## Mathseeds Reception: Lesson 1-50

Pupils learn fundamental number skills including number recognition, number words and counting. Pupils learn to count forwards and backwards to twenty with confidence. They use a range of techniques including ten frames and number lines. They also learn the number words up to twenty. Pupils learn to add to ten and their doubles facts to double five.

Pupils learn the four basic 2D shapes: circle, square, triangle and rectangle. They distinguish between colours and investigate some simple concepts of size: big, small, short, tall etc. Lessons cover the concepts of more time and less time, life cycles and days of the week. Pupils develop their understanding of 2D shapes by sorting them according to their properties. They are also introduced to the 3D shapes: sphere, cube, cone and cylinder.

| YEAR | LESSON NUMBER | LESSON NAME | DOMAIN | LESSON CONTENT |
| :---: | :---: | :---: | :---: | :---: |
| R | 1 | Number 1 | Number \& Place Value | Count to 1. Know, read and write the numeral 1. Read the word one. Represent a number of objects with a written number. |
| R | 2 | Number 2 | Number \& Place Value | Count to 2. Know, read and write the numeral 2. Read the word two. Represent a number of objects with a written number. |
| R | 3 | Number 3 | Number \& Place Value | Count to 3. Know, read and write the numeral 3. Read the word three. Represent a number of objects with a written number. |
| R | 4 | Circles | Properties of Shapes | Name circles in the environment. Sort shapes. Name circles in different orientations and sizes. |
| R | 5 | Number 4 | Number \& Place Value | Count to 4. Know, read and write the numeral 4. Read the word four. Represent a number of objects with a written number. Compare 4 to other numbers. Count to answer 'How many?' questions. |
| R | 6 | Squares | Properties of Shapes | Name squares in the environment. Sort shapes. Name squares in different orientations and sizes. |
| R | 7 | Number 5 | Number \& Place Value | Count to 5. Know, read and write the numeral 5. Read the word five. Represent a number of objects with a written number. Compare 5 to other numbers. Connect counting to cardinality. |
| R | 8 | Colours |  | Copy, continue and create patterns with objects and drawings. Identify colours. Match objects to colour name. Identify colours when two primary colours are mixed. |
| R | 9 | Triangles | Properties of Shapes | Name triangles in the environment. Sort shapes. Name triangles in different orientations and sizes. |
| R | 10 | Numbers 1-5 <br> Revision | Number \& Place Value | Count to 5 . Know, read and write the numerals $1-5$. Read the words: one, two, three, four, five. Represent a number of objects with a written number. Compare numbers. Connect counting to cardinality. |
| R | 11 | Number 6 | Number \& Place Value | Count to 6. Know, read and write the numeral 6. Read the word six. Represent a number of objects with a written number. Compare 6 to other numbers. Connect counting to cardinality. |
| R | 12 | Number 7 | Number \& Place Value | Count to 7. Know, read and write the numeral 7. Read the word seven. Represent a number of objects with a written number. Compare 7 to other numbers. Connect counting to cardinality. Count to answer 'How many?' questions. |
| R | 13 | Big and Small | Measurement | Compare objects. Use measurement language to describe objects. |
| R | 14 | Number 8 | Number \& Place Value | Count to 8. Know, read and write the numeral 8. Read the word eight. Represent a number of objects with a written number. Compare 8 to other numbers. Connect counting to cardinality. Count to answer 'How many?' questions. |
| R | 15 | Rectangles | Properties of Shapes | Name rectangles in the environment. Sort shapes. Name rectangles in different orientations and sizes. |

## Mathseeds Reception: Lesson 1-50

| YEAR | LESSON | LESSON | DOMAIN | LESSON CONTINT |
| :--- | :--- | :--- | :--- | :--- |
| R | 16 | Numbers 1-8 |  |  | Numbers | Count 1-8. Know, read and write the numerals 1-8. Read the words: three, five, |
| :--- |
| seven, eight. Represent a number of objects with a written number. Compare |
| numbers written as numerals. Connect counting to cardinality. |

## Mathseeds Reception: Lesson 1-50

| YEAR | LESSON NUMBER | LESSON NAME | DOMAIN | LESSON CONTENT |
| :---: | :---: | :---: | :---: | :---: |
| R | 34 | Add to 10 | Numbers | Connect counting to addition. Model addition with objects. Write equations for addends to 10 . Find pairs of numbers that make 10. Subitise small groups of objects in different formations. |
| R | 35 | The Cube \& Sphere | Shapes, Space and Measures | Name cubes and spheres in the environment. Match and sort cubes and spheres. Identify objects that can be stacked and those that roll. |
| R | 36 | Adding to 10 | Numbers | Connect counting to addition. Model addition with objects. Write equations for addends to 10 . Find pairs of numbers that make 10. |
| R | 37 | Patterns 2 | Shapes, Space and Measures | Copy, continue and create patterns. |
| R | 38 | Capacity | Shapes, Space and Measures | Use comparisons to decide which holds more or less. Use comparative language: full, empty, big, small, short, tall. |
| R | 39 | Time | Shapes, Space and Measures | Compare and order events using the everyday language of time. |
| R | 40 | Add to 10 on a Number Line | Numbers | Connect counting to addition. Add on a number line. Model addition with objects. Write equations for addends to 10 . Find pairs of numbers that make 10 . |
| R | 41 | $\begin{aligned} & \text { Numbers } 11 \\ & \& 12 \end{aligned}$ | Numbers | Count to 12. Know, read and write the numerals 11 \& 12. Read number words to twelve. Represent a number of objects with a written number. Compare numbers. Connect counting to cardinality. Subitise small groups of objects in different formations. |
| R | 42 | Days of the Week | Shapes, Space and Measures | Connect days of the week to familiar events and actions. |
| R | 43 | $\begin{aligned} & \text { Numbers } 13 \text {, } \\ & 14 \& 15 \end{aligned}$ | Numbers | Count to 15. Know, read and write the numerals 13, 14, 15. Read number words to fifteen. Represent a number of objects with a written number. Compare numbers. Connect counting to cardinality. |
| R | 44 | The Cone \& Cylinder | Shapes, Space and Measures | Name cones and cylinders in the environment. Match and sort cones and cylinders. Name cones and cylinders in different sizes. |
| R | 45 | $\begin{aligned} & \text { Numbers } 16 \\ & \& 17 \end{aligned}$ | Numbers | Count to 17. Know, read and write the numerals 16 \& 17. Read number words to seventeen. Represent a number of objects with a written number. Compose and decompose the numbers $11,12,13,15$ into tens and ones. Compare groups of objects. Use comparative language: more, less, the same. |
| R | 46 | $\begin{aligned} & \text { Numbers 18, } \\ & 19 \& 20 \end{aligned}$ | Numbers | Count to 20 . Know, read and write numbers to 20 . Read number words to twenty. Represent a number of objects with a written number. Compose and decompose the numbers $12,14,16,19$ into tens and ones. Compare groups of objects. Use comparative language: more, less, the same. |
| R | 47 | Subtraction 1 | Addition \& Subtraction | Solve subtraction problems using objects and equations. Represent objects with a written numeral to solve subtraction problems. Represent a written numeral with objects to solve subtraction problems. |
| R | 48 | Number Words 11-20 | Numbers | Count to 20. Read number words to twenty. |
| R | 49 | Doubles to Double 5 | Numbers | Connect counting to addition. Model addition. Write equations for addends to 10 . Find pairs of numbers that make 10 . Subitise small groups of objects in different formations. |
| R | 50 | Revision 0-20 | Numbers | Count to 20 . Know, read and write numbers to 20 . Read number words to twenty. Compose and decompose teen numbers into tens and ones. Use comparative language: smaller, larger. Sequence numbers, count forwards and backwards. |

## Mathseeds Year 1: Lesson 51-100

Pupils learn to count to 100, order numbers and identify ordinal numbers to 10th. They develop an understanding of place value including regrouping. Pupils practice their subtraction skills. They add and subtract to 10, and then within 100. Strategies include counting on, counting back, near doubles and using number fact families. Pupils learn how to skip count by $2 \mathrm{~s}, 5 \mathrm{~s}$ and 10 s , as well as the early multiplication and division skills of grouping and sharing.

Pupils identify notes and coins, and use addition to find amounts of money. They explore fractions, focusing on wholes, halves and quarters. Pupils continue to investigate the features of 2D shapes and 3D objects. They follow simple directions to a particular location and learn to read clocks to the half-hour. They work with early chance concepts, tally charts and simple pictograms.

| YEAR | LESSON NUMBER | LESSON NAME | DOMAIN | LESSON CONTENT |
| :---: | :---: | :---: | :---: | :---: |
| 1 | 51 | Addition to 10 with Two and Three groups | Addition \& Subtraction | Solve addition of three whole numbers. Use the count on strategy. Represent numerals with objects to solve addition problems. Understand the equals sign and work out if addition equations are true or false. |
| 1 | 52 | Sorting and Grouping 2D Shapes | Properties of Shapes | Recognise and classify familiar two-dimensional shapes. Compose twodimensional shapes. Match two-dimensional shapes to their names. Identify shapes as two-dimensional or three-dimensional. |
| 1 | 53 | Subtraction 2 | Addition \& Subtraction | Represent objects with a written numeral to solve subtraction problems. Represent a written numeral with objects to solve subtraction problems. Work out the unknown number in a subtraction equation. Find pairs of numbers that make 10 . |
| 1 | 54 | O'clock | Measurement | Tell and write time in hours and half-hours. Use analogue and digital clocks. Use comparative language: longer time, shorter time. |
| 1 | 55 | Near and Far | Measurement | Compare and select which is longer or shorter. Sort objects according to height. Describe position and movement using the everyday language of location and direction. Use comparative language: near, far, behind, in front, on, next to, big, small, short, tall, longest, shortest. |
| 1 | 56 | Number Lines to 20 | Numbers | Count to 20. Read number words to twenty. Sequence numbers, counting forwards and backwards. Count to answer 'How many?' questions. Connect counting to addition. Model addition for addends to 10 . |
| 1 | 57 | Position 1 | Position \& Direction | Follow directions to familiar locations. Understand position words when giving and following directions: right, left, above, below, next to, between, forward, under. |
| 1 | 58 | Subtraction on a Number Line |  <br> Subtraction | Solve subtraction problems using a number line. Represent objects with a written numeral to solve subtraction problems. Represent a written numeral with objects to solve subtraction problems. Work out the unknown number in a subtraction equation. |
| 1 | 59 | Area | Measurement | Understand that area measures how much a surface covers. Sort objects according to height. Sort objects according to area. Compare to identify and order area. Count to measure area. Use comparative language: big, small, short, tall, largest, smallest. |
| 1 | 60 | Counting 20-30 | Number \& Place Value | Count to 30 starting at any number. Read and write numerals. Represent a number of objects with a written numeral. Compose two-digit numbers using tens and ones. Compare groups of objects. Use comparative language: larger, smaller. |
| 1 | 61 | Wholes and Halves | Fractions | Partition objects into halves. Identify and colour one half of different 2D shapes. Recognise to share equally between two, each share is one half. Read fraction notation. |
| 1 | 62 | Sorting and Grouping 3D Objects | Properties of Shapes | Identify shapes that stack. Identify shapes that roll. Identify shapes that slide. Name 3D objects. Identify the number of sides and corners on a 3D object. |

## Mathseeds Year 1: Lesson 51-100

| YEAR | LESSON | LESSON | DOMAIN | LESSON CONTENT |
| :--- | :--- | :--- | :--- | :--- |
| NUMBER | NAME | Ordinal <br> Numbers |  <br> Place Value | Read and represent position using ordinal numbers in a sequence. |
| $\mathbf{1}$ | 63 | Money | Measurement |  | | Count and order money. Solve addition problems using coins. Solve addition |
| :--- |
| problems involving money. |

Mathseeds Year 1: Lesson 51-100

| YEAR | LESSON NUMBER | LESSON NAME | DOMAIN | LESSON CONTENT |
| :---: | :---: | :---: | :---: | :---: |
| 1 | 81 | Counting 50-70 | Number \& Place Value | Count to 70 starting at any number. Read and write numerals. Order numbers on a number line. Order numbers on a number chart. Compare groups of objects. Use comparative language: larger, smaller. Count and create collections by partitioning numbers using place value. |
| 1 | 82 | Chance 1 | Measurement | Identify outcomes of familiar events. Use everyday chance language: will happen, won't happen, might happen, possible, impossible. Use comparative language: more likely, less likely. |
| 1 | 83 | Money 2 | Measurement | Solve addition problems involving money. Identify coins and notes. Match money to symbols: $£, \mathrm{p}$. Compare the cost of items. Use different denominations of notes and coins to make amounts. Solve subtraction problems requiring change. |
| 1 | 84 | Measuring <br> Length | Measurement | Compare and select which is longer or shorter. Measure and compare the lengths of pairs of objects using uniform informal units. Sort objects according to length. Use comparative language: longer, longest, shorter, shortest. |
| 1 | 85 | Find the Difference 2 |  <br> Subtraction | Solve subtraction problems using find the difference. Represent objects with a written numeral to solve subtraction problems. Solve subtraction problems using a number line. Represent a written numeral with objects to solve subtraction problems. Work out the unknown number in a subtraction equation. |
| 1 | 86 | $\begin{aligned} & \text { Counting } \\ & 70-100 \end{aligned}$ | Number \& Place Value | Count to 100 starting at any number. Read and write numerals. Order numbers on a number line. Order numbers on a number chart. Compare groups of objects. Use comparative language: larger, smaller. Understand the meaning of the equals sign to determine true or false. |
| 1 | 87 | Half-Past and Digital Time | Measurement | Tell and write time in hours and half-hours. Use analogue and digital clocks. |
| 1 | 88 | Trading Tens | Addition \& Subtraction | Sort objects into groups of ten. Recognise ten as a bundle of ten ones. Compose two-digit numbers using tens and ones. Count and create collections by partitioning numbers using place value. Order numbers on a number chart. |
| 1 | 89 | Capacity 2 | Measurement | Use comparisons to decide which holds more or less. Use comparative language: empty, full, least, most. Compare capacities using a range of containers. Measure the capacity of a container using informal units. |
| 1 | 90 | Skip Counting | Addition \& Subtraction | Skip count by twos and fives. Make number bonds for numbers to 20 . Solve problems for the addition of three whole numbers. Use repeated addition to model and answer multiplication questions. |
| 1 | 91 | Near Doubles to 20 |  <br> Subtraction | Solve addition problems using the near doubles strategy. Use add to ten first as an addition strategy. Skip count by fives. Find different sums that add to make the same number. Solve addition of three whole numbers. Make number bonds for numbers to 20 . Count and create numbers by partitioning numbers using place value. |
| 1 | 92 | Change from £20 | Addition \& Subtraction | Solve addition problems involving money. Identify coins and notes. Match money using symbols: $£, \mathrm{p}$. Compare the cost of items. Use different denominations of notes and coins to make amounts. Solve subtraction problems requiring change. |
| 1 | 93 | Number Fact Families |  <br> Subtraction | Solve problems using the commutative property of addition. Fluently add to 10. Recognise different number combinations that make number fact families. Understand the equals sign. Work out if addition equations are true or false. Subitise small groups of objects in different formations. |
| 1 | 94 | Position 3 | Position \& Direction | Follow directions to familiar locations. Understand position words when giving and following directions: right, left, above, below, beneath, underneath, on top of, next to, between, beside, forward, under, clockwise, anticlockwise. |
| 1 | 95 | Add Within 100 | Addition \& Subtraction | Add a two-digit number and a one-digit number. Use strategies based on place value. Add two-digit numbers requiring sometimes to compose a ten. Add on a number line. Order numbers on a number chart. Solve addition problems using counting on as a strategy. Solve word problems using addition. Add multiples of ten to a two-digit number. Recognise different number combinations that make number fact families. |

## Mathseeds Year 1: Lesson 51-100

| YEAR | LESSON <br> NUMBER | LESSON <br> NAME | DOMAIN | LESSON CONTENT |
| :--- | :--- | :--- | :--- | :--- |
| $\mathbf{1}$ | 96 | Bridging to Ten |  <br> Subtraction | Solve addition problems using the bridge to ten strategy. Solve addition problems <br> using a number line. Write equations to solve addition problems. Understand the <br> equals sign. Work out if addition equations are true or false. Use comparative <br> language: larger, smaller. Solve addition problems using the jump strategy. Add <br> multiples of ten to a two-digit number. |
| $\mathbf{1}$ | 97 | Data 2 | Statistics | Represent data with objects and drawings. Sort data and represent using tally <br> marks. Understand one-to-one correspondence. Answer questions about data. |
| $\mathbf{1}$ | 98 | Add and <br> Subtract Tens |  <br> Subtraction | Add and subtract multiples of ten to a two-digit number. Add and subtract on a <br> number line. Add and subtract using a numbers chart. Understand the equals <br> sign. Work out if addition equations are true or false. Solve addition problems <br> by using the count on strategy. Subitise small groups of objects in different <br> formations. |
| $\mathbf{1}$ | 99 | 3D Objects | Properties of <br> Shapes | Recognise and sort two-dimensional shapes that are the faces of three- <br> dimensional objects. Identify prisms. Identify faces of prisms. Recognise features of <br> prisms. Identify objects shaped as prisms. |
| $\mathbf{1}$ | 100 | Subtracting <br> Unknown <br> Numbers |  <br> Subtraction | Find the unknown number in a subtraction equation. Solve problems using the <br> commutative property of addition. Fluently add to 10. Recognise different number <br> combinations that make number fact families. Solve subtraction problems by using <br> the count on strategy. Solve subtraction problems requiring change. |

## Mathseeds Year 2: Lesson 101-150

Pupils learn to count to 1000, identify odd and even numbers and round to the nearest 10 and 100. They build their place value skills, composing and decomposing numbers to 999. Pupils develop addition and subtraction strategies including the 'jump' and 'split' methods, as well as vertical addition and subtraction. Pupils practice grouping and sharing, and use the multiplication and division signs. They learn how to find a fraction of a collection of items.

Pupils investigate length and learn how to measure in metres and centimetres. They work with 2D shapes, make patterns that move and reflect, and study the features of 3D objects. Pupils tell time to the nearest 5 minutes and use a calendar to identify particular dates. They construct tally charts and pictograms, and interpret data in a variety of ways.

| YEAR | LESSON NUMBER | LESSON NAME | DOMAIN | LESSON CONTENT |
| :---: | :---: | :---: | :---: | :---: |
| 2 | 101 | $\begin{aligned} & \text { Counting } \\ & 100-500 \end{aligned}$ | Place Value | Read and write numbers to 500 . Count to 500 using base-ten numerals, number names, and expanded form. Know three-digit numbers represent amounts of hundreds, tens, and ones. Add 1, 10 or 100 to a given number 100-900. Subtract 1,10 or 100 from a given number 100-900. |
| 2 | 102 | Moving Shapes | Position \& Direction | Understand the effect of one-step slides, flips and turns. Know that moved objects do not alter size or features. Identify a quarter, half and three quarter turn. Tessellate shapes. |
| 2 | 103 | Adding 9 |  <br> Subtraction | Use the jump strategy to add 9 to numbers. Understand the equals sign. Work out if addition equations are true or false. Subitise small groups of objects in different formations. |
| 2 | 104 | Measuring | Measurement | Estimate lengths using metres. Measure lengths using metres. Compare lengths. Use comparative language: more than $1 \mathrm{~m} ; 1 \mathrm{~m}$; less than 1 m . |
| 2 | 105 | Partitioning Numbers to 1000 | Place Value | Read and write numbers to 500 . Count to 500 using base-ten numerals, number names, and expanded form. Know three-digit numbers represent amounts of hundreds, tens, and ones. Compose and decompose two- and three-digit numbers using tens and ones. |
| 2 | 106 | Counting $500-1000$ | Place Value | Count within 1000. Skip-count by 100s. Add 1, 10 or 100 to a given number 100900. Subtract 1, 10 or 100 from a given number 100-900. Use a number square to help skip count by 5 s. |
| 2 | 107 | Chance 2 | Statistics | Identify outcomes of familiar events involving chance. Use everyday chance language: will happen, won't happen, might happen, possible, impossible. Use comparative language: more likely, less likely. |
| 2 | 108 | Odd and Even Numbers |  <br> Subtraction | Determine if a number is odd or even. Use rules to add odd and even numbers. |
| 2 | 109 | The Calendar | Measurement | Use a calendar to identify the date. Determine the number of days in each month. Sequence months of the year. Countdown to dates using a calendar. Sequence days of the week. |
| 2 | 110 | Take Away by Partitioning |  <br> Subtraction | Solve subtraction problems using the jump strategy. Fluently subtract within 30 . Use place value to partition numbers to solve subtraction problems. Solve subtraction word problems. Subtract multiples of ten from a two-digit number. |
| 2 | 111 | Sharing 2 | Multiplication \& Division | Share a collection of objects into two, three, four or six equals groups. Arrange groups into arrays. Use addition to find the total number of objects in arrays. Count groups of objects. |
| 2 | 112 | Area 2 | Measurement | Understand that area measures how much a surface covers. Sort objects according to height. Sort objects according to area. Use informal measurement to count area. Compare to identify and order which is larger or smaller. |
| 2 | 113 | Grouping 2 | Multiplication \& Division | Count groups of objects. Recognise grouping as repeated addition. Use a number line to skip count. Write an equation to show the total as a sum of equals addends. Solve word problems by grouping and counting. |

## Mathseeds Year 2: Lesson 101-150

| YEAR | LESSON | LESSON NAME | DOMAIN | LESSON CONTENT |
| :--- | :--- | :--- | :--- | :--- |
| $\mathbf{N}$ | 114 | Quarter to and <br> Quarter past | Measurement |  | | Tell time to the quarterhour. Use language of time: quarter past, quarter to. |
| :--- |
| Recognise the position of clock hands when showing quarter to or quarter past. |
| Sequence months of the year. Countdown to dates using a calendar. Sequence |
| days of the week. |

## Mathseeds Year 2: Lesson 101-150

| YEAR | LESSON NUMBER | Lesson name | DOMAIN | LESSON CONTENT |
| :---: | :---: | :---: | :---: | :---: |
| 2 | 133 | Number Patterns 1 | Place Value | Identify a pattern in order to complete a number pattern: +2 pattern, -10 pattern, +100 pattern. |
| 2 | 134 | Subtract 3-digit Numbers |  <br> Subtraction | Practise vertical subtraction. Subtract two 2-digit numbers with no regrouping. Subtract two 3-digit numbers with no regrouping. |
| 2 | 135 | Comparing Mass | Measurement | Use non-standard units to measure the mass of different items. Count the units using tally marks. Present the information as a pictogram and interpret the graph. |
| 2 | 136 | The Division Sign | Multiplication \& Division | Use the division sign. Share items between groups and divide using a number line. |
| 2 | 137 | Word Problems: <br> Make a Table |  <br> Subtraction | Solve a word problem by organising information in a table. |
| 2 | 138 | Finding Fractions of a Collection | Fractions | Investigate a half, third, quarter and eighth of a share. Understand that the denominator tells you how many groups to make. |
| 2 | 139 | 2-Step Problem Solving | Addition \& Subtraction | Break a word problem into 2 separate sums. Focus on just addition, addition and subtraction sums, and just subtraction. |
| 2 | 140 | Revision | Addition \& Subtraction | Revise vertical addition and subtraction, grouping and fractions. Identify the properties of 2D shapes and 3D objects. Measure length in cm , match analogue and digital times and compare area in square units. Interpret pictograms. |
| 2 | 141 | Word Problems: Length | Measurement | Solve multi-step word problems involving length using a range of addition and subtraction strategies. These include creating a picture to find the difference, using a number line, mentally counting on by tens and exploring related number facts. |
| 2 | 142 | Fluent Facts within 20 | Addition \& Subtraction | Use number bonds to 10 and then to 20 to fluently complete addition equations. Apply knowledge of related addition and subtraction number facts to solve subtraction equations within 20. |
| 2 | 143 | Comparing <br> Lengths using Data | Statistics | Measure different lengths in cm and construct a bar chart to show the results. Interpret the bar chart to answer questions. |
| 2 | 144 | Adding within 1000 | Addition \& Subtraction | Explore 3 different strategies to add two 3-digit numbers: use base ten equipment to decompose and compose numbers; use vertical addition; use a number line. |
| 2 | 145 | Quadrilaterals | Properties of Shapes | Understand that shapes with 4 sides are called quadrilaterals. Identify quadrilaterals from a range of shapes. Identify how many sets of parallel lines a shape has and determine if it is a quadrilateral. |
| 2 | 146 | Subtracting within 1000 |  <br> Subtraction | Explore 3 different strategies to subtract two 3-digit numbers: use base ten equipment to decompose and compose numbers; use vertical subtraction; use a number line. |
| 2 | 147 | Word Problems: Money | Measurement | Solve multi-step word problems that involve adding the cost of three items to find the total; determining how much more money is needed to buy an item; adding the cost of three items and giving change from $£ 5$. |
| 2 | 148 | Mentally Adding and Subtracting |  <br> Subtraction | Use strategies to mentally add and subtract 10 or 100 to or from a given number 100-900. |
| 2 | 149 | Area of Rectangles | Measurement | Revision of area. Partition rectangles into square units; count square units to measure area; compare the areas of 2 shapes; create shapes based on a given area. |
| 2 | 150 | Adding and Subtracting 4-digit Numbers | Addition \& Subtraction | Add and subtract up to four 2-digit numbers using a variety of strategies including vertical algorithms, number lines and related number facts. |

## Mathseeds Year 3: Lesson 151-200

Pupils learn to count to 10000 , using place value to order numbers. They explore number patterns created by adding and subtracting, including the Fibonacci Sequence. Pupils begin to learn the times tables, aiming to know all products of two single-digit numbers by the end of year 3. They also learn about the parts of a fraction and explore how fractions relate to each other.

Pupils investigate symmetry and area in 2D shapes and in real world contexts. They measure liquids in litres and millilitres, time in minutes, and mass in grams and kilograms. They recognise notes and coins, and find equivalent amounts of money and correct change.

| YEAR | LESSON NUMBER | LESSON NAME | DOMAIN | LESSON CONTENT |
| :---: | :---: | :---: | :---: | :---: |
| 3 | 151 | $\begin{aligned} & \text { Counting } \\ & 1000-5000 \end{aligned}$ | Number \& Place <br> Value | Order numbers on a number line, counting forwards and backwards in thousands, hundreds and tens. Order numbers from smallest to largest. |
| 3 | 152 | Symmetry | Properties of Shapes | Explore vertical and horizontal lines of symmetry. Identify images in the environment that are symmetrical. |
| 3 | 153 | Number Patterns 2 | Number \& Place <br> Value | Identify addition and subtraction number patterns. Explore the Fibonacci Sequence and follow a rule to create a number pattern. Identify the rule to create a number pattern. |
| 3 | 154 | Litres \& Millilitres | Measurement | Introduce the litre and millilitre as units of measure. Understand that $1 \mathrm{~L}=1$ litre and $1 \mathrm{ml}=1$ millilitre, and that $1 \mathrm{~L}=1000 \mathrm{ml}$. Determine if a vessel holds more than, less than or is equal to 1 L . Read increments on measuring jugs in litres and millilitres to determine the amount of liquid there is. |
| 3 | 155 | Multiplication Revision | Multiplication \& Division | Revise multiplication strategies including repeated addition, grouping items together and using the multiplication sign in a number sentence. Solve multiplication word problems using the 'create a picture' strategy to help visualise the problem. |
| 3 | 156 | Counting $5000-10000$ | Number \& Place Value | Model a number using base ten equipment and match the number to its name. Place numbers on a number line and count forwards and backwards in thousands, hundreds and tens. Add $+1,+10,+100$ to a number. |
| 3 | 157 | Area 3 | Measurement | Count squares to measure area. Multiply the number of squares (length) by the number of squares (width). Multiply length x width to find the area in $\mathrm{m}^{2}$. |
| 3 | 158 | $\begin{aligned} & \text { Times Tables: } \\ & \times 2, \times 4 \end{aligned}$ | Multiplication \& Division | Explore the $\times 2, \times 4$ tables. Identify patterns in a hundred chart and understand that $2 \times 2$ means two groups of two. |
| 3 | 159 | Money: Equivalent Amounts 2 | Measurement | Count collections of coins and notes to determine the value. Understand that the same amount can be presented in different combinations of currency. Match different currency combinations to a given amount. Find the correct change combinations from a given amount up to $£ 50$. |
| 3 | 160 | Comparing \& Ordering Fractions | Fractions | Understand the role of the top and bottom numbers in a fraction, and use the term 'denominator'. Compare the sizes of fractions, including mixed numbers up to 2. Order simple fractions and mixed numbers on a number line. Fractions used: $\frac{1}{2}, \frac{1}{3}$, $\frac{1}{4}, \frac{1}{5}, \frac{1}{6}, \frac{1}{8}$. |
| 3 | 161 | Partitioning Numbers | Number \& Place Value | Use place value to partition and rearrange numbers up to 9999. Recognise the value of each digit in 4 -digit numbers. Increase the value of numbers by addition, and compare values using mathematical symbols. |
| 3 | 162 | Time to the Minute | Measurement | Recognise that there are 60 minutes in an hour, and tell time to the nearest minute. |
| 3 | 163 | Equivalent <br> Number Sentences | Addition \& Subtraction | Explore the connection between addition and subtraction using wholes and parts, related number facts and equivalent number sentences. |
| 3 | 164 | Maps |  | Identify features and places on a simple map using basic coordinates and compass directions. |
| 3 | 165 | Division | Multiplication \& Division | Revision of grouping and sharing using the division sign and related number facts. |

## Mathseeds Year 3: Lesson 151-200

| YEAR | $\begin{aligned} & \text { LESSON } \\ & \text { NUMBER } \end{aligned}$ | LESSON NAME | DOMAIN | LESSON CONTENT |
| :---: | :---: | :---: | :---: | :---: |
| 3 | 166 | Odd \& Even <br> Numbers 2 | Number \& Place <br> Value | Identify odd and even numbers using skip counting by twos on number lines and charts. Explore odd and even number patterns. |
| 3 | 167 | Chance 3 | Statistics | Investigate different chance experiments. Identify outcomes and possibilities and record results. |
| 3 | 168 | Multiplication <br> Word <br> Problems 2 | Multiplication \& Division | Use multiplication facts and related number facts to solve a variety of word problems. Explore the use of different strategies to solve problems. |
| 3 | 169 | Prisms and Pyramids | Properties of Shapes | Identify prisms and pyramids and describe their key features. |
| 3 | 170 | Addition 3 |  <br> Subtraction | Use vertical addition. Add two 3-digit numbers and introduce regrouping. |
| 3 | 171 | Times Tables 2: x8 | Multiplication \& Division | Explore the 4 x and 8 x tables. Identify number patterns and investigate the associative property of multiplication. |
| 3 | 172 | Kilograms \& Grams | Measurement | Measure and compare the mass of objects using grams and kilograms. Use a range of operations to solve one-step word problems involving mass. |
| 3 | 173 | Mental + - <br> Strategies |  <br> Subtraction | Use the compensation strategy to add and subtract numbers mentally. |
| 3 | 174 | Data 3 | Statistics | Collect data and draw a scaled picture graph. Solve one-step and two-step questions by interpreting the information presented in the graph. |
| 3 | 175 | Comparing Fractions of a Collection | Fractions | Investigate a half, a quarter, a third, a fifth and a tenth of a share. Understand that the denominator tells you how many groups to make. Compare quantities by comparing unit fractions with different denominators. |
| 3 | 176 | Times Tables 3: <br> Mental Facts | Multiplication \& Division | Explore times tables, including the $3 x$ and $6 x$ tables. Identify number patterns and investigate the distributive property of multiplication. |
| 3 | 177 | Angles | Properties of Shapes | Understand that angles are properties of 2D shapes and measures of turn. Identify angles in the environment and compare their sizes. |
| 3 | 178 | Subtraction with Regrouping |  <br> Subtraction | Apply place value to subtract two 3 -digit numbers. Use a variety of strategies to demonstrate regrouping when subtracting. |
| 3 | 179 | Comparing Times | Measurement | Compare the duration of an event, recognising that time can be recorded in minutes, seconds and hours. Understand the difference between am and pm time. |
| 3 | 180 | Equivalent Fractions | Fractions | Recognise equivalent fractions that are the same size or at the same point on a number line. Compare equivalent fractions. |
| 3 | 181 | Number Fact Families 2 | Multiplication \& Division | Solve problems using the commutative property of multiplication. Recognise different number combinations that make number fact families when multiplying and dividing. |
| 3 | 182 | Metres, Centimetres \& Millimetres | Measurement | Measure and compare objects using metres, centimetres and millimetres. Recognise which unit of measure is the most appropriate for the situation. |
| 3 | 183 | Solving Word <br> Problems |  <br> Subtraction | Solve a variety of addition and subtraction word problems using different strategies. |
| 3 | 184 | Properties of 2D <br> Shapes | Properties of Shapes | Revise the different categories of 2D shapes and group shapes according to their attributes. |
| 3 | 185 | Adding Fractions | Fractions | Add simple fractions that share the same denominator. Solve simple word problems. |
| 3 | 186 | Multiplication | Multiplication \& Division | Use vertical multiplication. Multiply 1 digit by 1 digit, and 2 digits by 1 digit. |
| 3 | 187 | Creating Graphs | Statistics | Collect data and draw a scaled bar graph. Solve one-step and two-step questions by interpreting the information presented in the graph. |
| 3 | 188 | Problem Solving |  <br> Subtraction | Solve word problems that involve the four operations. Interpret the question and determine the appropriate operation to solve the problem. |

## Mathseeds Year 3: Lesson 151-200

$\left.\begin{array}{lllll}\text { YEAR } & \begin{array}{l}\text { LESSON } \\ \text { NUMBER }\end{array} & \begin{array}{l}\text { LESSON } \\ \text { NAME }\end{array} & \text { DOMAIN } & \text { LESSON CONTENT } \\ \hline \mathbf{3} & 189 & \begin{array}{l}\text { Time Word } \\ \text { Problems }\end{array} & \text { Measurement }\end{array} \begin{array}{l}\text { Solve word problems that focus on time. Use addition and subtraction to calculate } \\ \text { time intervals in minutes. }\end{array}\right]$

