**OLD BUCKENHAM**
PRIMARY SCHOOL

# Progression of Skills in Mathematics Years 1-6

| Year 1 | Week 1 | Week 2 | Week 3 | Week 4 | Week 5 | Week6 | Week 7 | Week 8 | Week 9 | Week 10 | Week 11 | Week 12 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Autumn** | **Number** Place Value (within 10) <br>• Sort objects <br>• Count objects <br>• Count objects from a larger group <br>• Represent objects <br>• Recognise numbers as words <br>• Count on form any number <br>• 1 more, 1 less <br>• Count backwards within 10 <br>• Compare groups by matching <br>• Fewer, more, same <br>• Less than, greater than, equal to <br>• Compare numbers <br>• Order objects and numbers <br>• The number line | | | | | **Number** Addition and subtraction (within 10) <br>• Introduce parts and wholes <br>• Part whole model <br>• Write number sentences <br>• Fact families- addition facts <br>• Number bonds within 10 <br>• Systematic number bonds within 10 <br>• Number bonds to 10 <br>• Addition-add together <br>• Addition- add more <br>• Addition problems <br>• Find a part <br>• Subtraction-find a part <br>• Fact families- the eight facts <br>• Subtraction- take away/ crossing out. How many left? <br>• Subtraction-take away. How many left? <br>• Subtraction on a number line <br>• Add or subtract 1 or 2. | | | | | **Geometry** Shape <br>• Recognise and name 3D shapes <br>• Sort 3D shapes <br>• Recognise and name 2D shapes <br>• Sort 2D shapes <br>• Patterns with 2D and 3 D shapes | |
| **Key Vocabulary** | Sort <br>Represent <br>Ones <br>Tens | | | | | Addition/add <br>Subtraction <br>Difference <br>Equals <br>Facts | | | | | Sides <br>Corners <br>Properties <br>Pyramids <br>Faces | |

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| | **Number** Place Value (within 20) | **Number** Addition and subtraction (within 20) | **Number** Place Value (within 50) | **Measurement** Length and Height | **Measurement** Weight and volume |
|---|---|---|---|---|---|
| **Spring** | • Count within 20<br>• Understand 10<br>• Understand 11, 12 and 13<br>• Understand 14, 15, 16<br>• Understand 17, 18, 19<br>• Understand 20<br>• 1 more and 1 less<br>• The number line to 20<br>• Use a number line to 20<br>• Estimate on a number line to 20<br>• Compare numbers to 20<br>• Order numbers to 20 | • Add by counting on within 20<br>• Add ones using number bonds<br>• Find and make number bonds to 20<br>• Doubles<br>• Near doubles<br>• Subtract ones using number bonds<br>• Subtraction – counting back<br>• Subtraction – finding the difference<br>• Related facts<br>• Missing number problems | • Count from 20 to 50 20, 30, 40 and 50<br>• Count by making groups of tens<br>• Groups of tens and ones<br>• Partition into tens and ones<br>• The number line to 50<br>• Estimate on a number line to 50<br>• 1 more, 1 less | • Compare lengths and heights<br>• Measure length using objects<br>• Measure length in centimetres | • Heavier and lighter<br>• Measure mass<br>• Compare mass<br>• Full and empty<br>• Compare volume<br>• Measure capacity<br>• Compare capacity |
| **Key Vocabulary** | Sort<br>Represent<br>Multiples<br>Partitioning<br>Ones<br>Tens | Addition/add<br>Subtraction<br>Difference<br>Equals<br>Facts<br>Missing number problems<br>2 digit number<br>Inverse | Sort<br>Represent<br>Multiples<br>Partitioning<br>Ones<br>Tens | Length | Mass<br>volume |

## Summer

### Number
**Multiplication and Division**
- Count in 2s
- Count in 10s
- Count in 5s
- Recognise equal groups
- Add equal groups
- Make arrays
- Make doubles
- Make equal groups - grouping
- Make equal groups - sharing

### Number
**Fractions**
- Recognise a half of an object or a shape
- Find a half of an object or a shape
- Recognise a half of a quantity
- Find a half of a quantity
- Recognise a quarter of an object or a shape
- Find a quarter of an object or a shape
- Recognise a quarter of a quantity
- Find a quarter of a quantity

### Geometry
**Position and direction**
- Describe turns
- Describe position – left and right
- Describe position – forwards and backwards
- Describe position – above and below
- Ordinal numbers

### Number
**Place Value (within 100)**
- Count from 50 to 100
- Tens to 100
- Partition into tens and ones
- The number line to 100
- 1 more, 1 less
- Compare numbers with the same number of tens
- Compare any two numbers

### Measurement
**Money**
- Unitising
- Recognise coins
- Recognise notes
- Count in coins

### Measurement
**Time**
- Before and after
- Days of the week
- Months of the year
- Hours, minutes and seconds
- Tell the time to the hour
- Tell the time to the half hour

**Consolidation**

### Key Vocabulary

| | | | | | |
|---|---|---|---|---|---|
| Multiplication<br>Division<br>Arrays | Whole<br>Half<br>Quarter<br>Equal parts | Position<br>Direction<br>Movement<br>Whole turn<br>Quarter turn<br>Half turn<br>Three quarter turn | Sort<br>Represent<br>Multiples<br>Partitioning<br>Ones<br>Tens | Money<br>Coins<br>Notes<br>Pounds £<br>Pence p | Chronological order<br>Days of the week<br>Months of the year<br>Month<br>Year<br>O'clock<br>Half past<br>second |

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| Year 2 | Week 1 | Week 2 | Week 3 | Week 4 | Week 5 | Week6 | Week 7 | Week 8 | Week 9 | Week 10 | Week 11 | Week 12 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|

### Autumn

**Number**
Place Value

- Numbers to 20
- Count objects to 100 by making 10s
- Recognise tens and ones
- Use a place value chart
- Partition numbers to 100
- Write numbers to 100 in words
- Flexibly partition numbers to 100
- Write numbers to 100 in expanded form
- 10s on the number line to 100
- 10s and 1s on the number line to 100
- Estimate numbers on a number line
- Compare objects
- Compare numbers
- Order objects and numbers
- Count in 2s, 5s and 10s
- Count in 3s

**Number**
Addition and subtraction

- Bonds to 10
- Fact families- addition and subtraction facts within 20
- Related facts
- Bonds to 100 (tens)
- Add and subtract 1s
- Add by making 10
- Add three 1-digit numbers
- Add to the next 10
- Add across a 10
- Subtract across 10
- Subtract from a 10
- Subtract a 1-digit number from a 2-digit number (across a 10)
- 10 more, 10 less
- Add and subtract 10s
- Add two 2-digit numbers (not across a 10)
- Add two 2-digit numbers (across a 10)
- Subtract two 2-digit numbers (not across a 10)
- Subtract two 2-digit numbers (across a 10)
- Mixed addition and subtraction
- Compare number sentences
- Missing number problems

**Geometry**
Shape

- Recognise 2-D and 3-D shapes
- Count sides on 2-D shapes
- Count vertices on 2-D shapes
- Draw 2-D shapes
- Lines of symmetry on shapes Use lines of symmetry to complete shapes
- Sort 2-D shapes
- Count faces on 3-D shapes
- Count edges on 3-D shapes
- Count vertices on 3-D shapes
- Sort 3-D shapes
- Make patterns with 2-D and 3-D shape

### Key Vocabulary

Count in steps
Count in multiples
Place value
Estimate
Compare

Sum
3 digit number
Commutative

Pentagon
Hexagon
Line of symmetry
Properties
Cylinder
Edges
Vertices
Vertex

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| | | **Measurement** Money | **Number** Multiplication and Division | **Measurement** Length and Height | **Measurement** Mass, capacity and temperature |
|---|---|---|---|---|---|
| **Spring** | | • Count money - pence<br>• Count money - pounds (notes and coins)<br>• Count money - pounds and pence<br>• Choose notes and coins<br>• Make the same amount<br>• Compare amounts of money<br>• Calculate with money<br>• Make a pound<br>• Find change<br>• Two-step problem | • Recognise equal groups<br>• Make equal groups<br>• Add equal groups<br>• Introduce the multiplication symbol<br>• Multiplication sentences<br>• Use arrays<br>• Make equal groups – grouping<br>• Make equal groups – sharing<br>• The 2 times-table<br>• Divide by 2<br>• Doubling and halving<br>• Odd and even numbers<br>• The 10 times-table<br>• Divide by 10<br>• The 5 times-table<br>• Divide by 5<br>• The 5 and 10 times-tables | • Measure in centimetres<br>• Measure in metres<br>• Compare lengths and heights<br>• Order lengths and heights<br>• Four operations with lengths and heights | • Compare mass<br>• Measure in grams<br>• Measure in kilograms<br>• Four operations with mass<br>• Compare volume and capacity<br>• Measure in millilitres<br>• Measure in litres<br>• Four operations with volume and capacity<br>• Temperature |
| **Key Vocabulary** | | Value<br>Change | Multiplication tables<br>Commutative<br>Repeated addition | Standard units<br>Estimate<br>Order<br>Record results<br>Centimetre cm<br>Metre m | Kilogram kg<br>Grams g<br>Quarter full<br>Three quarters full<br>Litres (l)<br>Millilitres (ml)<br>Temperature<br>Celsius |

**OLD BUCKENHAM PRIMARY SCHOOL**

|  | Number | Measurement | Statistics | Geometry |  |
|---|---|---|---|---|---|
| **Summer** | **Fractions**<br>• Introduction to parts and whole<br>• Equal and unequal parts<br>• Recognise a half<br>• Find a half<br>• Recognise a quarter<br>• Find a quarter<br>• Recognise a third<br>• Find a third<br>• Find the whole<br>• Unit fractions<br>• Non-unit fractions<br>• Recognise the equivalence of a half and two-quarters<br>• Recognise three-quarters<br>• Find three-quarters<br>• Count in fractions up to a whole | **Time**<br>• O'clock and half past<br>• Quarter past and quarter to<br>• Tell time past the hour<br>• Tell time to the hour<br>• Tell the time to 5 minutes<br>• Minutes in an hour<br>• Hours in a day | • Make tally charts<br>• Tables<br>• Block diagrams<br>• Draw pictograms (1-1)<br>• Interpret pictograms (1-1)<br>• Draw pictograms (2, 5 and 10)<br>• Interpret pictograms (2, 5 and 10) | **Position and direction**<br>• Language of position<br>• Describe movement<br>• Describe turns<br>• Describe movement and turns<br>• Shape patterns with turns | Consolidation |
| **Key Vocabulary** | Three quarters<br>Third<br>Equivalent fractions<br>Unit fractions<br>Non unit fractions<br>Numerator<br>Denominator<br>One whole | Intervals of time<br>Quarter past/quarter to<br>Duration | Pictograms<br>Tally chart<br>Block diagram<br>Category<br>Sorting<br>Totalling<br>Comparing<br>Horizontal<br>Vertical | Clockwise/ anti-clockwise<br>Straight line<br>Rotation<br>Arrange<br>sequences |  |

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| Year 3 | Week 1 | Week 2 | Week 3 | Week 4 | Week 5 | Week6 | Week 7 | Week 8 | Week 9 | Week 10 | Week 11 | Week 12 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Autumn** | **Number**<br>Place Value<br><br>• Represent numbers to 100<br>• Partition numbers to 100<br>• Number line to 100<br>• Hundreds<br>• Represent numbers to 1,000<br>• Partition numbers to 1,000<br>• Flexible partitioning of numbers to 1000<br>• Hundreds, tens and ones<br>• Find 1, 10 or 100 more or less<br>• Number line to 1,000<br>• Estimating on a number line to 1,000<br>• Compare numbers to 1,000<br>• Order numbers to 1,000<br>• Count in 50s | | **Number**<br>Addition and subtraction<br><br>• Apply number bonds within 10<br>• Add and subtract 1s<br>• Add and subtract 10s<br>• Add and subtract 100s<br>• Spot the pattern<br>• Add 1s across a 10<br>• Add 10s across a 100<br>• Subtract 1s across a 10<br>• Subtract 10s across a 100<br>• Make connections<br>• Add two numbers (no exchange)<br>• Subtract two numbers (no exchange)<br>• Add two numbers (across a 10)<br>• Add two numbers (across a 100)<br>• Subtract two numbers (across a 10)<br>• Subtract two numbers (across a 100)<br>• Add 2-digit and 3-digit numbers<br>• Subtract a 2-digit number from a 3-digit number<br>• Complements to 100<br>• Estimate answers<br>• Inverse operations<br>• Make decisions | | | | | **Number**<br>Multiplication and Division<br><br>• Multiplication- equal groups<br>• Use arrays<br>• Multiples of 2<br>• Multiples of 5 and 10<br>• Sharing and grouping<br>• Multiply by 3 Divide by 3<br>• The 3 times-table<br>• Multiply by 4<br>• Divide by 4<br>• The 4 times-table<br>• Multiply by 8<br>• Divide by 8<br>• The 8 times-table<br>• The 2, 4 and 8 times-tables | | | | |
| **Key Vocabulary** *YR, Y1 and Y2 also* | Ascending<br>Descending<br>10 or 100 more<br>10 or 100 less<br>Hundreds | | Column addition<br>Column subtraction<br>Exchange<br>estimate | | | | | Exchange<br>Mathematical statements<br>Missing number problems<br>Integer scaling problems<br>Correspondence problems<br>Derived facts | | | | |

| **Number** Multiplication and Division | **Measurement** Length and perimeter | **Number** Fractions | **Measurement** Mass and capacity |
|---|---|---|---|
| <ul><li>Multiples of 10</li><li>Related calculations</li><li>Reasoning about multiplication</li><li>Multiply a 2-digit number by a 1-digit number – no exchange</li><li>Multiply a 2-digit number by a 1-digit number – with exchange</li><li>Link multiplication and division</li><li>Divide a 2-digit number by a 1-digit number – no exchange</li><li>Divide a 2-digit number by a 1-digit number – flexible partitioning</li><li>Divide a 2-digit number by a 1-digit number – with reminders</li><li>Scaling How many ways</li></ul> | <ul><li>Measure in metres and centimetres</li><li>Measure in millimetres</li><li>Measure in centimetres and millimetres</li><li>Metres, centimetres and millimetres</li><li>Equivalent lengths (metres and centimetres )</li><li>Equivalent lengths (centimetres and millimetres)</li><li>Compare lengths</li><li>Add lengths Subtract lengths</li><li>What is perimeter?</li><li>Measure perimeter</li><li>Calculate perimeter</li></ul> | <ul><li>Understand the denominators of unit fractions</li><li>Compare and order unit fractions</li><li>Understand the numerators of non-unit fractions</li><li>Understand the whole</li><li>Compare and order non-unit fractions</li><li>Fractions and scales</li><li>Fractions on a number line</li><li>Count in fractions on a number line</li><li>Equivalent fractions on a number line</li><li>Equivalent fractions as bar models</li></ul> | <ul><li>Use scales</li><li>Measure mass in grams</li><li>Measure mass in kilograms and grams</li><li>Equivalent masses (kilograms and grams)</li><li>Compare mass</li><li>Add and subtract mass</li><li>Measure capacity and volume in millilitres</li><li>Measure capacity and volume in litres and millilitres</li><li>Equivalent capacities and volumes (litres and millilitres)</li><li>Compare capacity and volume</li><li>Add and subtract capacity and volume</li></ul> |

**Spring**

| Exchange<br>Mathematical statements<br>Missing number problems<br>Integer scaling problems<br>Correspondence problems<br>Derived facts | Millimetre (mm)<br>Perimeter | tenths | *Same words from Year R, Year 1 and Year 2* |
|---|---|---|---|

**Key vocabulary** *YR, Y1 and Y2 also*

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| Summer | **Number** Fractions | **Measurement** Money | **Measurement** Time | **Geometry** Shape | **Statistics** | Consolidation |
|---|---|---|---|---|---|---|
| | • Add fractions<br>• Subtract fractions<br>• Partition the whole<br>• Unit fractions of a set of objects<br>• Non-unit fractions of a set of objects<br>• Reasoning with fractions of an amount | • Pounds and pence<br>• Convert pounds and pence<br>• Add money Subtract money<br>• Find change | • Roman numerals to 12<br>• Tell the time to 5 minutes<br>• Tell the time to the minute<br>• Read time on a digital clock<br>• Use am and pm<br>• Years, months and days<br>• Days and hours<br>• Hours and minutes – use start and end times<br>• Hours and minutes – use durations<br>• Minutes and seconds<br>• Units of time<br>• Solve problems with time | • Turns and angles<br>• Right angles<br>• Compare angles<br>• Measure and draw accurately<br>• Horizontal and vertical<br>• Parallel and perpendicular<br>• Recognise and describe 2-D shapes<br>• Draw polygons<br>• Recognise and describe 3-D shapes<br>• Make 3-D shapes | • Interpret pictograms<br>• Draw pictograms<br>• Interpret bar charts<br>• Draw bar charts<br>• Collect and represent data<br>• Two-way tables | |

**Progression of Skills in Mathematics Years 1-6**

| Key Vocabulary YR, Y1 and Y2 words also | Tenths | | As per Y1 and Y2 | Analogue<br>Roman numerals<br>12-hour clock<br>24-hour clock<br>a.m./ p.m.<br>noon<br>midnight<br>leap year<br>digital | | Right angle triangle<br>Heptagon<br>Octagon<br>Polygon<br>Properties<br>Prism<br>Orientations<br>Angles<br>Acute angle<br>Obtuse angle<br>Turn<br>Right angle<br>Half turn<br>Three quarters of a turn<br>Horizontal line<br>Vertical line | Table<br>Bar chart<br>One-step problem<br>Two-step problem | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **Year 4** | Week 1 | Week 2 | Week 3 | Week 4 | Week 5 | Week6 | Week 7 | Week 8 | Week 9 | Week 10 | Week 11 | Week 12 |

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## Number
### Place Value

- Represent numbers to 1000
- Partition numbers to 1,000
- Number line to 1,000
- Thousands
- Represent numbers to 10,000
- Partition numbers to 10,000
- Flexible partitioning of numbers to 10,000
- Find 1, 10, 100, 1,000 more or less
- Number line to 10,000
- Estimate on a number line to 10,000
- Compare numbers to 10,000
- Order numbers to 10,000
- Roman numerals
- Round to the nearest 10
- Round to the nearest 100
- Round to the nearest 1,000
- Round to the nearest 10, 100 or 1,000

## Number
### Addition and subtraction

- Add and subtract 1s, 10s, 100s and 1,000s
- Add up to two 4-digit numbers - no exchange
- Add two 4-digit numbers - one exchange
- Add two 4-digit numbers– more than one exchange
- Subtract two 4-digit numbers - no exchange
- Subtract two 4-digit numbers - one exchange
- Subtract two 4-digit numbers – more than one exchange
- Efficient subtraction
- Estimate answers
  Checking strategies

## Measurement
### Area

What is area?
Counting squares
Make shapes
Compare area

## Number
### Multiplication and Division

- Multiples of 3
- Multiply and divide by 6
- 6 times-table and division facts
- Multiply and divide by 9
- 9 times-table and division facts
- The 3, 6 and 9 times-tables
- Multiply and divide by 7
- 7 times-table and division facts
- 11 times-table and division facts
- 12 times-table and division facts
- Multiply by 1 and 0
- Divide by 1 and itself
- Multiply three numbers

**Autumn**

Consolidation

| Key Vocabulary | Negative numbers<br>Roman numerals<br>1000 more<br>1000 less<br>thousands<br>rounds | 4 digit number<br>Operations<br>methods | area | Factor pairs<br>Formal written layout<br>Distributive law<br>Remainders | |
| --- | --- | --- | --- | --- | --- |

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| **Number** Multiplication and Division | **Measurement** Length and perimeter | **Number** Fractions | **Number** Decimals |
|---|---|---|---|
| • Factor pairs<br>• Use factor pairs<br>• Multiply by 10<br>• Multiply by 100<br>• Divide by 10<br>• Divide by 100 Related facts – multiplication and division Informal written methods for multiplication<br>• Multiply a 2-digit number by a 1-digit number<br>• Multiply a 3-digit number by a 1-digit number<br>• Divide a 2-digit number by a 1-digit number (1)<br>• Divide a 2-digit number by a 1-digit number (2)<br>• Divide a 3-digit number by a 1-digit number<br>• Correspondence problems<br>• Efficient multiplication | • Measure in kilometres and metres<br>• Equivalent lengths (kilometres and metres)<br>• Perimeter on a grid<br>• Perimeter of a rectangle<br>• Perimeter of rectilinear shapes<br>• Find missing lengths in rectilinear shapes<br>• Calculate the perimeter of rectilinear shapes<br>• Perimeter of regular polygons<br>• Perimeter of polygons | • Understand the whole<br>• Count beyond 1<br>• Partition a mixed number<br>• Number lines with mixed numbers<br>• Compare and order mixed numbers<br>• Understand improper fractions<br>• Convert mixed numbers to improper fractions<br>• Convert improper fractions to mixed numbers<br>• Equivalent fractions on a number line<br>• Equivalent fraction families<br>• Add two or more fractions<br>• Add fractions and mixed numbers<br>• Subtract two fractions<br>• Subtract from whole amounts<br>• Subtract from mixed number | • Tenths as fractions<br>• Tenths as decimals<br>• Tenths on a place value chart<br>• Tenths on a number line<br>• Divide a 1-digit number by 10<br>• Divide a 2-digit number by 10<br>• Hundredths as fractions<br>• Hundredths as decimals<br>• Hundredths on a place value chart<br>• Divide a 1 or 2-digit number by 100 |

Spring

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| Key Vocabulary | | | | | | |
|---|---|---|---|---|---|---|
| Factor pairs<br>Formal written layout<br>Distributive law<br>Remainders | | Kilometres (km)<br>Rectilinear figure | Decimal equivalents<br>Hundredths<br>Convert<br>Proper fractions<br>Improper fractions<br>Decimal point | | | Decimal equivalents<br>Hundredths<br>Convert<br>Decimal point |

## Summer

| **Number**<br>Decimals | **Measurement**<br>Money | **Measurement**<br>Time | Consolidation | **Geometry**<br>Shape | **Statistics** | **Geometry**<br>Position and direction |
|---|---|---|---|---|---|---|
| • Make a whole with tenths<br>• Make a whole with hundredths<br>• Partition decimals<br>• Flexibly partition decimals<br>• Compare decimals<br>• Order decimals<br>• Round to the nearest whole number<br>• Halves and quarters as decimals | • Write money using decimals<br>• Convert between pounds and pence<br>• Compare amounts of money<br>• Estimate with money<br>• Calculate with money<br>• Solve problems with money | • Years, months, weeks and days<br>• Hours, minutes and seconds<br>• Convert between analogue and digital times<br>• Convert to the 24 hour clock<br>• Convert from the 24 hour clock | | • Understand angles as turns<br>• Identify angles<br>• Compare and order angles<br>• Triangles<br>• Quadrilaterals<br>• Polygons<br>• Lines of symmetry<br>• Complete a symmetric figure | • Interpret charts<br>• Comparison, sum and difference<br>• Interpret line graphs<br>• Draw line graphs | • Describe position using coordinates<br>• Plot coordinates<br>• Draw 2-D shapes on a grid<br>• Translate on a grid<br>• Describe translation on a grid |

| Key Vocabulary | Decimal equivalents<br>Hundredths<br>Convert<br>Proper fractions<br>Improper fractions<br>Decimal point | *As per Y1, Y2 and Y3* | *As per YR, Y1, y2 and Y3* | | Isosceles<br>Equilateral<br>Scalene<br>Trapezium<br>Rhombus<br>Parallelogram<br>Kite<br>Geometric shapes<br>Quadrilaterals | Time graph<br>Discrete data<br>Continuous data<br>Line graphs<br>Comparison problem<br>Sum problem<br>Difference problem<br>Calculate<br>interpret | Co-ordinates<br>First Quadrant<br>Translation<br>Plot<br>Polygon<br>Axis |

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| Year 5 | Week 1 | Week 2 | Week 3 | Week 4 | Week 5 | Week6 | Week 7 | Week 8 | Week 9 | Week 10 | Week 11 | Week 12 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Autumn** | **Number**<br>Place Value<br><br>• Roman numerals to 1,000<br>• Numbers to 10,000<br>• Numbers to 100,000<br>• Numbers to 1,000,000<br>• Read and write numbers to 1,000,000<br>• Powers of 10 10/100/1,000/10,000/100,000 more or less<br>• Partition numbers to 1,000,000<br>• Number line to 1,000,000<br>• Compare and order numbers to 100,000<br>• Compare and order numbers to 1,000,000<br>• Round to the nearest 10, 100 or 1,000<br>• Round within 100,000<br>• Round within 1,000,000 | | **Number**<br>Addition and subtraction<br><br>• Mental strategies<br>• Add whole numbers with more than four digits<br>• Subtract whole numbers with more than four digits<br>• Round to check answers<br>• Inverse operations (addition and subtraction)<br>• Multi-step addition and subtraction problems<br>• Compare calculations<br>• Find missing numbers | | **Number**<br>Multiplication and Division<br><br>• Multiples<br>• Common multiples<br>• Factors<br>• Common factors<br>• Prime numbers<br>• Square numbers<br>• Cube numbers<br>• Multiply by 10, 100 and 1,000<br>• Divide by 10, 100 and 1,000<br>• Multiples of 10, 100 and 1,000 | | | **Number**<br>Fractions<br><br>• Find fractions equivalent to a unit fraction<br>• Find fractions equivalent to a non-unit fraction<br>• Recognise equivalent fractions<br>• Convert improper fractions to mixed numbers<br>• Convert mixed numbers to improper fractions<br>• Compare fractions less than 1<br>• Order fractions less than 1<br>• Compare and order fractions greater than 1<br>• Add and subtract fractions with the same denominator<br>• Add fractions within 1<br>• Add fractions with total greater than 1<br>• Add to a mixed number<br>• Add two mixed numbers<br>• Subtract fractions<br>• Subtract from a mixed number<br>• Subtract from a mixed number - breaking the whole<br>• Subtract two mixed numbers | | | |
| **Key Vocabulary** | Ten thousands<br>One hundred thousands<br>Powers of<br>integer | | *As per YR, Y1, Y2, Y3 and Y4* | | Multiples<br>Factors<br>Prime numbers<br>Square numbers<br>Cube numbers<br>Short division | | | | Fifth<br>Thousandths<br>Mixed numbers<br>Per cent %<br>Factors<br>Integer<br>complements | | | |

# Progression of Skills in Mathematics Years 1-6

| **Number** Multiplication and Division | **Number** Fraction | **Number** Decimals and Percentages | **Measurement** Perimeter and area | **Statistics** |
|---|---|---|---|---|
| • Multiply up to a 4-digit number by a 1-digit number<br>• Multiply a 2-digit number by a 2-digit number (area model)<br>• Multiply a 2-digit number by a 2-digit number<br>• Multiply a 3-digit number by a 2-digit number<br>• Multiply a 4-digit number by a 2-digit number<br>• Solve problems with multiplication<br>• Short division<br>• Divide a 4-digit number by a 1-digit number<br>• Divide with remainders<br>• Efficient division<br>• Solve problems with multiplication and division | • Multiply a unit fraction by an integer<br>• Multiply a non-unit fraction by an integer<br>• Multiply a mixed number by an integer<br>• Calculate a fraction of a quantity<br>• Fraction of an amount<br>• Find the whole Use fractions as operators | • Decimals up to 2 decimal places<br>• Equivalent fractions and decimals (tenths)<br>• Equivalent fractions and decimals (hundredths)<br>• Equivalent fractions and decimals<br>• Thousandths as fractions<br>• Thousandths as decimals<br>• Thousandths on a place value chart<br>• Order and compare decimals (same number of decimal places)<br>• Order and compare any decimals with up to 3 decimal places<br>• Round to the nearest whole number<br>• Round to 1 decimal place<br>• Understand percentages<br>• Percentages as fractions<br>• Percentages as decimals<br>• Equivalent fractions, decimals and percentage | • Perimeter of rectangles<br>• Perimeter of rectilinear shapes<br>• Perimeter of polygons<br>• Area of rectangles<br>• Area of compound shapes<br>• Estimate area | • Draw line graphs<br>• Read and interpret line graphs<br>• Read and interpret tables<br>• Two-way tables<br>• Read and interpret timetables |

Spring

| | | | | |
|---|---|---|---|---|
| | Multiples<br>Factors<br>Prime numbers<br>Square numbers<br>Cube numbers<br>Short division<br>Quotient<br>Divisor<br>dividend | Fifth<br>Thousandths<br>Mixed numbers<br>Per cent %<br>Factors<br>Integer<br>complements | **As per Year 4** | Timetable<br>Two way timetables |

**OLD BUCKENHAM PRIMARY SCHOOL**

| **Summer** | **Geometry** Shape | **Geometry** Position and direction | **Number** Decimals | **Number** Negative numbers | **Measurement** Converting units | **Measurement** Volume |
|---|---|---|---|---|---|---|
| | • Understand and use degrees<br>• Classify angles<br>• Estimate angles<br>• Measure angles up to 180°<br>• Draw lines and angles accurately<br>• Calculate angles around a point<br>• Calculate angles on a straight line<br>• Lengths and angles in shapes<br>• Regular and irregular polygons<br>• 3-D shapes | • Read and plot coordinates<br>• Problem solving with coordinates<br>• Translation<br>• Translation with coordinates<br>• Lines of symmetry<br>• Reflection in horizontal and vertical lines | • Use known facts to add and subtract decimals within 1<br>• Complements to 1<br>• Add and subtract decimals across 1<br>• Add decimals with the same number of decimal places<br>• Subtract decimals with the same number of decimal places<br>• Add decimals with different numbers of decimal places<br>• Subtract decimals with different numbers of decimal places<br>• Efficient strategies for adding and subtracting decimals<br>• Decimal sequences<br>• Multiply by 10, 100 and 1,000<br>• Divide by 10, 100 and 1,000<br>• Multiply and divide decimals - missing values | • Understand negative numbers<br>• Count through zero in 1s<br>• Count through zero in multiples<br>• Compare and order negative numbers<br>• Find the difference | • Kilograms and kilometres<br>• Millimetres and millilitres<br>• Convert units of length<br>• Convert between metric and imperial units<br>• Convert units of time<br>• Calculate with timetables | • Cubic centimetres<br>• Compare volume<br>• Estimate volume<br>• Estimate capacity |

| | Regular polygon<br>Irregular polygon<br>Reflex angles<br>Degrees<br>One whole turn<br>Angles on a straight line<br>Angles around a point<br>Vertically opposite<br>,missing angles | Reflection | Fifth<br>Thousandths<br>Mixed numbers<br>Per cent %<br>Factors<br>Integer<br>complements | As per previous years | Pounds<br>pints | Cubic centimetre |
|---|---|---|---|---|---|---|

# Progression of Skills in Mathematics Years 1-6

| Year 6 | Week 1 | Week 2 | Week 3 | Week 4 | Week 5 | Week6 | Week 7 | Week 8 | Week 9 | Week 10 | Week 11 | Week 12 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Autumn** | **Number** Place Value <br><br> • Numbers to 1,000,000 <br> • Numbers to 10,000,000 <br> • Read and write numbers to 10,000,000 <br> • Powers of 10 <br> • Number line to 10,000,000 <br> • Compare and order any integers <br> • Round any integers <br> • Negative numbers | | **Number** Four operations <br><br> • Add and subtract integers <br> • Common factors <br> • Common multiples <br> • Rules of divisibility <br> • Primes to 100 Square and cube numbers <br> • Multiply up to a 4-digit number by a 2-digit number <br> • Solve problems with multiplication <br> • Short division <br> • Division using factors <br> • Introduction to long division <br> • Long division with remainders <br> • Solve problems with division <br> • Solve multi-step problems <br> • Order of operations <br> • Mental calculations and estimation <br> • Reason from known facts | | | | | **Number** Fractions A and B <br><br> • Equivalent fractions and simplifying <br> • Equivalent fractions on a number line <br> • Compare and order (denominator) <br> • Compare and order (numerator) <br> • Add and subtract simple fractions <br> • Add and subtract any two fractions <br> • Add mixed numbers <br> • Subtract mixed numbers <br> • Multi-step problems <br> • Multiply fractions by integers <br> • Multiply fractions by fractions <br> • Divide a fraction by an integer <br> • Divide any fraction by an integer <br> • Mixed questions with fractions <br> • Fraction of an amount <br> • Fraction of an amount - find the whole | | | **Number** Converting Units <br><br> • Metric measures <br> • Convert metric measures <br> • Calculate with metric measures <br> • Miles and kilometres <br> • Imperial measure |
| **Key Vocabulary** | *As per vocabulary taught from Reception to Year 5* <br><br> Millions <br> Ten millions | | *Vocabulary taught from Reception to Year 5* <br><br> Multi-digit numbers <br> Long division | | | | | | *As per vocabulary taught in Y1-Y5* | | | | Conversion <br> Miles <br> Ounces <br> Stones <br> Gallons <br> Feet <br> Formulae |

**OLD BUCKENHAM PRIMARY SCHOOL**

| **Number** Ratio | **Number** Algebra | **Number** Decimals | **Number** Fractions, decimals and percentages | **Measurement** Area, perimeter and volume | **Statistics** |
|---|---|---|---|---|---|
| • Add or multiply? <br> • Using ratio language <br> • Introduction to the ratio symbol <br> • Ratio and fractions <br> • Scale drawing <br> • Using scale factors <br> • Similar shapes <br> • Ratio problems <br> • Proportion problems <br> • Recipes | • 1-step function machines <br> • 2-step function machines <br> • Form expressions <br> • Substitution Formulae <br> • Form equations <br> • Solve 1-step equations <br> • Solve 2-step equations <br> • Find pairs of values <br> • Solve problems with two unknowns | • Place value within 1 <br> • Place value – integers and decimals <br> • Round decimals <br> • Add and subtract decimals <br> • Multiply by 10, 100 and 1,000 <br> • Divide by 10, 100 and 1,000 <br> • Multiply decimals by integers <br> • Divide decimals by integers <br> • Multiply and divide decimals in context | • Decimal and fraction equivalents Fraction as division Understand percentages Fractions to percentages Equivalent fractions, decimals and percentages Order fractions, decimals and percentages Percentage of an amount – one step Percentage of an amount – multi-step Percentages – missing values | • Shapes – same area <br> • Area and perimeter <br> • Area of a triangle – counting squares <br> • Area of a right-angled triangle <br> • Area of any triangle <br> • Area of a parallelogram <br> • Volume – counting cubes <br> • Volume of a cuboid | • Line graphs <br> • Dual bar charts <br> • Read and interpret pie charts <br> • Pie charts with percentages <br> • Draw pie charts <br> • The mean |

Spring

**Progression of Skills in Mathematics Years 1-6**

| Key Vocabulary | | | | | |
|---|---|---|---|---|---|
| Relative size<br>Missing values<br>Integer multiplication<br>Percentages<br>Scale factor<br>Unequal sharing and grouping | Formulae<br>Linear number sequences<br>Algebraically<br>Equation<br>Unknowns<br>Combinations<br>variables | *As per vocabulary taught in Y1-Y5* | *As per vocabulary taught in Y1-Y5* | Formulae<br>Parallelograms<br>Triangles<br>Cubic kilometre<br>Cubic millimetre<br>Cubic metre | Pie chart<br>Mean |

**Summer**

| | | |
|---|---|---|
| **Geometry**<br>Shape<br><br>• Measure and classify angles<br>• Calculate angles<br>• Vertically opposite angles<br>• Angles in a triangle<br>• Angles in a triangle – special cases<br>• Angles in a triangle – missing angles<br>• Angles in quadrilaterals<br>• Angles in polygons<br>• Circles<br>• Draw shapes accurately<br>• Nets of 3-D shapes | **Geometry**<br><br>Position and direction<br><br>• The first quadrant<br>• Read and plot points in four quadrants<br>• Solve problems with coordinates<br>• Translations<br>• Reflection | Consolidation and problem solving |

**Key Vocabulary**

| | | |
|---|---|---|
| *All vocabulary from YR-Y5*<br>Circumference<br>Dimensions<br>Radius<br>Diameter | *All vocabulary from YR-Y5*<br>Four quadrants<br>Co-ordinate plane | |