Thurcroft Infant School Progression Document

Place Value

KS1 National Curriculum Objectives

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.
•Given a number, identify one more and one less.
•Identify and represent numbers using objects and pictorial representations including the number line, and use the language of: equal to, more than, less than, most, least.

What does this look like in Y1?

- Sort objects.
- Count objects.
- Count objects from a larger group.
- Represent objects.
- Recognise numbers as words.
- Count on from any number.
- One more
- Count backwards within 10
- One less
- Compare groups by matching
- Fewer, more, same
- Less than, greater than, equal to
- Compare numbers.
- Order objects and numbers.
- The number line.

- Count within 20
- Understand 10
- Understand 11, 12 and 13
- Understand 14, 15 and 16
- Understand 17, 18 and 19
- Understand 20
- 1 more and 1 less
- The numberline to 20
- Use a numberline to 20
- Estimate on a numberline to 20
- Compare numbers to 20
- Order numbers to 20

- Count from 20 to 50
- 20, 30, 40 and 50
- Count by making groups of tens
- Groups of tens and ones
- Partition into tens and ones
- The numberline to 50
- Estimate on a numberline to 50
- 1 more, 1 less

Vocab Year 1

Sort, Represent, Multiples, Partitioning, ones

Place Value

KS1 National Curriculum Objectives	Read and write numbers to at least 100 in numerals and in words. •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. •Use place value and number facts to solve problems. •Count in steps of 2, 3 and 5 from 0, and in tens from any number, forward and backwards.
What does this look like in Y2?	• Numbers to 20 • Count objects to 100 by making 10's • Recognise 10's and 1's. • Use a place value chart • Partition numbers to 100 • Write numbers to 100 in words • Flexibly partition numbers to 100 • Write numbers to 100 in expanded form. • Tens on the numberline to 100 • Tens and ones on the numberline to 100 • Compare objects. • Compare numbers. • Order objects and numbers. • Count in 2s, 5s and 10s. • Count in 3s.
	Vocab year2 **Count in steps, Count in multiples, Place value, Estimate, Compare, tens**

Addition and Subtraction

KS1 National Curriculum Objectives	Represent and use number bonds and related subtraction facts within 20. •Read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs. •Add and subtract one-digit and two-digit numbers to 20, including zero. •Solve one step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as 7= □-9.
What does this look like in Y1?	• Introduce parts and wholes. • Part whole model • Write number sentences • Fact families -Addition facts. • Number bonds within 10. • Systematic methods for number bonds within 10. • Number bonds to 10. • Addition: Adding together. • Addition: Adding more. • Addition problems • Finding a part. • Subtraction: Finding a part • Fact families -The 8 facts. • Subtraction: Take away and crossing out • Subtraction: Take away (How many left) • Subtraction on a numberline • Add or subtract 1 or 2 • Add by counting on within 20. • Add ones using number bonds. • Find and make number bonds to 20 • Doubles • Near doubles • Add by making 10. • Subtract ones using number bonds • Subtraction -Counting back • Subtraction -Finding the difference • Related Facts. • Missing number problems.
	Vocab year 1 **Addition / add, Subtraction, Difference, Equals, Facts, Problems, Missing number, 2 digit number, inverse**

Addition and Subtraction

KS1 National Curriculum Objectives	Recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100. •Add and subtract numbers using concrete objects, pictorial representations, and mentally, including: a two-digit number and ones; a two-digit number and tens; two two-digit numbers; adding three one-digit numbers. •Show that the addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot. •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 and written methods. •Recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems.
What does this look like in Y2?	• Bonds to 10 • Fact families -Addition and subtraction bonds to 20. • Related facts. • Bonds to 100 (tens). • Add and subtract 1s. • Add by making 10 • Add three 1 digit numbers • Add to the next 10 • Add across a ten • Subtract across a ten • Subtract from a ten • Subtract a 1 digit number from a 2 digit number (across a 10) • 10 more and 10 less. • Add and subtract 10s. • Add two 2-digit numbers -not crossing ten -add ones and add tens. • Add two 2-digit numbers -crossing ten -add ones and add tens. • Subtract a 2-digit number from a 2-digit number -not crossing ten. • Subtract a 2-digit number from a 2-digit number -crossing ten -subtract ones and tens. • Mixed addition and subtraction • Missing number problems
	Vocab Year 2 **Sum, 3 digit number, commutative**

Geometry: Shape

KS1 National Curriculum Objectives	*Recognise and name common 2-D shapes, including: (e.g. rectangles (including squares), circles and triangles). •Recognise and name common 3-D shapes, including: (e.g. cuboids (including cubes), pyramids and spheres). Identify and describe the properties of 2-D shapes, including the number of sides and line symmetry in a vertical line. •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
What does this look like in Y1?	• Recognise and name 3D shapes. • Sort 3D shapes. • Recognise and name 2D shapes. • Sort 2D shapes. • Patterns with 3D and 2D shapes.
	Vocab year 1 **Sides, Vertices, Properties, Pyramid, faces**
What does this look like in Y2?	• Recognise 2D and 3D shapes. • Count sides on 2D shapes. • Count vertices on 2D shapes. • Draw 2D shapes. • Lines of symmetry on shapes • Use lines of symmetry to complete shapes. • Sort 2D shapes. • Count faces on 3D shapes. • Count edges on 3D shapes. • Count vertices on 3D shapes. • Sort 3D shapes. • Make patterns with 2D and 3D shapes.
	Vocab year 2 **Pentagon, Hexagon, Lines of symmetry, Properties, Cylinder, Edges, vertex**

Measurement: Length and Height

KS1 National Curriculum Objectives	*Measurement: Length and Height Measure and begin to record lengths and heights. •Compare, describe and solve practical problems for: lengths and heights (for example, long/short, longer/shorter, tall/short, double/half). *Choose and use appropriate standard units to estimate and measure length/height in any direction (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 =.
What does this look like in Y1?	• Compare lengths and heights. • Measure length (unit 1 WRM - Non-standard units) • Measure length (unit 2 WRM - Non standard units)
	Vocab year 1 **compare**
What does this look like in Y2?	• Measure length (cm). • Measure length (m). • Compare lengths and heights. • Order lengths and heights. • Four operations with lengths and heights.
	Vocab year 2 **Estimate, Order, Record results, Centimetre (cm), Metre (m)**

Measurement: Weight and Volume

KS1 National Curriculum Objectives	*Measurement: Weight and Volume Measure and begin to record mass/weight, capacity and volume. •Compare, describe and solve practical problems for mass/weight: [for example, heavy/light, heavier than, lighter than]; capacity and volume [for example, full/empty, more than, less than, half, half full, quarter]. *Choose and use appropriate standard units to estimate and measure length/height in any direction (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 =.
What does this look like in Y1?	• Heavier and lighter. • Measure mass. • Compare mass. • Full and empty • Compare volume. • Measure capacity. • Compare capacity.
	Vocab year 1 **Volume**
What does this look like in Y2?	• Compare mass. • Measure mass in grams. • Measure mass in kilograms. • Four operations with mass • Compare volume and capacity. • Measure in Millilitres. • Measure in Litres. • Four operations with volume and capacity • Temperature.
	Vocab year 2 **Kilogram kg, Gram g, Quarter full, Three quarters full, Litres l, Millilitres ml, Temperature, Celsius**

Number: Fractions

KS1 National Curriculum Objectives	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. •Compare, describe and solve practical problems for: lengths and heights (for example, long/short, longer/shorter, tall/short, double/half) •Compare, describe and solve practical problems for: mass/weight [for example, heavy/light, heavier than, lighter than]; capacity and volume [for example, full/empty, more than, less than, half, half full, quarter]. Recognise, find, name and write fractions 1/3, ¼, 2/4and ¾of a length, shape, set of objects or quantity. •Write simple fractions for example, ½of 6 = 3 and recognise the equivalence of2/4and ½.
What does this look like in Y1?	• Recognise half of an object or shape • Find half of an object or shapes. • Recognise half of a quantity • Find half of a quantity. • Recognise a quarter of a shape or object. • Find a quarter of an object or shape • Recognise a quarter of a quantity. • Find a quarter of a quantity
	Vocab year 1 **Whole,Half, Quarter, Equal parts**
What does this look like in Y2?	• Introduction to parts and whole • Equal and unequal parts. • Recognise half. • Find half. • Recognise a quarter. • Find a quarter. • Recognise a third. • Find a third. • Find a whole • Unit fractions. • NonOunit fractions. • Equivalence of ½ and $^{2}/_{4}$. • Recognise three quarters • Find three quarters. • Count in fractions.
	Vocab year 2 **Three quarters, Third, Equivalent fraction, Numerator, Denominator, One whole**

Geometry: Position and Direction

KS1 National Curriculum Objectives	*Describe position, direction and movement, including whole, half, quarter and three quarter turns *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). *Order and arrange combinations of mathematical objects in patterns and sequences.
What does this look like in Y1?	• Describe turns. • Describe Position 'left', 'right', • Describe position 'forwards' and 'backwards' • Describe position 'above, below'. • Ordinal numbers
	Vocab year 1 **Position, Direction, Movement, Whole turn, Quarter turn, half turn, three quarter turn**
What does this look like in Y2?	• Language of position. • Describing movement. • Describing turns. • Describing movement and turns. • Shape patterns with turns
	Vocab year 2 **Clockwise, Anticlockwise, Straight line, Rotation, Arrange, sequences**

Measurement: Money

KS1 National Curriculum Objectives	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 the same unit, including giving change.
What does this look like in Y1?	• Unitising • Recognising coins. • Recognising notes. • Counting in coins
	Vocab year 1 **Money, Coins, Notes, Pounds, pence**
What does this look like in Y2?	• Count money –pence. • Count money –pounds (notes and coins). • Count money – ponds and pence. • Choose notes and coins • Make the same amount. • Compare amounts of money. • Calculate with money • Make one pound • Find change. • Two-step problems.
	Vocab **Value, change**

Measurement: Time

KS1 National Curriculum Objectives	Sequence events in chronological order using language [for example, before and after, next, first, today, yesterday, tomorrow, morning, afternoon and evening. •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, describe and solve practical problems for time [for example, quicker, slower, earlier, later]. •Measure and begin to record time (hours, minutes, seconds). 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. •Compare and sequence intervals of time.
What does this look like in Y1?	• Before and after. • Days of the week • Months of the year • Hours, minutes and seconds • Time to the hour. • Time to the half hour.
	Vocab **Chronological order, Days of the week, Months of the year, Month, Year, O'clock, Half past, second**
What does this look like in Y2?	• O'clock and half past. • Quarter past and quarter to. • Tell the time past the hour • Tell the time to the hour • Telling time to 5 minutes. • Minutes in an hour, • Hours in a day.
	Vocab **Intervals of time, Quarter past / to, Duration**

Statistics

KS1 National Curriculum Objectives	Interpret and construct simple pictograms, tally charts, block diagrams and simple tables. •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 totaling and comparing categorical data.
What does this look like in Y1?	
	Vocab
What does this look like in Y2?	• Make tally charts. • Tables • Block diagrams. • Draw pictograms (1-1). • Interpret pictograms (1-1). • Draw pictograms (2, 5 and 10). • Interpret pictograms (2, 5 and 10). •
	Vocab year 2 **Pictogram, Tally chart, Block diagram, Category, Sorting, Totalling, Comparing, Horizontal, vertical**

Multiplication and Division

KS1 National Curriculum Objectives	• 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 (×), division (÷) and equals (=) signs • show that multiplication of 2 numbers can be done in any order (commutative) and division of 1 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
What does this look like in Y1?	• Count in 2s • Count in 10s • Count in 5s • Recognise equal groups • Add equal groups • Make arrays • Make doubles • Make equal groups – grouping • Make equal groups – sharing
	Vocab year 1 **Equal, part, whole, array, double, grouping, sharing** .
What does this look like in Y2?	• Recognise equal groups • Make equal groups • Add equal groups • Introduce the multiplication symbol • Multiplication sentences • Use arrays • Make equal groups – grouping • Make equal groups – sharing • The 2 times-table • Divide by 2 • Doubling and halving • Odd and even numbers • The 10 times-table • Divide by 10 • The 5 times-table • Divide by 5 • The 5 and 10 times-tables
	Vocab year 2 **Equal, part, whole, array, double, grouping, sharing** **multiplication, division, repeated addition, repeated subtraction**