## Busy Ant Maths Year 2 Medium-Term Plans



| Number - |  | Geometry - |
| :---: | :---: | :---: |
|  <br> place value |  <br> subtraction | Properties <br> of shapes |


| Number - |  |
| :--- | :--- |
|  <br> subtraction |  <br> subtraction <br>  <br> height) |

## Unit 5

| Number - |  | Geometry - |
| :---: | :---: | :---: |
| Number \& | Addition \& | Properties |
| place value | subtraction <br> including <br> of shapes |  |
|  | Measurement <br> (money) |  |


| Number - |  | Geometry - |
| :---: | :---: | :---: |
| Number \& |  |  |
| place value |  <br> subtraction <br> direction |  |

## Unit 9

Geometry -
Position \& direction

| Number - | Measurement <br> (mass) |  |
| :---: | :---: | :---: |
| Multiplication | Multiplication |  |
| \& divison | \& divison |  |
| including <br>  <br> place value |  |  |

## Unit 10

| Number - | Measurement <br> (including |  |
| :---: | :---: | :---: |
| Multiplication | Multiplication | Temperature) |
| \& divison | \& divison |  |
| including | including |  |
|  <br> place value |  <br> place value |  |

## Unit II

## Number

## Unit 4

Number -
Multiplication Fractions
\& divison
including
Number \&
place value

## Unit 8

Number -
Multiplication Fractions

## \& divison

including
Number \&
place value

## Unit 7

Number -
Statistics
Addition \& Addition \&
subtraction subtraction
including
Measurement
(money)

## Unit 3

Number -
\& divison
including
Number \& Number \& place value

Geometry -
Position \& direction

| Number - | Statistics |  |
| :--- | :--- | :--- |
|  <br> subtraction |  <br> subtraction |  |



# Busy Ant Maths Year 2 Medium-Term Plans 

## Number - Number and place value <br> Unit 1 Number - Addition and subtraction Geometry - Properties of shapes

## National Curriculum attainment targets

Pupils should be taught to:
Number - Number and place value

- recognise the place value of each digit in a two-digit number (tens, ones)
- identify, represent and estimate numbers using different representations, including the number line
- compare and order numbers from 0 up to 100; use $<_{,}$> and = signs
- read and write numbers to at least 100 in numerals and in words
- use place value and number facts to solve problems


## Number - Addition and subtraction

- recall and use addition and subtraction facts to 20 fluently
- show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot
- recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems


## Geometry - Properties of shapes

- identify and describe the properties of 2-D shapes, including the number of sides and line symmetry in a vertical line
- compare and sort common 2-D shapes
- draw lines and shapes using a straight edge *

| Lesson objectives <br> Pupils will be taught to: | Lesson |
| :--- | :---: |
| Week 1 | - Read and write numbers to 50 in numerals <br> - Recognise the place value of each digit in a two-digit number up to 50 <br> (tens, ones) |
| - Compare and order numbers from 0 up to 50; use < and > signs | 2 |
| - Read and write numbers to 50 in words | 3 |
| - Use place value and number facts to solve problems | 4 |
| Week 2 | 1 |
| - Understand that addition of two numbers can be done in any order <br> (commutative rule) but subtraction cannot | 2 |
| - Recall and use addition and subtraction facts to 20 | 3 |
| - Recognise and use the inverse relationship between addition and <br> subtraction, and use this to check calculations | 4 |
| • Recall and use addition and subtraction facts to 20, using number lines, and <br> understand the term 'difference' | 4 |

## Week 3

| - Identify and describe the properties of 2-D shapes | 1 |
| :--- | :--- |
| - Identify and describe the properties of 2-D shapes, including the number of <br> sides and line symmetry in a vertical line | 2 |
| - Draw straight lines and 2D shapes using a straight edge | 3 |
| - Compare and sort common 2D shapes using appropriate mathematical <br> vocabulary (including quadrilateral) | 4 |

## Unit 2 Number - Addition and subtraction

## National Curriculum attainment targets

Pupils should be taught to:

## Number - Multiplication and division

- solve problems with addition and subtraction:
- using concrete objects and pictorial representations,
including those involving numbers, quantities and measures
- applying their increasing knowledge of mental methods
- recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100
- recognise and use the inverse relationship between addition and subtraction and use this to solve missing number problems


## Measurement (length \& height)

- choose and use appropriate standard units to estimate and measure length/height in any direction ( $\mathrm{m} / \mathrm{cm}$ ) to the nearest appropriate unit, using rulers
- compare and order lengths and record the results using $>,<$ and $=$

| Lesson objectives Pupils will be taught to: | Lesson |
| :---: | :---: |
| Week 1 |  |
| - Recall and use addition and subtraction facts to 20 , and derive and use related facts <br> - Apply increasing knowledge of mental methods | 1 |
| - Recall and use addition facts to 20 fluently, and derive and use related facts up to 100 <br> - Apply increasing knowledge of mental methods | 2 |
| - Recall and use subtraction facts to 20 , and derive and use related facts up to 100 <br> - Apply increasing knowledge of mental methods | 3 |
| - Use patterns of similar calculations <br> - Apply increasing knowledge of mental methods | 4 |
| Week 2 |  |
| - Add a one-digit number to a multiple of 10 | 1 |
| - Subtract a one-digit number from a multiple of 10 | 2 |
| - Solve missing number problems involving addition <br> - Recognise and use the inverse relationship between addition and subtraction to solve missing number problems | 3 |
| - Solve missing number problems involving subtraction <br> - Recognise and use the inverse relationship between addition and subtraction to solve missing number problems | 4 |
| Week 3 |  |
| - Estimate, measure and record lengths in centimetres | 1 |
| - Estimate, measure and record heights in centimetres and metres <br> - Convert metres to centimetres and vice versa | 2 |
| - Measure, compare and order different lengths <br> - Record using >, < and = | 3 |
| - Compare lengths using simple multiples | 4 |

* Notes and guidance (non-statutory)


## Busy Ant Maths Year 2 Medium-Term Plans

Unit 3 Number - Multiplication and division, including Number and place value Geometry - Position and direction

## National Curriculum attainment targets

## Pupils should be taught to:

Number - Multiplication and division

- calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication $(x)$, division $(\div)$ and equals (=) signs
- show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot
- solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts


## Number - Number and place value

- count in steps of 2 and 5 from 0, forward and backward


## Geometry - Position and direction

- order and arrange combinations of mathematical objects in patterns and sequences
- use mathematical vocabulary to describe position, direction and movement, including movement in a straight line

| Lesson objectives Pupils will be taught to: | Lesson |
| :---: | :---: |
| Week 1 |  |
| - Count in steps of 2 | 1 |
| - Calculate mathematical statements for multiplication within the 2 times table and write them using the multiplication $(x)$ and equals ( $=$ ) signs <br> - Show that multiplication of two numbers can be done in any order (commutative) | 2 |
| - Calculate mathematical statements for division within the 2 times table and write them using the division ( $\div$ ) and equals (=) signs <br> - Show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot | 3 |
| - Solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts | 4 |
| Week 2 |  |
| - Count in steps of 5 | 1 |
| - Calculate mathematical statements for multiplication within the 5 times table and write them using the multiplication $(x)$ and equals ( $=$ ) signs <br> - Show that multiplication of two numbers can be done in any order (commutative) | 2 |
| - Calculate mathematical statements for division within the 5 times table and write them using the division ( $\div$ ) and equals (=) signs <br> - Show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot | 3 |
| - Solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts | 4 |
| Week 3 |  |
| - Identify patterns and sequences involving 2-D shapes to make predictions about what comes next | 1 |
| - Order and arrange mathematical shapes to create patterns and sequences | 2 |
| - Describe and find the position of a square on a grid of squares with the rows and columns labelled | 3 |
| - Describe direction using mathematical language (North, South, East, West) | 4 |

## Busy Ant Maths Year 2 Medium-Term Plans

| Number - Multiplication and division, including Number and place value <br> Number - Fractions <br> Measurement (time) |  |  |
| :---: | :---: | :---: |
| National Curriculum attainment targets Pupils should be taught to: | Lesson objectives Pupils will be taught to: | Lesson |
| Number - Multiplication and division | Week 1 |  |
| - calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication $(\times)$, division ( $\div$ ) and equals (=) signs <br> - show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot <br> - solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts | - Count in steps of 10 | 1 |
|  | - Calculate mathematical statements for multiplication within the 10 times table and write them using the multiplication ( $\times$ ) and equals (=) signs <br> - Show that multiplication of two numbers can be done in any order (commutative) | 2 |
|  | - Calculate mathematical statements for division within the 10 times table and write them using the division $(\div)$ and equals (=) signs <br> - Show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot | 3 |
| Number - Number and place value |  |  |
| - count in steps of 2 and 5 from 0 , and in tens from any number, forward and backward | - Solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts | 4 |
| Number - Fractions | Week 2 |  |
| - recognise, find, name and write fractions $\frac{1}{3}, \frac{1}{4}, \frac{2}{4}$ and $\frac{3}{4}$ of a length, shape, set of objects or quantity <br> - write simple fractions for example, $\frac{1}{2}$ of $6=3$ and recognise the equivalence of $\frac{2}{4}$ and $\frac{1}{2}$ | - Recognise, find, name and write fractions $\frac{1}{2}, \frac{1}{4}, \frac{2}{4}$ and $\frac{3}{4}$ of a shape | 1 |
|  | - Recognise, find, name and write fractions $\frac{1}{2}, \frac{1}{4}, \frac{2}{4}$ and $\frac{3}{4}$ of a shape <br> - Recognise that two quarters are the same as one half | 2 |
|  | - Find half of a set of objects <br> - Identify the total number of objects when half is known | 3 |
|  | - Find a quarter and three-quarters of a set of objects <br> - Identify the total number of objects when a quarter of three-quarters is known | 4 |
| Measurement (time) | Week 3 |  |
| - tell and write the time to five minutes, including quarter past/to the hour and draw the hands on a clock face to show these times <br> - know the number of minutes in an hour | - Tell and write the time to quarter past the hour <br> - Draw the hands on a clock face to show these times | 1 |
|  | - Tell and write the time to quarter to the hour <br> - Draw the hands on a clock face to show these times | 2 |
|  | - Tell and write the time to quarter past and quarter to the hour <br> - Draw the hands on a clock face to show these times | 3 |
|  | - Tell and write the time to 5 minutes, focusing on 5 to 30 minutes past <br> - Draw the hands on a clock face to show these times | 4 |

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## Introduction

## Busy Ant Maths Year 2 Medium-Term Plans

## Number - Number and place value <br> Unit 5 Number - Addition and subtraction, including Measurement (money) <br> Geometry - Properties of shapes

## National Curriculum attainment targets

Pupils should be taught to:
Number - Number and place value

- count in steps of 3 from 0 , forward and backward
- identify, represent and estimate numbers using different representations, including the number line
- compare and order numbers from 0 up to 100; use <, > and $=$ signs
- read and write numbers to at least 100 in numerals and in words


## Number - Addition and subtraction

- solve problems with addition and subtraction:
- using concrete objects and pictorial representations, including those involving numbers, quantities and measures
- applying their increasing knowledge of mental methods
- add and subtract numbers using concrete objects, pictorial representations, and mentally, including:
- a two-digit number and ones


## Measurement (money)

- recognise and use symbols for pounds ( $£$ ) and pence (p); combine amounts to make a particular value


## Statistics

- identify and describe the properties of 3-D shapes, including the number of edges, vertices and faces
- identify 2-D shapes on the surface of 3-D shapes, [for example, a circle on a cylinder and a triangle on a pyramid]
- compare and sort common 2-D and 3-D shapes and everyday objects

| Lesson objectives Pupils will be taught to: | Lesson |
| :---: | :---: |
| Week 1 |  |
| - Count in steps of 3 | 1 |
| - Read and write numbers to 100 in numerals and in words | 2 |
| - Compare and order numbers from 0 up to 100; use $<_{1}$, > and = signs | 3 |
| - Estimate numbers using a number line | 4 |
| Week 2 |  |
| - Add two-digit numbers and ones | 1 |
| - Subtract two-digit numbers and ones | 2 |
| - Double numbers to 20 | 3 |
| - Recognise and use symbols for pounds ( $£$ ) and pence ( $p$ ) <br> - Combine amounts to make a particular value | 4 |
| Week 3 |  |
| - Identify and describe the properties of 3-D shapes, including the number of edges, vertices and faces | 1 |
| - Identify 2-D shapes on the surface of 3-D shapes | 2 |
| - Compare and sort common 2-D and 3-D shapes | 3 |
| - Compare and sort common 2-D and 3-D shapes and everyday objects | 4 |

## Unit 6 Number - Multiplication and division, including Number and place value Measurement (mass)

## National Curriculum attainment targets

Pupils should be taught to:
Number - Multiplication and division

- recall and use multiplication and division facts for the 2,5 and 10 multiplication tables, including recognising odd and even numbers
- calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication ( $\times$ ), division ( $\div$ ) and equals (=) signs
- solve problems involving multiplication and division using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts


## Number - Number and place value

- count in steps of 2 and 5 from 0, and in tens from any number, forward and backward


## Measurement (mass)

- choose and use appropriate standard units to estimate and measure mass ( $\mathrm{kg} / \mathrm{g}$ ) to the nearest appropriate unit, using scales
- compare and order mass and record the results using > < and =

| Lesson objectives <br> Pupils will be taught to: | Lesson |
| :--- | :---: |
| Week 1 | - Count in steps of 2 and 5 from 0, forward and backward <br> - Count in tens from any number, forward and backward |
| - Recall and use multiplication facts for the 2 multiplication table | 1 |
| - Recall and use multiplication and division facts for the 2 multiplication table | 3 |
| - Recall and use multiplication facts for the 5 multiplication table | 4 |
| Week 2 | 2 |
| - Recall and use multiplication and division facts for the 5 multiplication table | 1 |
| - Recall and use multiplication facts for the 10 multiplication table | 2 |
| - Recall and use multiplication and division facts for the 10 multiplication |  |
| table | 3 |
| - Solve problems involving multiplication and division, using arrays | 4 |
| Week 3 | 2 |
| - Estimate, measure and record mass in kilograms | 1 |
| - Estimate, measure and record masses in grams and kilograms <br> - Convert kilograms to grams and vice versa | 2 |
| - Measure, compare and order different masses |  |
| - Record using >, < and = | 3 |
| • Compare mass using simple multipless | 4 |

[^1]
## Busy Ant Maths Year 2 Medium-Term Plans

| Number - Addition and subtraction <br> Number - Addition and subtraction, including Measurement (money) Statistics |  |  |
| :---: | :---: | :---: |
| National Curriculum attainment targets Pupils should be taught to: | Lesson objectives Pupils will be taught to: | Lesson |
| Number - Addition and subtraction | Week 1 |  |
| - add and subtract numbers using concrete objects, pictorial representations, and mentally, including: <br> - a two-digit number and tens <br> - adding three one-digit numbers <br> - show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot <br> - recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems | - Add two-digit numbers and tens | 1 |
|  | - Subtract two-digit numbers and tens | 2 |
|  | - Find missing numbers when multiples of 10 are added to or subtracted from two-digit numbers | 3 |
|  | - Add three one-digit numbers <br> - Show that addition can be done in any order | 4 |
| Number - Addition and subtraction | Week 2 |  |
| - solve problems with addition and subtraction: <br> - using concrete objects and pictorial representations, including those involving numbers <br> - applying their increasing knowledge of mental methods <br> - add and subtract numbers using concrete objects, pictorial representations, and mentally | - Add a 'near multiple of 10' to a two-digit number | 1 |
|  | - Subtract a 'near multiple of 10' from a two-digit number | 2 |
|  | - Find different combinations of coins that equal the same amounts of money | 3 |
| Measurement (money) |  |  |
| - find different combinations of coins that equal the same amounts of money <br> - solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change | - Solve practical money problems, including giving change | 4 |
| Statistics | Week 3 |  |
| - interpret and construct tally charts and simple tables <br> - ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity <br> - ask and answer questions about totalling and comparing categorical data | - Sort objects into groups, counting the number of objects in each category and comparing totals | 1 |
|  | - Construct a tally chart from a Carroll Diagram and vice versa | 2 |
|  | - Interpret and construct a simple frequency table | 3 |
|  | - Sort information using a Venn Diagram | 4 |

## Busy Ant Maths Year 2 Medium-Term Plans



* Notes and guidance (non-statutory)


# Busy Ant Maths Year 2 Medium-Term Plans 

## Unit $9 \quad \begin{aligned} & \text { Number - Number and place value } \\ & \text { Number - Addition and subtraction }\end{aligned}$ Geometry - Position and direction

## National Curriculum attainment targets

Pupils should be taught to:

## Number - Number and place value

- count in steps of 3 from 0, forward and backward
- recognise the place value of each digit in a two-digit number (tens, ones)
- compare and order numbers from 0 up to 100; use $<$, > and = signs
- use place value and number facts to solve problems


## Number - Addition and subtraction

- add and subtract numbers using concrete objects, pictorial representations, and mentally, including:
- two two-digit numbers
- show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot
- recognise and use the inverse relationship between addition and subtraction and use this to check calculations


## Geometry - Position and direction

- use mathematical vocabulary to describe position, direction and movement, including movement in a straight line and distinguishing between rotation as a turn and in terms of right angles for quarter, half and three-quarter turns (clockwise and anti-clockwise)

| Lesson objectives Pupils will be taught to: | Lesson |
| :---: | :---: |
| Week 1 |  |
| - Count in steps of 3 | 1 |
| - Recognise the place value of each digit in a two-digit number up to 100 | 2 |
| - Compare and order numbers from 0 up to 100; use $<_{\text {, }}>$ and $=$ signs | 3 |
| - Use place value and number facts to solve problems | 4 |
| Week 2 |  |
| - Add two two-digit numbers using the 1-100 number square | 1 |
| - Add two two-digit numbers using the empty number line | 2 |
| - Subtract two two-digit numbers using the 1-100 number square | 3 |
| - Subtract two two-digit numbers using the empty number line | 4 |
| Week 3 |  |
| - Use mathematical vocabulary to describe rotation as a turn for quarter, half and three-quarter turns (clockwise and anti-clockwise) | 1 |
| - Use mathematical vocabulary to describe movement and distinguish between rotation as a turn and in terms of right angles for quarter, half and three-quarter turns (clockwise and anti-clockwise) | 2 |
| - Use mathematical vocabulary to describe position, direction and movement | 3 |
| - Use mathematical vocabulary to give directions to navigate a course | 4 |

* Notes and guidance (non-statutory)


## Unit 10 Number - Multiplication and division, including Number and place value <br> Measurement, including Temperature

## National Curriculum attainment targets

Pupils should be taught to:

## Number - Multiplication and division

- recall and use multiplication and division facts for the

2,5 and 10 multiplication tables, including recognising odd and even numbers

- calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication $(x)$, division $(\div)$ and equals (=) signs
- solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts


## Number - Number and place value

- count in steps of 2 and 5 from 0 , and in tens from any number, forward and backward


## Measurement, including Temperature

- choose and use appropriate standard units to estimate and measure length/height in any direction ( $\mathrm{m} / \mathrm{cm}$ ); mass (kg/g); temperature ( ${ }^{\circ} \mathrm{C}$ ); capacity (litres/ml) to the nearest appropriate unit, using rulers, scales, thermometers and measuring vessels
- compare and order lengths, mass, volume/capacity and record the results using $>$, < and =
$\left.\begin{array}{|l|c|}\hline \begin{array}{l}\text { Lesson objectives } \\ \text { Pupils will be taught to: }\end{array} & \text { Lesson } \\ \hline \text { Week 1 } & \text { - Count in steps of 2 from 0 }\end{array}\right] 1$

[^2]
## Busy Ant Maths Year 2 Medium-Term Plans

| Number - Addition and subtraction <br> Unit 11 Number - Addition and subtraction Statistics |  |  |
| :---: | :---: | :---: |
| National Curriculum attainment targets Pupils should be taught to: | Lesson objectives Pupils will be taught to: | Lesson |
| Number - Addition and subtraction | Week 1 |  |
| - solve problems with addition and subtraction: <br> - using concrete objects and pictorial representations including those involving numbers, quantities and measures <br> - applying their increasing knowledge of mental and written methods <br> - add and subtract numbers using concrete objects, pictorial representations, and mentally, including: - two two-digit numbers <br> - show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot <br> - recognise and use the inverse relationship between addition and subtraction and use this to check calculations <br> - record addition and subtraction in columns to support place value and prepare for formal written methods with larger numbers * | - Add two two-digit numbers using partitioning <br> - Solve problems with addition, applying an increasing knowledge of mental and written methods - partitioning | 2 |
|  | - Subtract two two-digit numbers using partitioning | 3 |
|  | - Solve problems with subtraction, applying an increasing knowledge of mental and written methods - partitioning | 4 |
|  | Week 2 |  |
|  | - Add two two-digit numbers using the expanded written method | 1 |
|  | - Subtract two two-digit numbers using the written method | 2 |
|  | - Solve addition and subtraction problems using written methods | 3 |
|  | - Solve addition and subtraction problems using mental and written methods | 4 |
| Statistics | Week 3 |  |
| - interpret and construct simple pictograms block diagrams and simple tables <br> - use many-to-one correspondence in pictograms with simple ratios of 2 * <br> - ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity <br> - ask and answer questions about totalling and comparing categorical data | - Make and use a block diagram to ask and answer questions about information gathered <br> - Compare pictograms and block diagrams | 1 |
|  | - Make and use a block diagram to ask and answer questions about information gathered | 2 |
|  | - Construct a simple pictogram and ask and answer questions from the information collected | 3 |
|  | - Begin to compare different presentations of the same information | 4 |

* Notes and guidance (non-statutory)


## Busy Ant Maths Year 2 Medium-Term Plans



* Notes and guidance (non-statutory)


[^0]:    * Notes and guidance (non-statutory)

[^1]:    * Notes and guidance (non-statutory)

[^2]:    * Notes and guidance (non-statutory)

