Thornborough Infant School
Maths Curriculum Overview

Year Group	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Reception Number	**Subitising** Perceptually subitise within 3 identify sub-groups in larger arrangements create their own patterns for numbers within 4 practise using their fingers to represent quantities which they can subitise experience subitising in a range of contexts, including temporal patterns made by sounds. **Cardinality, ordinality and counting** relate the counting sequence to cardinality, seeing that the last number spoken gives the number in the entire set develop their knowledge of the counting sequence, including through rhyme and song develop 1:1 correspondence, including by coordinating movement and counting develop an understanding that anything can be counted, including actions and sounds explore a range of strategies which support accurate counting. **Composition** see that all numbers can be made of 1s compose their own collections within 4. **Comparison** Understand that sets can be compared according to a range of attributes, including by their numerosity	**Subitising** Subitise within 5, perceptually and conceptually, depending on the arrangements. **Cardinality, ordinality and counting** Continue counting skills explore the cardinality of 5, linking this to dice patterns and 5 fingers on 1 hand begin to count beyond 5 begin to recognise numerals, relating these to quantities they can subitise and count. **Composition** Explore the concept of 'wholes' and 'parts' by looking at a range of objects that are composed of parts, some of which can be taken apart and some of which cannot Explore the composition of numbers within 5. **Comparison** Compare sets using a variety of strategies, i 'just by looking', by subitising and by matching Compare sets by matching, seeing that every object can be matched to one in the other set, they contain the same number and are equal amounts.	**Subitising** Subitising by continuing to explore patterns within 5, including structured and random arrangements explore a range of patterns made by some numbers greater than 5, including structured patterns in which 5 is a clear part experience patterns which show a small group and '1 more' continue to match arrangements to finger patterns. **Cardinality, ordinality and counting** verbal counting to 20 and beyond develop object counting skills, using a range of strategies link counting to cardinality, including using their fingers to represent quantities between 5 and 10 order numbers, linking cardinal and ordinal representations of number. **Composition** Composition of 5 and practise recalling 'missing' or 'hidden' parts for 5 Composition of 6, linking this to familiar patterns, including symmetrical patterns begin to see that numbers within 10 can be composed of '5 and a bit' **Comparison** Compare sets using the language of comparison, and	**Subitising** Explore symmetrical patterns, in which each side is a familiar pattern, linking this to 'doubles'. **Cardinality, ordinality and counting** consolidate their understanding of cardinality, working with larger numbers within 10 become more familiar with the counting pattern beyond 20. **Composition** Composition of odd and even numbers, looking at the 'shape' of these numbers Link even numbers to doubles Explore the composition of numbers within 10. **Comparison** Compare numbers, reasoning about which is more, using both an understanding of the 'howmanyness' of a number, and its position in the number system.	**Subitising** Practise familiar subitising arrangements, including those which expose '1 more' or 'doubles' patterns use subitising skills to enable them to identify when patterns show the same number but in a different arrangement, or when patterns are similar but have a different number subitise structured and unstructured patterns, including those which show numbers within 10, in relation to 5 and 10 be encouraged to identify when it is appropriate to count and when groups can be subitised. **Cardinality, ordinality and counting** develop verbal counting to 20 and beyond, from different starting numbers develop confidence and accuracy in both verbal and object counting. **Composition** Explore the composition of 10. **Comparison** Order sets of objects, linking this to their understanding of the ordinal number system	**Subitising** Consolidate their understanding of concepts previously taught through working in a variety of contexts and with different numbers. **Cardinality, ordinality and counting** Revisit concepts previously taught **Composition** Rehearse previous learning **Comparison** Practise skills in different contexts.

	Use the language of comparison, including 'more than' and 'fewer than' Compare sets 'just by looking'.		play games which involve comparing sets Compare sets by matching, identifying when sets are equal Explore ways of making unequal sets equal			
Rec	**Measurement :Time** (On-going) Start to learn days of the week,months of the year and seasons. Begin to understand about time in relation to their day and their life. Then and now, Today, yesterday,tomorrow					
Reception Shape Space and Measures	**Shape and Space** Sort 2D shapes Match 2D shapes. Name and describe circles, squares and triangle. Describe position Behind, in front, next to, in between Continue a repeating AB pattern	**Measurement Length/Weight and Volume** Compare 2 objects by height, length, weight and volume using vocabulary long, tall, high, short, heavy, light, full, empty (	**Measurement- Money** Recognise 1p, 2p, 5p and 10p coins **Data** Sorting objects Organise and categorise Use language same/different	**Measurement Length/Weight and Volume** Count non-standard measures) to match length, height, weight, volume **Shape and Space** Sort and describe 3D shapes Use 3D shapes to print a repeating patterns Name and describe cube, sphere, cone and pyramid.	**Data** Tallying Create and interpret block Graphs **Measurement- Money** Recognise all coins.	**Measurement Length/Weight and Volume** Estimate, measure, and compare and order objects Use non-standard units **Shape and Space** Combine shapes to make new shapes Make patterns Create symmetrical images Follow instructions using positional vocabulary including left and right, on top, below, next, in between

Year 1						
	Place value (wk 1-5) Count to **ten**, forwards and backwards, beginning with 0 or 1, or from any given number. Count, read and write numbers to 10 in numerals and words. Given a number, identify one more or one less. Identify and represent numbers using objects and pictorial representations including the number line Use the language of: equal to, more than, less than (fewer), most, least. **Making Connections and application** Data-tables to sort. **Addition and Subtraction (wk 6-7)** Represent and use number bonds and related subtraction facts within 10 Read, write and interpret mathematical statements involving addition (+), subtraction (–) and equals (=) signs. Add and subtract one digit numbers to10, including zero. Solve one step problems that involve addition and subtraction, using concrete objects and pictorial representations and missing number problems.	**Addition and Subtraction (wk 1-3)** **Shape (wk 4-5)** Recognise and name common 2-D shapes, including: (for example, rectangles (including squares), circles and triangles) *In different orientations and relate to everyday objects* Recognise and name common 3-D shapes including: (for example, cuboids (including cubes), pyramids and spheres) *In different orientations and relate to everyday objects* **Making Connections and application** Addition- problem solving-how many sides on 3 triangles etc Data-sorting Assessment week (wk6)	**Place value within 20 (wk 1-2)** Count to **twenty**, forwards and backwards, beginning with 0 or 1, from any given number. Count, read and write numbers to **20** in numerals and words. Given a number, identify one more or 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 (fewer), most, least. **Addition and subtraction within 20 (wk 3-5)** **Place value within 50 (wk6)**	**Place value within 50 (wk1)** Count to 50 forwards and backwards, beginning with 0 or 1, or from any given number. Count, read and write numbers to 50 in numerals. Given a number, identify one more or 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 (fewer), most, least. Count in multiples of twos, fives and tens. **Length (wk2-3)** 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) **Making Connections and application** Place Value Data **Mass and volume (wk 4-5)** 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]	**Multiplication and division (wk1-2)** Count in multiples of twos, fives and tens. 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. **Fractions (wk3-5)** **Money (wk6)** Recognise and know the value of different denominations of coins and notes. **Making Connections and application** Place Value Addition and Subtraction Multiplication and division. Data	**Time (wk1-2)** Compare, describe and solve practical problems for time [for example, quicker, slower, earlier, later] Measure and begin to record the following for time (hours, minutes, seconds) 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. **Making Connections and application** Fractions Data **Place value within 100 (wk3-4)** 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.

Thornborough Infant School
Maths Curriculum Overview

				Making Connections and application Place Value Position and Direction (Wk 6) Describe position, direction and movement, including whole, half, quarter and three quarter turns.		**Making Connections and application** Addition and Subtraction Statistics (wk 5) Although this isn't in the NC it is important that there is some coverage. Collecting,representing and interpreting data. Tallying,pictograms and block graphs. Assessment (wk 6)
Year 2	Place value (wk 1-5) 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) Partition two digit numbers in more than one way 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 backward. Addition and Subtraction (wk 6-7)	Addition and Subtraction (wk 1-3) Shape (wk 4-5) 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. Assessment week (wk6)	Statistics (wk1-2) 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 totalling and comparing categorical data. **Making Connections and application** Addition and Subtraction Multiplication and division (wk3-6) Recall and use multiplication and division facts for the 2, 5 and 10 times tables, including recognising odd and even numbers.	Multiplication and division (wk1) Length (wk2-3) Choose and use appropriate standard units to estimate and measure length/height in any direction (m/cm) to the nearest appropriate unit, using rulers. Compare and order length/height and record the results using >, <and = **Making Connections and application** Place Value Addition and Subtraction Multiplication and division. Mass, capacity and temperature (wk 4-5) Choose and use appropriate standard units to estimate and measure: temperature (°C)	Money (wk 1-2) 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. **Making Connections and application** Place Value Addition and Subtraction Multiplication and division. Fractions (wk3-5) Recognise, find, name and write fractions ½ 1/3 ¼ 2/4 and ¾ of a length, shape, set of objects or quantity. Write	Time (wk1-3) 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. **Revise and consolidate Yr 2. Prepare for Year 3**

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. **<u>Making Connections and application</u>** Place Value		Calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (×), division (÷) and equals (=) signs. Solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods and multiplication and division facts, including problems in contexts. Show that the multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot. **<u>Making Connections</u>** Addition and subtraction. Place Value	capacity (litres/ml) mass (kg/g); to the nearest appropriate unit, using scales, thermometers and measuring vessels. Compare and order mass, volume/capacity and record the results using >, <and = **<u>Making Connections and application</u>** Place Value Addition and Subtraction Multiplication and division. Position and Direction (wk6) 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 **<u>Making Connections</u>** Fractions Time	simple fractions for example, ½ of 6 = 3 and recognise the equivalence of ½ and 2/4 **<u>Making Connections</u>** Shape Multiplication and division. SATs (Wk 6)	