<u>Year 3 Maths</u> <u>Areas of Focused Learning and Associated Vocabulary</u>

Counting, partitioning and calculating

- Addition and subtraction
- Mental methods: 1- and 2-digit numbers
- Written methods: 2- and 3-digit numbers
- Reading, writing, ordering, partitioning and rounding 2- and 3-digit numbers
- Solving one- and two-step word problems involving numbers, money or measures
- Explaining methods and reasoning, orally and on paper
- Multiplication and division
- Multiplying 1- and 2-digit numbers by 10 or 100
- Informal written methods: multiplying and dividing TU by U; rounding remainders

problem, solution, calculate, calculation, answer, method, explain, reasoning, pattern, predict

place value, partition, digit, ones, tens, hundreds, one-digit number, two-digit number, three-digit number, compare, order, equals (=)

count on/back, add, subtract, multiply, times, divide, share, group, sum, total, difference, plus, minus

pound (f), penny/pence (p), note, coin, units of measurement and their abbreviations

Securing number facts, understanding shape

- Recognising, using and drawing right angles
- Drawing and comparing angles
- Dividing and recalling number facts for all operations
- Estimating and checking
- Solving one- and two-step word problems involving numbers, money or measures
- Identifying and using patterns and relationships to solve problems
- Interpreting drawings of shapes and using reflective symmetry to draw and complete shapes

problem, solution, calculate, calculation, operation, inverse, answer, method, explain, reasoning, pattern, predict, estimate, approximate

add, subtract, multiply, divide, group, sum, total, difference, plus, minus, double, halve, multiple, product

pound (f), penny/pence (p), note, coin, units of measurement and their abbreviations

triangle, square, rectangle, quadrilateral, pentagon, hexagon, octagon, circle, semicircle, cube, cuboid, pyramid, cone, cylinder, prism, sphere, hemisphere, face, edge, vertex/vertices, surface, solid, side, straight, curved, diagram, right-angled

line of symmetry, mirror line, reflection, symmetrical, reflective symmetry

Handling data and measures

- Reading times and calculating time intervals
- Sorting information using lists, tables and diagrams
- Presenting data in frequency tables and bar charts
- Collecting, organising, presenting and interpreting data to follow a line of enquiry
- Identifying further questions
- Choosing and using appropriate units of measurement
- Knowing relationships between units of measure
- Using ICT

problem, enquiry, solution, calculate, calculation, method, explain, reasoning, reason, predict, pattern, relationship, collect, organise, compare, sort, classify, represent, interpret, effect

information, data, survey, questionnaire, table, frequency table, block graph, bar chart, Carroll diagram, Venn diagram, axis/axes, horizontal axis, vertical axis, label, title, scale, interval, division

frequency, how often?, how frequently?, more/less, most/least, most/least popular, most/least frequent, greatest/least value, approximately, close, about the same as, ten times, hundred times

metric unit, standard unit, millimetre (mm), centimetre (cm), metre (m), kilogram (kg), gram (g), litre (l), millilitre (ml), degree Celsius °, ruler, tape measure, balance, scales, thermometer, capacity, weight, length, width, height, depth, temperature

time, timer, clock, second, minute, hour, day, week, month, year, before, after, interval, start time, end time, how long ago?, how long will it take to ...?, how long will it be to ...

Calculating, measuring and understanding shape

- Understanding multiplication and division as inverse operations
- Using inverses to estimate and check calculations
- Developing written methods of calculation for all four operations
- Finding unit fractions of numbers and quantities
- Solving problems and representing information; set solutions in the context of the problem
- Using measures and scales
- Comparing angles with right angles
- Using the vocabulary of position, direction and movement

problem, solution, puzzle, pattern, methods, sign, operation, symbol, number sentence, equation, mental calculation, written calculation, informal method, jottings, diagrams, pictures, images

add, plus, sum, total, subtract, take away, minus, difference, double, halve, inverse, multiply, times, multiplied by, product, multiple, share, share equally, divide, divided by, divided into, left, left over, remainder

fraction, part, equal parts, one whole, one half, one third, one quarter, one fifth, one sixth, one tenth

grid, row, column, horizontal, vertical, diagonal, higher, lower

map, plan, compass point, north (N), south (S), east (E), west (W), turn, whole turn, half turn, quarter turn, clockwise, anticlockwise, right, left, up, down, ascend, descend, forwards, backwards, sideways, across

measuring scale, interval, division, unit, standard unit, approximately, close, about the same as, ten times, hundred times measure, estimate, unit, length, distance, weight, capacity, ruler, tape measure, balance, scales, measuring cylinder/jug, angle, right angle, setsquare, units of measurement and abbreviations: metre (m), centimetre (cm), millimetre (mm), kilogram (kg), gram (g), litre (l), millilitre (ml)

time, clock, watch, hour (h), minute (min), second (s)

Securing number facts, relationships and calculating

- Interpreting and using proper fractions
- Finding unit fractions of quantities
- Deriving and consolidating knowledge of number facts for all four operations
- Following lines of enquiry, and solving problems
- Solving problems by identifying patterns and relationships in numbers
- Developing practical and written methods for adding, subtracting, multiplying and dividing 2-digit numbers
- Interpreting remainders in context

problem, solution, calculate, calculation, inverse, answer, method, explain, predict, estimate, reason, pattern, relationship, compare, order, information, test, list, table, diagram

place value, partition, ones, tens, hundreds, one-digit number, two-digit number, three-digit number

sign, equals (=), operation, symbol, number sentence, equation, mental calculation, written calculation, informal method, jottings, number line

count on, count back, add, plus, sum, total, subtract, take away, minus, difference, double, halve, inverse, multiply, times, multiplied by, product, multiple, share, share equally, divide, divided by, divided into, left, left over, remainder, round up, round down

fraction, part, equal parts, one whole, parts of a whole, number of parts, one half, one third, one quarter, one fifth, one sixth, one tenth, two thirds, three quarters, three fifths, unit fraction

Fun Activities to do at home

Number Games

- Roll two dice to make a two-digit number e.g. if you roll a 6 and 4 this could be 64 or 46. Now do some of these activities.
- Count on or back from each number in tens.
- Add 9 to each number in your head (you could add 10 and 1). Extend to adding 19, 29 etc.
 - Subtract 9, 19, 29.
 - Double each number.
 - Halve each number.

Can you tell the time?

- Whenever possible, ask your child to tell you the time to the nearest 5 minutes. Use a clock with hands as well as a digital clock.
- Also ask: what time will it be in one hour?
 - What time was it an hour ago?
- Time your child doing various tasks
 e.g. getting ready for school, saying the 5 times table. Predict first.

Guess my number

- Choose a car number plate you can see e.g. AJ34 TSL
- Add ten to the first number in your head. Say the answer out loud. E.g. 13 (3 + 10)
- Can your child guess which car you were looking at?
 - Take turns.

Cupboard Maths

- Look at weights printed on jars, tins and packets of food.
- Choose six items. Place them in order according to weight. Is the largest item the heaviest?
- How many items are needed to be close to 1

kg?

Everyday Games and Ideas

- Skipping count the skips, count in 3s, 4s
- Ludo
- Beetle
- Dominoes
- Card games
- Times Table Bingo
- Heads and tails keep a tally
- Connect 4
- I spy a number + 10. e.g. I spy the number 7 + 10
- Number jigsaws
- Dot to dot with numbers
- Yahtzee
- Happy Families
- Sharing out toys, sweets
- Using telephone numbers for addition, place value, number bonds etc
- Using pizza for simple fractions whole, half and so on
- Cars on a journey e.g. how many red cars?
- Cooking and baking
- Shopping e.g. looking at prices, reading labels to discuss Capacity, weight and shape, value of coins using money.

Progression in Calculation Methods

This document explains the different methods and strategies we use for written methods of calculation. Please use the links on our website.

Useful Websites:

- <u>www.counton.org</u> has lots of ideas and games to play.
- <u>www.learn.co.uk</u> help for children with maths.
- <u>www.bbc.co.uk/schools</u> games to play.
- Google 'Coxhoe Primary School Maths' and this leads to lots of games children can play and links to other web sites.

Last but not least...

- It is important that you talk and listen to your child about their work in maths. It will help your child if they have to explain and show to you.
- Share a maths activity with your child and discuss ideas with them.
- Be positive about maths, even if you do not feel confident about it yourself.
- If your child is having any problems with maths do let us know by either writing a note or popping in to see us.
- Maths is all around us use everyday situations to help develop your child's vocabulary.
- If you need further information just ask.
- Play games and have fun!