MathsBox

KS1 – KS2

QUESTION GENERATOR OVERVIEW

Question structures for Primary.

Every question structure available for Primary in the Mathsbox Question Generator, organised by topic so you can find exactly what you need.

Number | Algebra | Geometry & Measures | Statistics

1,096 question structures

112 topics

4 strands

Contents

Primary · 1,096 question structures

01 Number 773 structures 3

- Place Value 3
- Roman Numerals 4
- Estimation 4
- Directed Numbers 4
- Arithmetic 4
- BIDMAS 6
- Properties of Number 7
- Fractions 7
- Decimals 8
- Equivalence 9
- Percentages 9
- Ratio 9
- Proportion 9

02 Algebra 64 structures 10

- Sequences 10
- Simplifying Expressions 10
- Function Machines 10
- Substitution 10
- Solving Equations 10

03 Geometry & Measures 218 structures 11

- Measures 11
- Time 11
- Area 11
- Perimeter 12
- Volume 12
- Angles 12
- 2D and 3D shapes 12
- Coordinates 12
- Transformations 12

04 Statistics 41 structures 13

- Drawing and using tables 13
- Bar charts and pictograms 13
- Line Graphs 13
- Pie Charts 13
- Averages 13

01 PRIMARY Number

73 topics
773 structures

Place Value

Charts and number lines · Place value charts 5

Represent numbers up to 100
Represent numbers up to 1,000
Represent numbers up to 10,000
Numbers up to 100,000
Numbers up to 1,000,000

Charts and number lines · Number lines 11

Number line up to 1,000
Number line to 1,000
Number line to 1,000
Estimate on a number line
Number line to 1,000
Number line to 10,000
Estimate numbers
Number lines
Number lines
Number lines
Number line up to 10,000,000

Partitioning 13

Partition numbers up to 100
Partition numbers up to 1,000
Partition numbers up to 1,000
Partition numbers up to 1,000
Partition numbers up to 1,000
Partition numbers up to 1,000
Partition numbers up to 10,000
Partition numbers up to 10,000
Partition numbers up to 10,000
Partition numbers up to 10,000
Partition numbers up to 10,000
Partition numbers up to 100,000 B
Partition numbers up to 1,000,000 B

Words to figures 7

Words to figures up to 100
Words to figures up to 1,000
Writing numbers up to 1,000 in figures
Words to figures
Words and figures
Words to figures
Words and figures

Specific digits 5

Numbers up to 10,000 - digit values
Numbers up to 100,000 - digit values
Numbers up to 1,000,000 - digit values
Powers of 10
Numbers up to 10,000,000 A

Tens, hundreds, thousands 5

Hundreds
Thousands -hundreds
Thousands -tens
Place value
Powers of 10

Making numbers 19

Making numbers (3 digits)
Making numbers (4 digits)

Making numbers *continued*

Making numbers (5 digits)
Making numbers (6 digits)
Making even numbers (4 digits)
Making even numbers (5 digits)
Making even numbers (6 digits)
Making odd numbers (4 digits)
Making odd numbers (5 digits)
Making odd numbers (6 digits)
Making multiple of 5 (4 digits)
Making multiple of 5 (5 digits)
Making multiple of 5 (6 digits)
Making multiple of 10 (4 digits)
Making multiple of 10 (5 digits)
Making multiple of 10 (6 digits)
Making numbers mixture (4–6 digits)
Making even/odd number mixture (4–6 digits)
Making multiple of 5/10 mixture (4–6 digits)

Comparing and ordering · Comparing 9

Compare numbers up to 100
Compare numbers up to 1,000 (using < or >)
Compare numbers up to 1,000
Compare numbers up to 1,000
Compare numbers up to 1,000
Compare numbers (10,000)
Comparing numbers (10,000)
Comparing numbers (100,000)
Comparing numbers

Comparing and ordering · Comparing 3

Order numbers (1,000)
Order numbers (10,000)
Ordering numbers

More or less · Up to 1,000 13

Find 1 more
Find 1 less
Find 1 more or less
Find 10 more
Find 10 less
Find 10 more or less
Find 100 more
Find 100 less
Find 100 more or less
Find 10 or 100 more
Find 10 or 100 less
Find 10 or 100 more less
1, 10 or 100 less than a number

More or less · Up to 10,000 11

Find 1 more
Find 1 less
Find 10 more
Find 10 less
Find 100 more
Find 100 less
Find 100 more less
Find 1,000 more
Find 1,000 less
Find 1,000 more or less
Find 10, 100 or 1,000 more or less

More or less · Up to 1,000,000 (7)

10 more or less
100 more or less
Multiples of 10 or 100 more or less
1,000 more or less
10,000 more or less
100,000 more or less
Numbers up to 1,000,000 C

More or less · Counting patterns (2)

Count in 50's
Counting in 10s,100s, 1,000s , 10,000 ...

Roman Numerals

Roman Numerals (6)

Roman numerals to figures
Figures to roman numerals
Comparing roman numerals
Roman numerals - reading
Roman numerals - writing
Roman numerals - ordering

Estimation

Rounding – nearest 10, 100, 1000 (18)

Rounding nearest 10
Rounding nearest 10
Rounding nearest 100
Rounding nearest 10
Rounding nearest 100
Rounding nearest 10 or 100
Rounding nearest 10, 100 or 1,000
Rounding nearest 1,000
Rounding nearest 10
Rounding nearest 100
Rounding nearest 1,000
Rounding nearest 10,100 or 1,000
Rounding nearest 10
Rounding nearest 100
Rounding nearest 1,000
Rounding nearest 10,000
Rounding A
Rounding B

Rounding – decimals (7)

Round to the nearest whole number
Round to the nearest whole number
Round to the nearest integer
Rounding - nearest integer
Round to 1 decimal place
Rounding - nearest tenth
Rounding - nearest hundredth

Directed Numbers

Negative Numbers (12)

Temperatures on thermometers
Count through zero in ones - number line
Count in ones
Count in multiples
Temperature changes
Comparing negative numbers
Ordering negative numbers
Finding the difference
Negative numbers - missing terms
Finding more of less - negative numbers
Calculate the difference - negative numbers

Negative Numbers *continued*

Addition and Subtraction across zero

Arithmetic

Addition · Place value charts (3)

Add ones
Add tens
Add hundreds

Addition · Column Addition (15)

Add 2 + 2 digit - no exchange
Add 3 + 3 digit - no exchange
Add 2 + 2 digit across a 10
Add 3 + 2 digit across a 10
Add 3 + 3 digit across a 100
Add 4 + 4 digit - no exchange
Add 4 + 5 digit no exchange
Add 4 + 4 digit -one exchange
Add 4 + 3 digit - one exchange
Add 3 + 2 digit
Add 3 + 3 digit
Add 4 + 3 digit
Add 4 + 4 digit
Add 5 + 4 digit
Add 5 + 5 digit

Addition · Adding 1's , 10's, 100's (12)

Add 1's (up to 100)
Add 1's (up to 1000)
Add 1's across a 10 (up to 1000)
Add 10's (up to 1000)
Add 10's across 100 (up to 1000)
Add 100's (up to 1000)
Mixture (up to 1000)
Add 1's (up to 10000)
Add 10s (up to 10000)
Add 100's (up to 10000)
Add 1000's (up to 10000)
Mixture (up to 10000)

Addition (16)

Add 2 + 2 digit - no exchange
Add 3 + 3 digit - no exchange
Add 2 + 2 digit across a 10
Add 3 + 3 digit across a 10
Add 3 + 3 -digit across a 100
Add 4 + 3 digit - no exchange
Add 4 + 4 digit - no exchange
Add 4 + 4 digit - one exchange
Add 4 + 3 digit- one exchange
Add 3 + 2 digit
Add 3 + 3 digit
Add 4 + 3 digit
Add 4 + 4 digit
Add 5 + 4 digit
Add 5 + 5 digit
Addition - up to 10,000,000

Addition · Complements/bonds (5)

Number bonds to 10
Number bonds to 20
Complements to 100
Numbers up to 1,000,000
Numbers up to 10,000,000

Addition · Inverse operations (2)

Inverse operations - Addition up to 1,000

Addition · Inverse operations *continued*

Inverse operations - Addition

Subtraction · Place value charts 3

Subtract ones
Subtract tens
Subtract hundreds

Subtraction · Column subtraction 15

Subtract 2 - 2 digit - no exchange
Subtract 3 - 3 digit - no exchange
Subtract 2 - 2 digit - across a 10
Subtract 3 - 3 digit - across a 10
Subtract 3 - 3 digit across a 100
Subtract 4 - 4 digit - no exchange
Subtract 4 - 3 digit - no exchange
Subtract 4 - 4 digit - one exchange
Subtract 4 - 3 digit - one exchange
Subtract 3 - 2 digit
Subtract 3 - 3 digit
Subtract 4 - 3 digit
Subtract 4 - 4 digit
Subtract 5 - 4 digit
Subtract 5 - 5 digit

Subtraction · Subtracting 1's, 10's and 100's 9

Subtract ones
Subtract ones
Subtract 1s
Subtract tens
Subtract 10s
Subtract hundreds
Subtract 100s
Subtract 1s across a 10
Subtract 10s across a 100

Subtraction 16

Subtract 2 - 2 digit - no exchange
Subtract 3 - 3 digit - no exchange
Subtract 4 - 3 digit - no exchange
Subtract 4 - 4 digit - no exchange
Subtract 2 - 2 digit across a 10
Subtract 3 - 3 digit across a 10
Subtract 3 - 3 digit across a 100
Subtract 4 - 3 digit one exchange
Subtract 4 - 3 digit one exchange
Subtract 3 - 2 digit
Subtract 3 - 3 digit
Subtract 4 - 3 digit
Subtract 4 - 4 digit
Subtract 5 digit - 4 digit
Subtract 5 digit - 5 digit
Subtraction - up to 10,000,000

Subtraction · Inverse operations 3

Inverse operations - Subtraction
Inverse operations - Subtraction up to 1,000
Inverse operations - Subtraction up to 10,000

Multiplication · Times Tables 24

Multiply by 3
4 times table
Multiply by 4
Multiply by 4
8 times table
Multiply by 8
Multiply by 8
3, 4 & 8 times table

Multiplication · Times Tables *continued*

3, 4, 5, 8 & 10 times tables
6 times table
Multiply by 6
9 times table
Multiply by 9
Multiply by 9
7 times table
Multiply by 7
11 times table
Multiply by 11
12 times table
Multiply by 12
Multiply - 1 and 0
Multiply or divide by (3,4 or 8)
Mixed tables up to 12 × 12
Division using tables facts

Multiplication · Column multiplication 6

2:Column: Multiply - 2 digit by 1 digit
Column Multiply - 3 digit &times 1 digit
Column Multiply - 4 digit &times 1 digit
Column Multiply - 2 digit &times 2 digit
Column Multiply - 3 digit &times 2 digit
Column Multiply - 4 digit &times 2 digit

Multiplication · Grid multiplication 8

2:Column: Multiply - 2 digit by 1 digit
Grid: Multiply 2 digit by 1 digit (no exch)
Grid: Multiply - 2 digit by 1 digit
Grid Multiply - 3 digit &times 1 digit
Grid Multiply - 4 digit &times 1 digit
Grid Multiply - 2 digit &times 2 digit
Grid Multiply - 3 digit &times 2 digit
Grid Multiply - 4 digit &times 2 digit

Multiplication 21

Equal groups
Use arrays
Doubling numbers (up to 100)
Repeated Addition and multiplication
Problem Solving
Related calculations
Reasoning
Multiply 2 digit by 1 digit (no exch)
Multiply 2 digit by 1 digit (no exch)
Multiply 2 digit by 1 digit
Multiply - 2 digit by 1 digit
Multiply - 3 digit &times 1 digit
Multiply - 4 digit &times 1 digit
Multiply - 2 digit &times 2 digit
Multiply - 3 digit &times 2 digit
Multiply - 4 digit &times 2 digit
Using related facts
Methods for multiplication
Problem solving
Scaling
Combinations - product rule

Multiplication · Multiplication by 10, 100 and 1,000 17

Multiplying by 10
Multiplying by 100
Multiplying by 10 or 100
Using related facts
Multiplying by 1,000
Multiplying by 10 - missing values
Multiplying by 100 - missing values
Multiplying by 1,000 - missing values
Multiplication - powers of 10

Multiplication · Multiplication by 10, 100 and 1,000 *continued*

- Multiplication and division - powers of 10
- Multiplying - multiples of 10 (up to 12 x ...)
- Multiplying - multiples of 10
- Multiplying - multiples of 100
- Multiplying - multiples of 10 and 100
- Multiplying - multiples of 1,000
- Multiplying - multiples of 10,100, 1,000
- Inverse operations - Multiplication up to 3 digit by 1 digit

Division · Times tables 17

- Divide by 3
- 3 times table
- Divide by 4
- Divide by 4
- 4 times table
- Divide by 8
- Divide by 8
- 8 times table
- 6 times table
- 9 times table
- 7 times table
- 11 times table
- 12 times table
- 2,5 or 10 tables
- Dividing by 2,5 or 10
- Finding the total giving the quotient, divisor and remainder
- Dividing -1 and itself

Division · Using bar models 9

- Divide by 2
- Divide by 3
- Divide by 4
- Divide by 5
- Divide by 6
- Divide by 7
- Divide by 8
- Divide by 9
- Divide by 10

Division · Bus stop 7

- Sharing and grouping (2,5 and 10)
- Bus stop Divide - 2 digit by 1 digit
- Bus stop Divide - 2 digit by 1 digit (rem)
- Bus stop Divide - 3 digit by 1 digit (no rem)
- Bus Stop Division - single digit
- Bus stop - with remainders
- Bus Stop Division - long division

Division 11

- Divide 2 digit by 1 digit
- Divide 2 digit by 1 digit (no exch)
- Divide - 2 digit by 1 digit (no rem)
- Divide - 2 digit by 1 digit (rem)
- Division - 3 digit &divide 1 digit
- Division - 4 digit &divide 1 digit
- Division - with remainders
- Division - long division
- Dividing using a place value chart
- Problem solving
- Related calculations

Division · Dividing by 10, 100 and 1,000 15

- Divide by 10
- Dividing by 10
- Dividing by 10 - missing values
- Dividing by 100
- Dividing by 10 or 100
- Multiplying by 10 or 100

Division · Dividing by 10, 100 and 1,000 *continued*

- Dividing by 100 - missing values
- Divide by 10, 100
- Divide by 10, 100
- Dividing by 1,000
- Divide by 10, 100 or 1,000
- Dividing by 1,000 - missing values
- Division - powers of 10
- Division - multiples of 10 or single digits
- Division - multiples of 10,100 or 1,000

Division · Division using factors 4

- Division by 4 using factors
- Division by 8 using factors
- Division by 6 using factors
- Division - factor pairs

Addition and subtraction · 1's, 10's and 100's 5

- Add and Subtract single digits
- Add and Subtract tens
- Add and Subtract hundreds
- Add and Subtract hundreds
- Add and Subtract 10's and 100's

Addition and subtraction · Addition and Subtraction 4

- Add and Subtract up to 3 digit numbers
- Add and Subtract up to 4 digit numbers
- Add and Subtract up to 5 digit numbers
- Add and Subtract up to 6 digit numbers

Addition and subtraction · Comparing calculations 4

- Add and Subtract ones - comparing
- Add and Subtract tens - comparing
- Add and Subtract hundreds
- Add and Subtract hundreds

Addition and subtraction · Inverse operations 4

- Inverse operations (up to 1,000)
- Inverse operations (up to 10,000)
- Inverse operations (up to 100,000)
- Inverse operations (up to 1,000,000)

Multiplication and Division 8

- Tables mixture
- Multiplication and division - by 1 digit number
- Multiplication and division - by 10 or 100
- Multiplication and division - by 10, 100 or 1,000
- Multiplication and division - by multiples of 10, 100 or 1,000
- Multiplication and division - by 2 digits
- Mixed Inverse operations -small numbers
- Mixed Inverse operations -larger numbers

BIDMAS

Order of operations · No Brackets 8

- Order of operations $a - b + c \times d$
- Order of operations $a + b + c \times d$
- Order of operations $a + b \times c$
- Order of operations $a - b \times c$
- Order of operations $a + b \div c$
- Order of operations $a - b \div c$
- Order of operations $a \times b - c \times d$
- Order of operations $a \times b + c \times d$

Order of operations · Brackets 13

- Order of operations $a + (b + c) \times d$
- Order of operations $(a + b) \times c$
- Order of operations $(a - b) \times c$

Order of operations · Brackets *continued*

- Order of operations $a - (b + c) \times d$
- Order of operations $a \times (b - c)$
- Order of operations $(a - b) \times c$
- Order of operations $(a + b) \div c$
- Order of operations $a \div (b + c)$
- Order of operations $(a - b) \div c$
- Order of operations $a \div (b - c)$
- Order of operations $a(b - c) + d$
- Order of operations $a(b + c) + d$
- Order of operations $a \times (b - c) \times d$

Order of operations · Brackets and squaring 3

- Order of operations $a \times (b - c)^2$
- Order of operations $(a - b)^2 + c$
- Order of operations $(a + b)^2 + c$

Order of operations · Full Mixture 1

- Order of operations Mixture

Properties of Number

Multiples 32

- Odd and even numbers
- Making odd and even numbers
- Multiples of 2
- Listing multiples of 2
- Identify multiples of 2
- Multiples of 5
- Multiples of 5
- Listing multiples of 5
- Identify multiples of 5
- Multiples of 10
- Listing Multiples of 10
- Identify multiples of 10
- Multiples of 3
- Recognising multiples of 3
- Recognising multiples of 6
- Identify multiples of 6
- Recognising multiples of 9
- Identify multiples of 4
- Counting in multiples of 50
- Counting in multiples of 4, 8, 50 or 100
- Counting in multiples of 6, 7 or 9
- Counting in multiples of 25
- Counting in multiples of 25 or 50
- Counting in multiples of 50 or 100
- Counting in multiples of 4,850 or 100
- Identify multiples of 8
- Listing Multiples
- Specific Multiples
- Listing Multiples and factors
- Finding multiples
- Finding common multiples
- Finding the lowest common multiple

Divisibility tests 6

- Divisibility tests - 2, 5, 10
- Divisibility tests - 4
- Divisibility tests - 8
- Divisibility tests - 3
- Divisibility tests - 9
- Divisibility tests - 6

Factors 7

- Listing factors
- Finding common factors
- Finding the highest common factor

Factors *continued*

- Factor pairs
- Using factors pairs
- Use factor pairs
- Multiplication - factor pairs

Square, cube & prime numbers 6

- Identifying prime numbers
- Listing prime numbers
- Square numbers
- Cube and square numbers
- Cube numbers
- Mixture - primes, factors, multiples, squares....

Fractions

Identifying and understanding the whole 9

- Denominators of unit fractions
- Shading fractions
- Identifying shaded fractions
- Understand the whole
- Understand the whole
- Fractions on a number line
- Count in fractions
- Partition the whole
- Understand the whole

Simplifying and equivalence 8

- Equivalent fractions
- Equivalent fractions
- Equivalent fractions (unit)
- Equivalent fractions
- Recognise equivalent fractions
- Equivalent fractions - number lines
- Equivalent fractions
- Simplify a fraction

Mixed numbers and improper fractions 16

- Partition a mixed number (1)
- Partition a mixed number (2)
- Partition a mixed number (3)
- Number lines with mixed numbers
- Improper fractions and wholes
- Mixed numbers to improper fractions
- Improper fractions to mixed numbers
- Improper fractions to mixed numbers
- Improper fractions and mixed numbers - mixture
- Equivalent fractions on a number line
- Equivalent fractions using bars
- Simplify a mixed number
- Count beyond 1 (unit fractions)
- Count beyond 1 (unit fractions)
- Count beyond 1 (increasing)
- Count beyond 1 (decreasing)

Comparing and ordering 14

- Compare unit fractions
- Order unit fractions
- Compare non-unit fractions
- Order non-unit fractions
- Order non-unit fractions
- Compare fractions (same numerator of same denominator)
- Compare fractions less than 1
- Comparing fractions less than 1
- Ordering fractions less than 1
- Compare mixed numbers
- Order mixed numbers
- Compare fractions greater than 1
- Order fractions greater than 1

Comparing and ordering *continued*

70: Fractions as operators

Fraction of a quantity 15

Unit fraction of a set of objects
Non unit fraction
Simple fraction of a quantity
Find the whole given a half, third or quarter
Fraction of a quantity
Unit Fraction of a quantity
Fraction of a quantity (12 × 12 and multiples of 10)
Fraction of a quantity
Unit fraction of a quantity
Fraction of a quantity
Find the whole give a unit fraction of a quantity
Find the whole A
Find the whole B
Find the whole C
Finding the whole - problems

Arithmetic 9

Add two or more fractions
Add two or more fractions
Add fractions and mixed numbers
Addition - denominator multiple
Addition - (total >1)
Addition - fraction - mixed number
Addition - mixed numbers
Adding fractions (2)
Adding mixed numbers

Arithmetic 6

Addition or Subtractionn (within 1)
Addition or Subtractionn (within 1)
Addition or Subtractionn (within 1) - 3 fractions
Addition or Subtractionn - common multiple denominator
Addition or Subtractionn - mixed numbers
Addition or Subtractionn - mixed numbers

Arithmetic 12

Subtract fractions
Subtract two fractions
Subtract from whole amounts
Subtract from mixed numbers
Subtract from mixed numbers
Subtraction - denominator multiple A
Subtraction - mixed number - fraction
Subtraction - mixed number - fraction
Subtraction - mixed numbers
Subtracting fractions (1)
Subtracting fractions (2)
Subtracting mixed numbers

Arithmetic 6

Multiply - unit fraction by an integer
Multiply - fraction by an integer
Multiply - mixed number by an integer
Multiply - any two fractions
Divide - fraction by an integer
Divide - mixed number by an integer

Decimals

Place value 30

Tenths - place value chart
Counting in tenths
Tenths on a number line
Make a whole with tenths

Place value *continued*

Number lines (tenths A)
Place value
Hundredths as decimals - shading
Hundredths - place value chart
Count in Hundredths
Count in tenths or hundredths
Number lines (hundredths B)
Decimals up to 2 d.p - place value chart
Decimals up to 2 d.p - missing numbers
Partition decimals
Partition decimals
Number lines (thousandths)
Thousandths - place value chart
Place Value (words to figures) tenths and hundredths
Place Value (words to figures)
Place Value (words to figures)
Place Value (words to figures)
Place Value - missing values A
Place Value - missing values B
Number lines (D)
Number lines (E)
Integers and Decimals -thousandths (words)
Integers and Decimals -thousandths (figures)
Thousandths as decimals
Complements to 1 (2 d.p)
Complements to 1 (3 d.p)

Ordering and comparing 6

Compare decimals (up to 2 d.p.)
Order decimals (up to 2 d.p.)
Order numbers (3 d.p.)
Compare numbers (3 d.p.)
Order numbers (up to 3 d.p.)
Compare numbers (up to 3 d.p.)

Multiplication and division 24

Divide by 10
Divide by 10
Divide by 10
Divide by 100
Divide by 100
Divide by 1,000
Divide by 1,000
Divide by 10, 100, 1,000
Division - missing values (10)
Division - missing values (10, or 100)
Division - missing values (10, 100, 1,000)
Dividing - decimal by an integer
Multiply by 10
Multiply by 10
Multiply by 100
Multiply by 100
Multiply by 1,000
Multiply by 10, 100, 1,000
Multiply by 10 or 100 (leading to decimals)
Multiply - missing values (10, 100, 1,000)
Multiply - decimal by an integer
Multiply or divide a decimal by an integer
Multiply or divide a decimal 10 , 100 or 1,000
Multiply - decimal by an integer

Addition and subtraction 16

Add decimals within 1 - place value chart
Add decimals within 1 - words
Add decimals within 1
Add decimals across 1
Add decimals - same no. of d.p.
Add decimals - diff no. of d.p.

Addition and subtraction *continued*

Adding Decimals
Subtract decimals within 1 - place value chart
Subtract decimals within 1 - words
Subtract decimals within 1
Subtract decimals across 1
Subtract decimals - same no. of d.p.
Subtract decimals - diff no. of d.p.
Subtracting Decimals
Add and subtract decimals
Add and subtract decimals (up to 3 d.p.)

Money 19

Convert pence to pounds
Convert pounds to pence
Add money
Add money
Subtract money
Subtract money
Totals and change with money
Find change from £1
Find change from £5
Find change from £1 or £5
Find change from £10
Problem solving
Pence to decimal £s
Addition - pence and £s
Decimals in context A
Decimals in context B
Decimals in context C
Decimals in context D
Decimals in context E

Equivalence

Decimals and fractions 21

Tenths as fractions
Tenths as decimals and fractions
Hundredths as fractions
Hundredths as fractions - shading
Make a whole with tenths
Make a whole with hundredths (fraction)
Hundredths as fractions and decimals
Decimals to fractions
Decimals and fractions
Fractions to decimals - chart
Fractions to decimals
Decimals to fractions
Decimals from a hundred square
Improper fractions to decimals
Equivalent fractions and decimals
Thousandths as fractions - equivalence
Thousandths as fractions - partitioning
Thousandths as decimals
Thousandths - place value chart
Fractions to Decimals
Decimals to fractions

Percentages

Understanding percentages and equivalence 19

Percentages - bar models
Percentage - bar models B
Understanding percentages
Percentages - word problems
Percentages as fractions
Percentages as decimals
Decimals and percentages
Equivalent fractions and percentages

Understanding percentages and equivalence *continued*

Equivalent fractions and percentages
Fractions to percentages A
Fractions to percentages B
Percentages to fractions A
Percentages to fractions B
Percentages to fractions and decimals
Percentages and fractions - problem A
Percentages and fractions - problem B
Fractions, decimals, percentages
Ordering fractions, decimals, percentages
Comparing fractions, decimals, percentages

Percentage of a quantity 15

50% of a quantity
25% of a quantity
25%,50 or 75% of a quantity
10% of a quantity
20% of a quantity
5% of a quantity
5%,10 or 20% of a quantity
Multiples of 5% a quantity
1% of a quantity
(1%-9%) a quantity
Any % a quantity
Missing values (1%)
Missing values (1-9%)
Missing values (multiples of 5%)
Missing values (any%)

Ratio

Understanding ratios 6

Add or multiply A
Add or multiply B
Add or multiply C
Use ratio language
Use ratio language
Use the ratio symbol A

Using ratios 15

Simplifying
Completing equivalent ratios
Use the ratio symbol B
Use the ratio symbol C
Use the ratio symbol D
Ratios and Fractions A
Ratios and Fractions B
Ratios and Fractions C
Ratios and Fractions D
Ratios and Fractions E
Ratios and Fractions F
Ratio Problems
Ratio Problems
Ratio Problems
Ratio Problems

Proportion

Scale drawing and scale factors 8

Scale Drawing A
Scale Drawing B
Scale Drawing C
Scale Drawing D
Use scale factors
Use scale factors
Use scale factors
Similar Shapes

Proportion 7

Simple problems with scaling
Proportion Problems
Proportion Problems
Proportion Problems

Proportion *continued*

Proportion Problems
Proportion Problems
Proportion Problems

02 PRIMARY Algebra

10 topics
64 structures

Sequences

Sequences 4

Add or multiply B
Decimal sequences - creating
Decimal sequences - missing spaces
Find the next 2 terms

Simplifying Expressions

Collecting like terms 6

Collecting like terms-addition
Collecting like terms - Single variable
Collecting like terms - Single variable (across 0)
Collecting like terms - Single variable and a number (addition)
Collecting like terms - Single variable and a number
Collecting like terms - two variables

Function Machines

Function Machines - find the input 11

1-step function machines(output)
1-step function machines(input)
1-step function machines(input)
2-step function machines(input)
2-step function machines(input)
2-step function machines(input)
2-step function machines(input)
2-step function machines(input)
2-step function machines(input)
2-step function machines(input)
2-step function machines(input)

Function Machines - find the output 11

1-step function machines(output)
1-step function machines(output)
2-step function machines(output)
2-step function machines(output)
2-step function machines(output)
2-step function machines(output)
2-step function machines(output)
2-step function machines(output)
2-step function machines(output)
2-step function machines(output)
2-step function machines(input)

Forming expressions 6

Forming expressions A
Forming expressions B
Forming expressions C
Forming expressions D
Forming equations A
Forming equations B

Substitution

Substitution - single variable 8

Substitution : $x + a$
Substitution : $x - a$
Substitution : ax
Substitution : $\frac{a}{x}$
Substitution : $ax + b$
Substitution : $ax - b$
Substitution : $b - ax$
Substitution : Mixture

Substitution - two variables 2

Substitution : 2 variables
Substitution : 2 variables

Substitution - real life problems 3

Formulae A
Formulae B
Formulae C

Solving Equations

Linear Equations 7

Solving Equations $x + a = b$
Solving Equations $x - a = b$
Solving Equations $ax = b$
Solving Equations $\frac{x}{a} = b$
Solving Equations $ax + b = c$
Solving Equations $ax - b = c$
Solving Equations Mixture

Pairs of values 6

Pairs of Values A
Pairs of Values B
Pairs of Values B
Pairs of Values D
Pairs of Values E
Pairs of Values F

03 PRIMARY Geometry & Measures

24 topics
218 structures

Measures

Length 18

- Comparing lengths
- Ordering lengths
- Metres to centimetres
- Centimetres to metres
- Comparing lengths (cm and m)
- Centimetres to millimetres
- Millimetres to centimetres
- Comparing lengths (cm and mm)
- Converting - cm to mm
- Converting - cm to m
- Converting - m to cm
- Converting - mm, cm and m mixture
- Converting - m to km
- Converting - km to m
- Converting - m and km mixture
- Converting - m and km mixture decimals
- Converting - metric measures mixture
- Comparing - metric measures mixture

Length 14

- Comparing lengths
- Arithmetic - length
- Comparing lengths (cm and mm)
- Add and subtract lengths (same unit)
- Add lengths (cm and m)
- Add lengths (cm and m)
- Add lengths (cm and mm)
- Add lengths (cm and mm)
- Subtract lengths (cm and m)
- Subtract lengths (cm and m)
- Subtract lengths (cm and mm)
- Subtract lengths (cm and mm)
- Add and Subtract lengths (cm and mm)
- Add and Subtract lengths mixed units

Mass 6

- Measure mass in grams
- Converting - kg to g
- Converting - kg to tonnes
- Converting - tonnes to kg
- Compare mass
- Measure mass in grams

Mass 3

- Arithmetic - mass
- Add mass
- Subtract mass

Capacity 8

- Converting - ml to litres
- Converting - litres to ml
- Arithmetic - capacity
- Capacity and volume (ml)
- Capacity and volume (litres)
- Equivalent capacities (1 litre = 1,000ml)
- Compare capacity and volume
- Estimating capacity

Capacity 4

- Converting - ml to litres

Capacity *continued*

- Add capacity
- Subtract capacity
- Arithmetic - capacity

Imperial Measures 13

- Converting - miles to km
- Converting - km to miles
- Converting - inches to cm
- Converting - cm to inches
- Converting - inches to feet
- Converting - feet to inches
- Converting - pounds to ounces
- Converting - ounces to pounds
- Converting - pounds to stones
- Converting - stones to pounds
- Converting - pints to gallons
- Converting - gallons to pints
- Imperial units mixture

Time

Read the time from a clock 8

- Read the time from a clock - 5 mins
- Read the time from a clock
- Minutes to the hour
- Tell the time to the minute
- Draw times on a clock
- Read time on a digit clock
- Draw hands on a clock
- Use am and pm

Time - Conversions 10

- Read the time from a clock - 5 mins
- Months and Years
- Days and Weeks
- Comparing time intervals
- Mixed time conversions (hours, days, weeks, months, years)
- Mixed time conversions (seconds, minutes, hours, days, weeks)
- Hours and days
- Convert to hour clock
- Convert to 12 hour clock
- Converting 12 hour and 24 hour clock times

Time - Calculations 11

- Read the time from a clock - 5 mins
- Reading a calendar
- Calculating durations A
- Calculating durations B
- Start and end times A
- Start and end times B
- Analogue to digital times
- Digital to analogue times
- Time before
- Time after
- Before and after time problems

Area

Understanding area 7

- Area - counting squares
- Area - counting squares
- Making shapes

Understanding area *continued*

- Comparing area
- Comparing area
- Making shapes
- Estimating area

Area – rectangles (+rectilinear shapes) 10

- Area of a rectangle -by counting
- Area of rectangles - by counting
- Area of a rectangle (up to 12 × 12)
- Area of a rectangle (no diagram)
- Area of a rectangle (up to 25 × 25)
- Area - rectangle - missing length
- Area of a rectangle-perimeter known
- Perimeter of a rectangle- area known
- Compound shapes - area - counting
- Compound shapes - area

Area – Triangles 10

- Area - counting squares
- Area - counting squares
- Area of a triangle - counting
- Area of a triangle
- Area of a triangle - missing base
- Area of a triangle - missing height
- Area of a triangle - non-right angled
- Area - non-right angled - base
- Area - non-right angled - height
- Area - triangles and rectangles

Area – Parallelograms 4

- Parallelogram area - counting
- Parallelogram area
- Parallelogram base
- Parallelogram height

Area – Mixed Shapes 1

- Mixed area

Perimeter

Perimeter – rectangles and counting 11

- Perimeter by counting
- Perimeter by counting
- Measure perimeter
- Perimeter of a rectangle - no diagram
- Work out the perimeter of the shape
- Perimeter of a rectangle
- Perimeter-rectangle-missing length
- Perimeter-rectangle-missing length
- Perimeter and area of a rectangle
- Area of a rectangle-perimeter known
- Perimeter of a rectangle- area known

Perimeter – compound shapes 3

- Perimeter by counting
- Compound shapes - missing length
- Compound shapes - perimeter

Volume

Volume 6

- Cubic centimetres - counting cubes
- Comparing volume
- Volume - by counting
- Volume of a cuboid
- Volume of a cuboid
- Volume of a cuboid - missing lengths

Angles

Understanding angles 14

- Turns and angles
- Right angles
- Comparing angles
- Identifying angles
- Ordering angles
- Understand degrees B
- Classifying angles A
- Classifying angles B
- Estimating angles - Acute
- Estimating angles - Obtuse
- Estimating angles - Reflex
- Measuring angles - Acute
- Measuring angles - Obtuse
- Draw lines and angles accurately

Calculating angles 13

- Angles at a point A
- Angles at a point B
- Angles on straight line A
- Angles on straight line B
- Angles in a triangle A
- Angles in a triangle B
- Angles in a triangle C
- Angles in a triangle D
- Angles - line, point or triangle
- Angles in a quadrilateral A
- Angles in a quadrilateral B
- Angles in polygons
- Triangles

2D and 3D shapes

2D and 3D shapes 12

- Drawing lines accurately and Language
- Language of lines and angles
- Language of shape
- Horizontal and vertical lines
- Parallel lines
- Perpendilar lines
- Quadrilaterals
- Regular polygons
- Draw shapes accurately
- Circles
- 3D shapes - mixture
- Nets of 3D shapes

Coordinates

Coordinates 4

- Coordinates (first quadrant) A
- Coordinates (first quadrant) B
- Coordinates - 2D shapes
- Coordinates in 4 Quadrants A

Transformations

Reflection and symmetry 13

- Coordinates in 4 Quadrants B
- Coordinates problem A
- Coordinates problem B
- Coordinates problem C
- Coordinates problem D
- Lines of symmetry
- Reflecting A
- Reflecting B
- Reflecting C

Reflection and symmetry *continued*

Reflecting D
Reflections - x-axis
Reflections - y -axis
Reflecting Coordinates

Translation 15

Translating points - horizontally
Translating shapes - horizontally
Translating points - vertically
Translating shapes - vertically
Translating points - mixture

Translation *continued*

Translating shapes - mixture
Describing horizontal translations - points
Describing horizontal translations -shapes
Describing vertical translations - points
Describing vertical translations-shapes
Describing mixed translations - points
Describe the translations -shapes
Translations - describing (4 quadrants)
Translating shapes (4 quadrants)
Translating Coordinates (4 quadrants)

04 PRIMARY Statistics

5 topics
41 structures

Drawing and using tables

Drawing and using tables 12

Complete a tally chart
Complete a tally chart
Draw a tally chart
Completing a 2 way table
Information from a 2 way table
Read and interpret tables A
Read and interpret tables B
Read and interpret tables C
Two way tables - completing totals
Two way tables - completing totals
Two way tables - reading information
Reading timetables

Bar charts and pictograms

Bar charts and pictograms 10

Interpret pictograms
Complete pictograms
Draw pictograms
Interpret bar charts
Draw bar charts
Draw bar charts
Mixed charts - Sum and difference
Plotting - dual bar chart
Plotting - dual bar chart
Questions - dual bar chart

Line Graphs

Line Graphs 5

Plotting a line graph - axes given
Plotting a line graph
Read and interpret line graphs
Questions - 2 line graphs
Questions - Distance time

Pie Charts

Pie Charts 10

Drawing - Pie chart - markers given
Drawing - Pie chart - markers given
Drawing - Pie chart - markers given %
Reading - Pie chart - markers given A
Reading - Pie chart - markers given B
Reading - Pie chart - markers given C
Reading - Pie chart - % given A
Reading - Pie chart - % given B
Reading - Pie chart - % given C
Calculating angles

Averages

Averages 4

Calculating the mean - integers
Calculating the mean - decimals
Calculating the mean - missing values
Calculating the mean, mode or median