Gainford CE Primary and Preschool

Maths Learning Plan Term 1

<u>Year 3</u>

| Topic or Activity | Year 3 Term 1 Knowledge Based Learning Objectives |
|--------------------------------|---|
| Number: Place Value | Identify, represent and estimate numbers using different representations |
| | Find 10 or 100 more or less than a given number |
| | Recognise the place value of each digit in a three-digit number (hundreds, tens, ones) |
| | Compare and order numbers up to 1000 |
| | Read and write numbers up to 1000 in numerals and in words |
| | Solve number problems and practical problems involving these ideas |
| | Count from 0 in multiples of 4, 8, 50 and 100; |
| Number: Addition & Subtraction | Add and subtract numbers mentally, including: a three-digit number and ones; a three-digit number and tens; a three-digit number and hundreds |
| | Add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction |
| | Estimate the answer to a calculation and use inverse operations to check answers |
| | Solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction |
| Number: Multiplication & | Count from 0 in multiples of 4, 8, 50 and 100 |
| Division | Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables |
| | Write and calculate mathematical statements for multiplication and division using the multiplication |
| | tables that they know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods |
| | Solve problems, including missing number problems, involving multiplication and division, including positive integer scaling problems and correspondence problems in which n objects are connected to m objects |

Year 3 | Autumn Term | Week 1 to 3 – Number: Place Value



Overview Small Steps

| Hundreds |
|--|
| Represent numbers to 1,000 |
| 100s, 10s and 1s (1) |
| 100s, 10s and 1s (2) |
| Number line to 1,000 |
| Find 1, 10, 100 more or less than a given number |
| Compare objects to 1,000 |
| Compare numbers to 1,000 |
| Order numbers |
| Count in 50s |

NC Objectives

Identify, represent and estimate numbers using different representations.

Find 10 or 100 more or less than a given number.

Recognise the place value of each digit in a three-digit number (hundreds, tens, ones).

Compare and order number up to 1,000.

Read and write numbers up to 1,000 in numerals and in words.

Solve number problems and practical problems involving these ideas.

Count from 0 in multiples of 4, 8, 50 and 100

Year 3 | Autumn Term | Week 4 to 8 - Number: Addition & Subtraction



Overview Small Steps

| Add | and | subtract | m | ultipl | es o | f 1 | 00 | |
|----------------|-----|--------------|---|--------|--------|-----|--------|--|
| م ما <u>ما</u> | and | au latira at | z | distit | م م ما | 1 | di mit | |

- Add and subtract 3-digit and 1-digit numbers not crossing 10
- Add 3-digit and 1-digit numbers crossing 10
- Subtract a 1-digit number from a 3-digit number crossing 10
- Add and subtract 3-digit and 2-digit numbers not crossing 100
- Add 3-digit and 2-digit numbers crossing 100
- Subtract a 2-digit number from a 3-digit number crossing 100
- Add and subtract 100s
- Spot the pattern making it explicit
- Add and subtract a 2-digit and 3-digit numbers not crossing 10 or 100
- Add a 2-digit and 3-digit numbers crossing 10 or 100
- Subtract a 2-digit number from a 3-digit number crossing 10 or 100
- Add two 3-digit numbers not crossing 10 or 100
- Add two 3-digit numbers crossing 10 or 100
 - Subtract a 3-digit number from a 3-digit number no exchange

NC Objectives

Add and subtract numbers mentally, including: a three-digit number and ones; a three-digit number and tens; a three-digit number and hundreds.

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

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

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

Year 3 | Autumn Term | Week 9 to 11 - Number: Multiplication & Division



Overview Small Steps

| Multiplication – equal groups |) |
|-------------------------------|---|
| Multiply by 3 | |
| Divide by 3 | |
| The 3 times table | |
| Multiply by 4 | |
| Divide by 4 | ſ |
| The 4 times table | |
| Multiply by 8 | |
| Divide by 8 | |
| The 8 times table | J |

NC Objectives

Count from 0 in multiples of 4, 8, 50 and 100

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

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

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

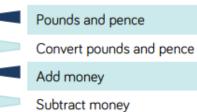
Maths Learning Plan Term 2 Year 3

| Topic or Activity | Year 3 Term 2 Knowledge Based Learning Objectives |
|--------------------------|---|
| Number: Multiplication & | Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables |
| Division | Write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods |
| | Solve problems, including missing number problems, involving multiplication and division, including positive integer scaling problems and correspondence problems in which n objects are connected to m objects |
| Measurement: Money | Add and subtract amounts of money to give change, using both £ and p in practical contexts |
| Statistics | Interpret and present data using bar charts, pictograms and tables |
| | Solve one-step and two-step questions [e.g. 'How many more?' and 'How many fewer?'] using information presented in scaled bar charts and pictograms and tables |
| Measurement: Length & | Measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (I/mI) |
| Perimeter | Measure the perimeter of simple 2-D shapes |
| Number: Fractions | Count up and down in tenths |
| | Recognise that tenths arise from dividing an object into 10 equal parts and in dividing one – digit numbers or quantities by 10 |
| | Recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators |
| | Recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators |
| | Solve problems that involve all of the above |



Year 3 | Spring Term | Week 4 – Measurement: Money

Overview Small Steps



Give change



NC Objectives

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

Year 3 | Spring Term | Week 5 to 6 – Statistics

Overview Small Steps

| Pictograms | |
|------------|---|
| Bar Charts | > |
| Tables | J |



NC Objectives

Interpret and present data using bar charts, pictograms and tables.

Solve one-step and two-step questions [for example, 'How many more?' and 'How many fewer?'] using information presented in scaled bar charts and pictograms and tables.

Year 3 | Spring Term | Week 7 to 9 - Measurement: Length & Perimeter



Overview Small Steps

| Measure length |
|------------------------------|
| Equivalent lengths – m & cm |
| Equivalent lengths – mm & cm |
| Compare lengths |
| Add lengths |
| Subtract lengths |
| Measure perimeter |
| Calculate perimeter |

NC Objectives

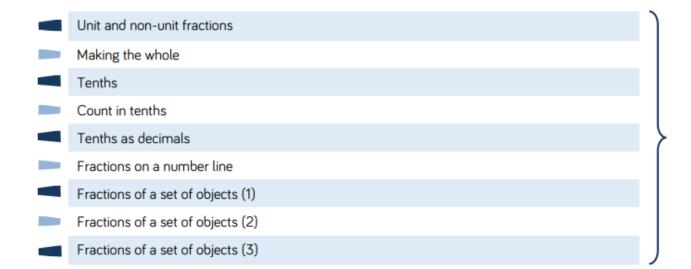
Measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml).

Measure the perimeter of simple 2-D shapes.

Year 3 | Spring Term | Week 10 to 11 - Number: Fractions



Overview Small Steps



NC Objectives

Count up and down in tenths; recognise that tenths arise from dividing an object into 10 equal parts and in dividing one-digit numbers or quantities by 10

Recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators.

Recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators.

Solve problems that involve all of the above.

Maths Learning Plan Term 3 Year 3

| Topic or Activity | Year 3 Term 3 Knowledge Based Learning Objectives |
|-------------------------------|--|
| Number: Fractions | Recognise and show, using diagrams, families of common equivalent fractions |
| | compare and order unit fractions, and fractions with the same denominators |
| | Add and subtract fractions with the same denominator within one whole (e.g. $\frac{5}{7} + \frac{1}{7} = \frac{6}{7}$) |
| | Solve problems that involve all of the above |
| Measurement: Time | Tell and write the time from an analogue clock, including using Roman numerals from I to XII, and 12- hour and 24-hour clocks |
| | Estimate and read time with increasing accuracy to the nearest minute; |
| | Record and compare time in terms of seconds, minutes, hours and o'clock; |
| | Use vocabulary such as a.m./p.m., morning, afternoon, noon and midnight |
| | Know the number of seconds in a minute and the number of days in each month, year and leap year |
| | Compare durations of events, for example to calculate the time taken by particular events or tasks |
| Geometry: Properties of Shape | Recognise angles as a property of shape or a description of a turn |
| | Identify right angles, recognise that two right angles make a half-turn, three make three quarters of a |
| | turn and four a complete turn; identify whether angles are greater than or less than a right angle |
| | Identify horizontal and vertical lines and pairs of perpendicular and parallel lines |
| | Draw 2-D shapes and make 3-D shapes using modelling materials; |
| | Recognise 3-D shapes in different orientations and describe them |
| Measurement: Mass, Capacity & | Measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml) |
| Temperature | |



Year 3 | Summer Term | Week 4 to 6 - Measurement: Time



Year 3 | Summer Term | Week 7 to 8 - Geometry: Properties of Shape



Year 3 | Summer Term | Week 9 to 11 - Measurement: Mass & Capacity

