	Time Mentals

Skill Quests

Convert units of time	Converting units of time
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Use all four operations to solve problems involving measure [for example, length, mass, volume, money] using decimal notation, including scaling

Activities

N - Problem Solving	Capacity Word Problems
	Money Problems: Four Operations with Pounds
M - Length, Perimeter and Area	Operations with Length
M - Volume, Capacity and Mass	How many Blocks?
	Capacity Word Problems
	Mass Word Problems

Skill Quests

Solve measure problems with decimals	Equivalent measures to 3 decimal places
	Comparing/ordering units of mass to 3 dp
	Solving money problems, multiplication & division

Geometry

Properties of shapes

Identify 3-D shapes, including cubes and other cuboids, from 2-D representations

Activities

G - Properties of Shapes	What Prism am I?
	What Pyramid am I?

	Prisms and Pyramids
	Nets
👑 Skill Quests	
Identify 3-D shapes from 2-D representations	Connecting nets of 3-D shapes

Know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles	
☰ Activities	
G - Properties of Shapes	Comparing Angles
👑 Skill Quests	
Compare angles	Comparing angles

Draw given angles, and measure them in degrees (°)	
☰ Activities	
G - Properties of Shapes	Measuring Angles
👑 Skill Quests	
Measure angles	Measuring angles

Identify: angles at a point and 1 whole turn (total 360°); angles at a point on a straight line and half a turn (total 180°); other multiples of 90°; use the properties of rectangles to deduce related facts and find missing lengths and angles; distinguish between regular and irregular polygons based on reasoning about equal sides and angles	
☰ Activities	
Teacher directed	
👑 Skill Quests	
Classify angles	Classifying angles

Use the properties of rectangles to deduce related facts and find missing lengths and angles	
☰ Activities	
Teacher directed	
👑 Skill Quests	
Classify quadrilaterals	Classifying quadrilaterals

Distinguish between regular and irregular polygons based on reasoning about equal sides and angles.	
☰ Activities	
Teacher directed	
👑 Skill Quests	
Identify regular & irregular polygons	Identifying regular & irregular polygons



Position and direction



Identify, describe and represent the position of a shape following a reflection or translation, using the appropriate language, and know that the shape has not changed	
☰ Activities	
G - Position and Direction	Flip, Slide, Turn
	Transformations
👑 Skill Quests	

Reflections and translations	Reflections with coordinates
	Translations with coordinates

Statistics

Statistics



Solve comparison, sum and difference problems using information presented in a line graph	
 Activities	
S - Statistics	Bar Graphs 2
	Travel Graphs
 Skill Quests	
Solve problems using line graphs	Solving problems using line graphs



Complete, read and interpret information in tables, including timetables	
 Activities	
M - Time	Using Timetables
S - Statistics	Using Timetables
 Skill Quests	
Solve problems with tables	Reading and interpreting data in tables
	Representing bivariate data in two-way tables
	Using timetables



Year 6



Number

Place Value


Read, write, order and compare numbers up to 10,000,000 and determine the value of each digit	
 Activities	
N - Number and Place Value	Put in Order 1
	Numbers from Words to Digits 1
	Numbers from Words to Digits 2
	Partition and rename 3
	Place Value - Millions
 Skill Quests	
Read and write numbers to 10,000,000	Reading and writing numbers to 10,000,000
	Identifying place value up to 10,000,000
	Using place value to partition 7-digit numbers
	Comparing and ordering numbers to 10,000,000

Round any whole number to a required degree of accuracy	
 Activities	
N - Number and Place Value	Nearest Whole Number
	Nearest 100?
	Nearest 1000?
	Rounding Numbers
 Skill Quests	
Round numbers of any size	Rounding numbers of any size

Use negative numbers in context, and calculate intervals across 0	
 Activities	
Teacher directed	
 Skill Quests	
Positive & negative numbers in context	Positive and negative numbers in context

Solve number and practical problems that involve all of the above	
 Activities	
Teacher directed	
 Skill Quests	
Teacher directed	

Addition, subtraction, multiplication and division

Multiply multi-digit numbers up to 4 digits by a two-digit whole number using the formal written method of long multiplication	
 Activities	
N - Multiply and Divide Written	Long Multiplication

👑 Skill Quests	
Multiply multi-digit numbers	Multiplying 3-digits by 2-digits: expanded form
	Multiplying 4-digits by 2-digits: algorithm

Divide numbers up to 4 digits by a two-digit whole number using the formal written method of long division, and interpret remainders as whole number remainders, fractions, or by rounding, as appropriate for the context

☰ Activities	
N - Multiply and Divide Written	Divide: 1-Digit Divisor 1
	Divide: 1-Digit Divisor, Remainder
	Divide: 2-Digit Divisor, Remainder
	Long Division

👑 Skill Quests	
Divide by 2-digits, long division	Dividing by 2-digits, algorithm (long division)

Divide numbers up to 4 digits by a two-digit number using the formal written method of short division where appropriate, interpreting remainders according to the context

☰ Activities	
N - Multiply and Divide Written	Short Division

👑 Skill Quests	
Divide by 2-digits, short division	Dividing by 2-digits, algorithm (short division)

Perform mental calculations, including with mixed operations and large numbers

☰ Activities	
N - Multiply and Divide Mental	Mental Methods Multiplication
	Mental Methods Division 1
	Multiplying by 10, 100, 1000
	Dividing by 10, 100, 1000
N - Multiply and Divide Written	Remainders by Tables

👑 Skill Quests	
Perform mental calculations	Applying strategies for addition and subtraction


Identify common factors, common multiples and prime numbers



☰ Activities	
N - Number and Place Value	Highest Common Factor
	Lowest Common Multiple
	Prime or Composite?
N - Multiply and Divide Written	Factors
	Multiples
N - Problem Solving	Divisibility Tests



👑 Skill Quests	
Identify common factors/multiples/primes	Identifying prime and composite numbers
	Finding common factors for two numbers
	Finding multiples up to 144



Use their knowledge of the order of operations to carry out calculations involving the 4 operations

☰ Activities	
N - Problem Solving	Order of Operations 1 (BIDMAS)



 Skill Quests	
Introduce order of operations	Introducing order of operations
	Grouping symbols in order of operations


Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why	
 Activities	
N - Add and Subtract	Add Multi-Digit Numbers 2 (UK)
	3-Digit Differences: 2 Regroupings
	Add Decimals 2
	Subtract Decimals 2
 Skill Quests	
Solve add/sub multi-step problems	Solving add/sub word problems

Solve problems involving addition, subtraction, multiplication and division	
 Activities	
N - Problem Solving	Money Problems: Four Operations with Pounds
 Skill Quests	
Solve problems with the 4 operations	Solving multiplication and division word problems
	Solving addition and subtraction word problems

Use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy	
 Activities	
N - Add and Subtract	Estimation: Add and Subtract
N - Multiply and Divide Mental	Estimate Products
	Estimate Quotients
	Estimation: Multiply and Divide
 Skill Quests	
Check the accuracy of calculations	Rounding to estimate quotients
	Checking accuracy, addition/subtraction
	Rounding to estimate products

Fractions, decimals and percentages

Use common factors to simplify fractions; use common multiples to express fractions in the same denomination	
 Activities	
N - Fractions	Equivalent Fractions on a Number Line 2
	Simplifying Fractions
 Skill Quests	
Use common factors and multiples	Equivalent simple fractions, related denominators
	Using common factors to simplify proper fractions

Compare and order fractions, including fractions >1	
 Activities	
N - Fractions	Identifying fractions beyond 1
	Converting Mixed and Improper
	Compare fractions 2

	Comparing Fractions 2
	Ordering Fractions 1
	Counting with Fractions on a Number Line
👑 Skill Quets	
Compare and order fractions	Comparing and ordering proper fractions
	Comparing and ordering mixed numbers
	Comparing and ordering improper fractions
	Comparing and ordering fractions and mixed numbers



Add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions	
☰ Activities	
N - Fractions Calculating	Subtract Like Mixed Numbers
	Add Like Mixed Numbers
	Add Unlike Fractions
	Add Unlike Mixed Numbers
	Subtract Unlike Fractions
	Subtract Unlike Mixed Numbers
	No Common Denominator
	Mixed Numerals
👑 Skill Quets	
Add and subtract fractions	Adding fractions, related denominators
	Adding fractions, unrelated denominators
	Subtracting fractions, related denominators
	Subtracting fractions, unrelated denominators
	Adding/subtracting fractions, related denominators
	Add/subtract fractions, unrelated denominators



Multiply simple pairs of proper fractions, writing the answer in its simplest form [for example, $1/4 \times 1/2 = 1/8$]	
☰ Activities	
N - Fractions Calculating	Multiply Fraction by Fraction
	Multiply Two Fractions 1
👑 Skill Quets	
Multiply proper fractions	Multiplying proper fractions



Divide proper fractions by whole numbers [for example, $1/3 \div 2 = 1/6$]	
☰ Activities	
N - Fractions Calculating	Divide fractions visual model
👑 Skill Quets	
Divide proper fractions by whole numbers	Dividing proper fractions by whole numbers



Associate a fraction with division and calculate decimal fraction equivalents [for example, 0.375] for a simple fraction [for example, $3/8$]	
☰ Activities	
N - Fractions	Fractions to Decimals
	Fractions to Decimals 2
N - Decimals and Percentages	Decimals to Fractions 1
👑 Skill Quets	



Interpret fractions as division	Interpreting fractions as division
Convert simple fractions to decimals	Converting simple fractions to decimals

Identify the value of each digit in numbers given to 3 decimal places and multiply and divide numbers by 10, 100 and 1,000 giving answers up to 3 decimal places	
 Activities	
N - Decimals and Percentages	Decimals on a Number Line
	Decimals from Words to Digits 2
	Multiply Decimals and Powers of 10
 Skill Quests	
Multiply/divide decimals by powers of 10	Multiplying decimals by 10, 100 and 1,000
	Dividing decimals by 10, 100 and 1,000
Identify decimal place value	Identifying decimal place value



Multiply one-digit numbers with up to 2 decimal places by whole numbers	
 Activities	
N - Decimals and Percentages	Decimal by Whole Number
 Skill Quests	
Multiply decimals and whole numbers	Multiplying decimals and whole numbers



Use written division methods in cases where the answer has up to 2 decimal places	
 Activities	
Teacher directed	
 Skill Quests	
Divide decimals and whole numbers	Dividing decimals and whole numbers



Solve problems which require answers to be rounded to specified degrees of accuracy	
 Activities	
N - Decimals and Percentages	Rounding Decimals 1
	Estimate Decimal Sums 2
	Estimate Decimal Differences 1
 Skill Quests	
Round with decimals	Using rounding to check division
	Rounding decimals



Recall and use equivalences between simple fractions, decimals and percentages, including in different contexts	
 Activities	
N - Fractions	Fraction Wall Labelling 1
N - Decimals and Percentages	Decimal to Percentage
	Percentage to Fraction
 Skill Quests	
Fractions, decimals and percentages	Representing simple fractions as percentages
	Representing percentages and decimals
	Fraction, decimal and percentage equivalence

Ratio and proportion



Solve problems involving the relative sizes of 2 quantities where missing values can be found by using integer multiplication and division facts	
 Activities	
N - Fractions	Ratios
	Solve Proportions
 Skill Quests	
Solve problems involving ratios	Solving problems involving ratios


Solve problems involving the calculation of percentages [for example, of measures and such as 15% of 360] and the use of percentages for comparison	
 Activities	
N - Decimals and Percentages	Calculating Percentages
N - Problem Solving	Percentage Word Problems
 Skill Quests	
Calculate percentages	Calculating simple percentages
	Calculating simple percentages of quantities

Solve problems involving similar shapes where the scale factor is known or can be found	
 Activities	
G - Properties of Shapes and Position	Scale
	Scale Measurement
 Skill Quests	
Solve problems involving scale factor	Solving problems involving scale factor

Solve problems involving unequal sharing and grouping using knowledge of fractions and multiples	
 Activities	
Teacher directed	
 Skill Quests	
Solve problems with unequal quantities	Solving problems involving unequal quantities

Algebra

Use simple formulae	
 Activities	
N - Patterns and Algebra	Find the Pattern Rule
	Missing Numbers: Variables
	Word problems with letters
 Skill Quests	
Teacher directed	

Generate and describe linear number sequences	
 Activities	
N - Patterns and Algebra	Describing Patterns

	Increasing Patterns 1
	Decreasing Patterns
	Pick the Next Number
	Table of Values
	Pattern Rules and Tables
👑 Skill Quests	
Generate linear number sequences	Generating linear number sequences
	Finding the rule for a linear number sequence
	Finding the nth term of simple linear sequences

Express missing number problems algebraically	
☰ Activities	
N - Patterns and Algebra	Find the Missing Number 2
N - Problem Solving	Missing Values: Decimals
👑 Skill Quests	
Write and solve missing number problems	Writing and solving equations

Find pairs of numbers that satisfy an equation with 2 unknowns	
☰ Activities	
Teacher directed	
👑 Skill Quests	
Equations with 2 unknowns	Equations with 2 unknowns

Enumerate possibilities of combinations of 2 variables	
☰ Activities	
N - Patterns and Algebra	How many Combinations?
👑 Skill Quests	
Teacher directed	

Measurement

Measurement

Solve problems involving the calculation and conversion of units of measure, using decimal notation up to 3 decimal places where appropriate	
☰ Activities	
Teacher directed	
👑 Skill Quests	
Teacher directed	

Use, read, write and convert between standard units, converting measurements of length, mass, volume and time from a smaller unit of measure to a larger unit, and vice versa, using decimal notation to up to 3 decimal places	
☰ Activities	
M - Units of Measurement	Grams and Kilograms
	Grams and Milligrams
	Metres and Kilometres
	Converting Units of Mass

	Centimetres and Metres
	Operations with Length
	Millilitres and Litres
	Converting Volume
👑 Skill Quests	
Convert measurements, decimal notation	Converting between common metric units of length
	Converting between standard metric units of mass
	Converting between common metric units of capacity

Convert between miles and kilometres	
☰ Activities	
Teacher directed	
👑 Skill Quests	
Convert between miles and kilometres	Converting between miles and kilometres

Recognise that shapes with the same areas can have different perimeters and vice versa	
☰ Activities	
M - Perimeter, Area and Volume	Perimeter Detectives 2
👑 Skill Quests	
Teacher directed	



Recognise when it is possible to use formulae for area and volume of shapes	
☰ Activities	
N - Problem Solving	Capacity Word Problems
M - Perimeter, Area and Volume	Perimeter, Area, Dimension Change
	Area: Squares and Rectangles 2
	Area: Quadrilaterals
👑 Skill Quests	
Teacher directed	



Calculate the area of parallelograms and triangles	
☰ Activities	
M - Perimeter, Area and Volume	Area: Right Angled Triangles
	Area: Triangles
👑 Skill Quests	
Area of parallelograms and triangles	Calculating the area of a triangle
	Calculating the area of a parallelogram



Calculate, estimate and compare volume of cubes and cuboids using standard units, including cubic centimetres (cm^3) and cubic metres (m^3), and extending to other units [for example, mm^3 and km^3]	
☰ Activities	
M - Perimeter, Area and Volume	Volume: Cuboid 1
	Volume: Rectangular Prisms 1
👑 Skill Quests	
Find the volume of cubes and cuboids	Calculating the volume of cubes and cuboids



Geometry



Properties of shapes

Draw 2-D shapes using given dimensions and angles	
 Activities	
Teacher directed	
 Skill Quests	
Teacher directed	



Recognise, describe and build simple 3-D shapes, including making nets	
 Activities	
G - Properties of Shapes and Position	Nets
 Skill Quests	
Recognise and describe simple 3-D shapes	Describing and naming prisms and pyramids
	Investigating cross-sections of prisms & pyramids
	Connecting 3-D shapes with their nets



Compare and classify geometric shapes based on their properties and sizes and find unknown angles in any triangles, quadrilaterals, and regular polygons	
 Activities	
G - Properties of Shapes and Position	Triangles: Acute, Right, Obtuse
	Collect the Objects 2
	Triangle Tasters
	Angle Sum of a Quadrilateral
	Angle Sum of a Triangle
	Angles in a Revolution
 Skill Quests	
Classify geometric shapes	Classifying triangles by their sides and angles
	Classifying quadrilaterals by their features
	Classifying shapes in a hierarchy
Find unknown angles	Calculating interior angles of triangles
	Calculating interior angles of quadrilaterals
	Calculating interior angles of regular polygons

Illustrate and name parts of circles, including radius, diameter and circumference and know that the diameter is twice the radius	
 Activities	
G - Properties of Shapes and Position	Identify Parts of Circles 1
	Identify Parts of Circles 2
 Skill Quests	
Name the parts of circles	Naming the parts of circles

Recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles	
 Activities	
Teacher directed	
 Skill Quests	
Find missing angles	Adjacent, straight, and vertically opposite angles



Position and direction



Describe positions on the full coordinate grid (all 4 quadrants)	
 Activities	
G - Properties of Shapes and Position	Coordinate Graphs
 Skill Quests	
Describe positions, 4 quadrants	Describing positions, 4 quadrants
	Drawing polygons on the coordinate grid

Draw and translate simple shapes on the coordinate plane, and reflect them in the axes	
 Activities	
G - Properties of Shapes and Position	Transformations: Coordinate Plane
	Rotations: Coordinate Plane
	Horizontal and Vertical Change
 Skill Quests	
Translations & reflections, 4 quadrants	Reflections, 4 quadrants
	Understanding translations, 4 quadrants

Statistics

Statistics

Interpret and construct pie charts and line graphs and use these to solve problems	
 Activities	
S - Statistics	Pie Charts
	Compound Bar Chart
 Skill Quests	
Identifying pie charts and line graphs	Interpreting and constructing pie charts
	Interpreting and constructing line graphs

Calculate and interpret the mean as an average	
 Activities	
S - Statistics	Finding the Average
	Mean
 Skill Quests	
Calculate and interpret the mean	Calculating and interpreting the mean



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