Wallsend Jubilee Primary School

Skills Progression:

Strands		Nursery	Reception	Year 1	Year 2	Year 3	
Number and Place Value	Counting	•recites numbers in order to 10 • knows that a number identifies how many objects are in a set. •beginning to count with one to one correspondence • sometimes matches number and quantity correctly •realises that not only objects but anything can be counted including actions	•count reliably with numbers from 1-20, forwards and backwards •Recognises numbers 1-20 •estimates how many objects they can see and check by counting them Matches numeral and quantity to 20	•count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number •count, read and write numbers to 100 in numerals; count in multiples of twos, fives and tens	•count in steps of 2, 3, and 5 from 0, and in tens from any number, forward and backward	•count from 0 in multiples of 4, 8, 50 and 100; find 10 or 100 more or less than a given number	•count i 7, 9, 25 •find 10 than a g count ba through negative
	Place Value	•Compares two groups of objects saying when they have the same number	•Knows that a teen number is made up of a ten and a unit •orders numbers 1-20		•recognise the place value of each digit in a two-digit number •compare and order numbers from 0 up to 100; use <, > and = signs	•recognise the place value of each digit in a three-digit number •compare and order numbers up to 1000	•recogn value of four-dig •order a number •round a the nea 1000
	Representing number	•uses some number names and number language spontaneously and accurately in play • Beginning to represent numbers using fingers, marks on paper or pictures	•records using marks that they can interpret and explain •can identify the symbols and use the language of add / take away / equals / more / less • Read and write numerals from 1-20	•identify and represent numbers using objects and pictorial representations including the number line, & use language of: equal to, more than, less than (fewer), most, least •read and write numbers from 1 to 20 in numerals and words •read, write and interpret mathematical statements involving addition (+), subtraction (–) and equals (=) signs	•identify, represent and estimate numbers using different representations, including the number line •read and write numbers to at least 100 in numerals and in words	•identify, represent and estimate numbers using different representations •read and write numbers up to 1000 in numerals and in words	•identify estimate differen represe •read R to 100 (that ove numera changed concept place va
Addition and Subtraction	Number facts (+/-)		•Can say one more or one less than a given number to 20	•given a number, identify one more and one less •represent and use number bonds and related subtraction facts within 20	•use place value and number facts to solve problems recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100		
	Mental (+/-)			•add and subtract one-digit and two-digit numbers to 20, including zero	•add and subtract numbers using concrete objects, pictorial representations, and mentally, including: TU+U, TU+T, TU+TU and U+U+U •show that addition of two numbers can be done in any order (commutative) and subtraction of one	•add and subtract numbers mentally, including: HTU+U, HTU+T and HTU+H	

					number from another cannot		
	Written (+/-)					•add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction	•add an numbers digits us written m columna subtract appropr
	Problems +/-	•separates a group of 3 or 4 objects in different ways, beginning to recognise that the total is the same.	•using quantities and objects, they add and subtract two single digit numbers and count on or back to find the answer	•solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as 7 = □ – 9.	•solve problems with addition and subtraction, using concrete, pictorial and abstract representations •recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems.	•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	•estimat inverse check a calculat •solve a subtract problem deciding operatio to use a
Multiplication and Division	Number facts (x/÷)				•recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers	•recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables	•recall m and divi multiplic to 12 ×
	Mental (x/÷)				•calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (×), division (÷) and equals (=) signs •show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot	•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 methods	•use pla known a facts to divide m includin 0 and 1 multiply three nu •recogn factor p commut calculat
	Written (x/÷)					•Progress to formal written methods calculations as above	•multiply three-di a one-d using fo layout

	Problems (x/÷)		• they solve practical problems including doubling, halving and sharing	•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.	•solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts	•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.	•solve p involvin and adc using th law to m number integer s problem corresp problem objects to m obj
Fractions (including Decimals and Percentages)	Recognising fractions		•recognise, find and name a half as one of two equal parts of an object or quantity	•recognise, find and name a half as one of two equal parts of an object, shape or quantity •recognise, find and name a quarter as one of four equal parts of an object, shape or quantity.	•recognise, find, name and write fractions 1/3, 1/4 , 2/4 and 3/4 of a length, shape, set of objects or quantity	•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	•count u hundred •recogn hundred dividing one hun dividing
	Comparing fractions					•compare and order unit fractions, and fractions with the same denominators •recognise and show, using diagrams, equivalent fractions with small denominators	•recogn using di of comm fractions
	Finding fractions of quantities					•recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators •recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators	•solve p involvin harder f calculat fractions quantitie non-unit the answ number

	Fraction calculations				•write simple fractions for example, 1/2 of 6 = 3 and recognise the equivalence of 2/4 and 1/2.	•add and subtract fractions with the same denominator within one whole [for example, 5/7 + 1/7 = 6/7]	•add an fractions denomi
	Decimals as fractional amounts						•recogn decimal any nun hundred •recogn decimal ¼, ½ an •find the dividing digit nu 100, ide value of answer and hun
	Ordering decimals						•round d one dec the nea number •compa the sam decimal two dec
	Calculating with decimals						
	Percentages						
	Fraction problems					•solve problems using all fraction knowledge	•solve s and mo involvin

							decimal places
Geometry (Properties of shape)	Shape vocabulary	•shows an interest in shapes by playing with shapes or making arrangements with objects • can categorise objects by shape	•recognise and name common 2D shapes (square, circle, triangle, rectangle) •recognise and name common 3D shapes (cone, cylinder, cube. cuboid, sphere)	•recognise and name common 2-D shapes (e.g. Square, circle, triangle) •recognise and name common 3-D shapes (e.g. Cubes, cuboids, pyramids & spheres)	(vertices, edges, faces, symmetry)	•identify horizontal and vertical lines and pairs of perpendicular and parallel lines	
	Properties of 2-d shape	•Shows an awareness of similarities of shape in the environment •beginning to talk about the shapes of everyday objects e.g. round and tall	•explore characteristics of 2D shape and use mathematical language to describe them such as number of sides and corners and whether they are flat or curved.		•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 and 3-D shapes and everyday objects.	•draw 2-D shapes	•compa geomet includin and tria properti •identify symmet shapes different •comple symmet respect of symm
	Properties of 3-d shape	•beginning to talk about the shapes of everyday objects e.g. round and tall	• explore characteristics of 3D shape and use mathematical language to describe them such as number of faces, edges and corners and whether they are flat or curved.		•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. compare and sort common 2-D and 3-D shapes and everyday objects.	•make 3-D shapes using modelling materials recognise 3-D shapes in different orientations and describe them	
Geometry (Position & Direction)	Angles					•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 or less than right angle	•identify obtuse a compare angles u angles b
	Position & Direction	•uses some positional language.	•describe position such as behind or next to	•describe position, direction and movement, including whole, half, quarter and three-quarter turns.	•order and arrange combinations of mathematical objects in patterns and sequences.		•describ 2-D grid in the fi •describ between

			•describe direction, such as forward, backwards and to the side		•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 ¾ turns		translati unit to t up/dow •plot sp and dra complet polygon
Measures	Measures	•begins to use the language of size such as big / little •can categorise objects by size • explores weight and capacity through everyday play opportunities and can understand related language modelled by an adult •uses the language of weight and capacity during play and with developing accuracy.	•use everyday language to talk about size, weight, capacity and time • compare quantities and solve problems of size, weight, capacity and time, using non standard measures	•compare, describe and solve practical problems for: length/height, weight/mass, capacity/volume & time •measure and begin to record length/height, weight/mass, capacity/volume & time	•choose and use appropriate standard units to estimate and measure length/height (m/cm); mass (kg/g); temperature (°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 =	•measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml)	•Conver differen measur estimat calculat measur money i pence
	Mensuration					•measure the perimeter of simple 2-D shapes	•measu the peri rectiline (includi centime find the rectiline counting
	Money	•will use some language of money during role play such as £1 please.	•uses everyday language to talk about money, to compare quantities and objects and to solve problems	•recognise and know the value of different denominations of coins and notes	•recognise and use symbols for pounds (£) and pence (p); combine amounts to make a particular value •find different combinations of coins that equal the same amounts of money •solve simple problems in a practical context involving addition and subtraction of money of	•add and subtract amounts of money to give change, using both £ and p in practical contexts	

					the same unit, including giving change		
	Time	•Understands and uses some talk about immediate past and future such as later, soon etc.	•Uses everyday language to talk about time (before / after / yesterday) •Orders and sequences familiar events such as the school day •Measures short periods of time in simple ways •Use what they know about time to solve everyday problems	•sequence events in chronological order using language recognise and use language relating to dates, including days of the week, weeks, months and years •tell the time to the hour and half past the hour and draw the hands on a clock face to show these times	•compare and sequence intervals of time •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 •know the number of minutes in an hour and the number of hours in a day	•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 and hours; use vocabulary such as o'clock, 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	•Conver differen measur minutes •read, w time bet and digi hour clo •solve p involvin from ho minutes years to to days
Statistics	Interpreting data		•create simple pictograms as a class using objects •use tally charts to gather information in the setting		•interpret and construct simple pictograms, tally charts, block diagrams and simple tables	•interpret and present data using bar charts, pictograms and tables	•interpre discrete data usi graphica includin time gra
	Extract info from data		•use simple pictograms and tally charts to answer simple questions such as which is more / less / most popular etc.		•ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity •ask and answer questions about totalling and comparing categorical data	•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	•solve c and diff using in present pictogra other gr
Ratio and Proportion							
Algebra							

Organisation and Communication		Following EYFS framework / Early Learning Goals		Following White Rose Schemes of Learning	Following White Rose Schemes of Learning	Following White Rose Schemes of Learning	Follow Rose S Learni
Overarching v Vocabulary		See vocabulary list for key maths vocab		Red words for each year group to build on knowledge from previous years		Red words for each year gro knowledge from previous yea	