Waterville Primary School Progression of Skills and Vocabulary in MATHS

Year 1

KS1 National Curriculum

The principal focus of mathematics teaching in key stage 1 is to ensure that pupils develop confidence and mental fluency with whole numbers, counting and place value. This should involve working with numerals, words and the 4 operations, including with practical resources [for example, concrete objects and measuring tools].

At this stage, pupils should develop their ability to recognise, describe, draw, compare and sort different shapes and use the related vocabulary. Teaching should also involve using a range of measures to describe and compare different quantities such as length, mass, capacity/volume, time and money.

By the end of Year 1 pupils should:

∗Count within 100, forwards and backwards, starting with any number.

*Develop fluency in addition and subtraction facts with 10.

*Compose numbers to 10 from 2 parts, and partition numbers to 10 into parts.

*Recognise common 2-D and 3-D shapes presented in different orientations.

*Reason about the location of numbers to 20 within the linear number system, including using < > and =.

*Count forwards and backwards in multiples of 2, 5 and 10, up to 10 multiples, beginning with any multiple.

*Read, write and interpret equations containing addition (+), subtraction (-) and equals (=) symbols.

*Compose 2-D and 3-D shapes from smaller shapes to match an example.

TEACH – MODEL – USE MANIPULATIVES – RECORD – INVESTIGATE – MASTER - REPEAT

Year 1 Maths Skills

Number – Number and Place Value	Number – Addition and Subtraction	Number – Multiplication and Division	Number – Fractions
Counting To count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number To count, read and write numbers to 100 in numerals; count in multiples of twos, fives and tens. To identify one more and one less if given a number. **Comparing Numbers** To use the language of: equal to, more than, less than (fewer), most, least. **Identifying, Representing and Estimating Numbers** To identify and represent numbers using objects and pictorial representations including the number line. **Reading and Writing Numbers** To read and write numbers from 1 to 20 in numerals and words.	**Number Bonds** To represent and use number bonds and related subtraction facts within 20. **Mental Calculation** To add and subtract one-digit and two-digit numbers to 20, including zero. To read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs. **Written Methods** To read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs. **Problem Solving** To solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as 7 = □ - 9.	**Multiplication and Division Facts** To count in multiples of twos, fives and tens (copied from Number and Place Value). **Problem Solving** To solve one-step problems involving multiplication and division, by calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher.	**Recognising Fractions** To recognise, find and name a half as one of two equal parts of an object, shape or quantity. To recognise, find and name a quarter as one of four equal parts of an object, shape or quantity.
Vocabulary			
Sort, represent, multiples, partitioning, ones, tens.	Add, addition, subtraction, difference, equals, facts, problems, missing number problems, 2-digit number, inverse.	Multiplication, division, arrays.	Whole, half, quarter, equal parts.

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TEACH – MODEL – USE MANIPULATIVES – RECORD – INVESTIGATE – MASTER - REPEAT

Year 1 Maths Skills	Algebra	Measurement	Geometry – Properties of Shape	Geometry – Position and Direction
	Equations To solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and **missing number problems** such as 7 = □ - 9 (copied from Addition and Subtraction) To represent and use number bonds and related subtraction facts within 20 (copied from Addition and Subtraction) **Sequences** To sequence events in chronological order using language such as: before and after, next, first, today, yesterday, tomorrow, morning, afternoon and evening (copied from Measurement)	**Comparing and Estimating** To compare, describe and solve practical problems for: * lengths and heights [e.g. long/short, longer/shorter, tall/short, double/half] * mass/weight [e.g. heavy/light, heavier than, lighter than] * capacity and volume [e.g. full/empty, more than, less than, half, half full, quarter] time [e.g. quicker, slower, earlier, later] To sequence events in chronological order using language [e.g. before and after, next, first, today, yesterday, tomorrow, morning, afternoon and evening] **Measuring and Calculating** To measure and begin to record the following: * lengths and heights * mass/weight * capacity and volume * time (hours, minutes, seconds) To recognise and know the value of different denominations of coins and notes. **Telling the Time** To tell the time to the hour and half past the hour and draw the hands on a clock face to show these times. To recognise and use language relating to dates, including days of the week, weeks, months and years.	**Identifying Shapes and their Properties** To recognise and name common 2-D and 3-D shapes, including: * 2-D shapes [e.g. rectangles (including squares), circles and triangles] * 3-D shapes [e.g. cuboids (including cubes), pyramids and spheres].	**Position, Direction and Movement** To describe position, direction and movement, including half, quarter and three-quarter turns.
	Vocabulary			
		Measure and Length Compare. **Height, Weight and Capacity** Mass, volume, **Time** Chronological order, *days of the week, months of the year*, month, year, o'clock, half past, second. **Money** Money, coins, notes, pounds £, pence p.	Sides, corners, properties, pyramids, faces.	Position, direction, movement, whole turn, quarter turn, half turn, three quarter turn.