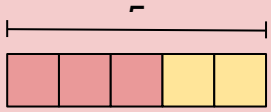
Manor Drive Primary Academy

Maths Curriculum Overview
Reception

Block 1	
W1	R.5.1 Develop spatial awareness via interaction with objects R.5.2 Use positional language to describe how objects are positioned relative to others R.5.3 Continue and create patterns of objects, actions and sounds, focusing on AB and ABC patterns R.5.4 Continue and create patterns with AAB, ABB, AABB patterns R 5.5 Understand parts and wholes through use of interaction with objects that fit together to make a whole (e.g. simple jigsaws) and with objects that have moving parts
W2	R 5.6 Understand that that people can move to a place and then find their way back to where they started R 5.7 Describe hidden objects and describe arrangements of objects that are shown then hidden from view **THIS LEARNING SHOULD CONTINUE THROUGHOUT OTHER COMPONENTS OF MATHEMATICS TEACHING AND IS REINFORCED VIA THE INITIAL STAGES OF THE SCIENCE CURRICULUM (UNDERSTANDING THE WORLD)**
W3	**R.1.10 Perceptually subitise groups of objects 1-5 in different arrangements (line, pair structure, dice, random)** **R.1.1 Count up to 5 (cardinal and ordinal representations)** **R.1.2 Count down from 5 (cardinal and ordinal representations)**
W4	**R.1.3 Count up from any number from 1-5 (cardinal and ordinal representations)** **R.1.4 Count down from any number from 1-5 (cardinal and ordinal representations)**
W5	**R.1.5 Recognise numerals to 5** R.1.6 Use 1:1 counting up to 5 R.1.7 Demonstrate cardinal principle with objects up to 5

W6	R.1.8 Demonstrate order irrelevance principle up to 5 R.1.9 Count non-tangible objects up to 5 (e.g. sounds)

Block 2	
W1	R.2.1 Sort objects into groups based on characteristics R.2.2 Sort objects into equal groups and determine 'how many' in each group, including representations R.3.1 Compare groups of *identical objects* up to 5 using language of "more than, fewer than, same as" (e.g. in adjacent 5-frames)
W2	R.3.2 Compare groups of *different objects* up to 5 using language of "more than, fewer than, same as" (e.g. in adjacent 5-frames)
W3	**R.4.1 Know one more than numbers up to 5 (cardinal and ordinal representations)** **R.4.2 Know one less than numbers up to 5 (cardinal and ordinal representations)** R.4.3 Understand zero with concrete objects R.4.4 Represent number bonds 2-5 in visual representations (part-whole models) including zero as one addend in some cases, progressing from representative objects to manipulatives to **discrete** bar models, e.g.
W4	
W5	**R.4.5 Know number bonds from to 2-5 with use of manipulatives and visual representations**
W6	R.6.1 Order important times in their day and use positional language to describe when events happen R.6.2 Develop some sense of periods of time (minute, hour, day)

Block 3	
W1	**R.7.1 Count up to 10** **R.7.2 Count down from 10** **R.7.3 Count up from any number from 0-9 (cardinal and ordinal representations)** **R.7.4 Count down from any number from 1-10 (cardinal and ordinal representations)** R.7.5 Use 1:1 counting up to 10
W2	R.7.6 Demonstrate cardinal principle with objects up to 10 R.7.7 Demonstrate order irrelevance principle up to 10 R.7.8 Count non-tangible objects up to 10 (e.g. sounds) **R.7.9 Recognise numerals to 10**
W3	**R.7.10 Conceptually subitise groups of objects from 6-10 in two different arrangements within a ten-frame (pair structure and '5-and-a-bit' structure), using fingers and using bead-strings/rekenrek** R.7.11 Compare groups of *identical objects* up to 10 using language of "more than, fewer than, same as" (e.g. in adjacent 10-frames)
W4	<u>Addition and subtraction</u> R.8.1 Understand addition as combining sets of objects (aggregation) R.8.2 Understand part-whole models with concrete objects and numerals
W5	R.8.3 Partition 5 into two parts using concrete objects and part-whole models (specifically **discrete** bar models and cherry diagrams) R.8.4 Partition 6 into two parts using concrete objects and part-whole models (specifically **discrete** bar models and cherry diagrams) R.8.5 Partition 7 into two parts using concrete objects and part-whole models (specifically **discrete** bar models and cherry diagrams)
W6	R.8.6 Partition 8 into two parts using concrete objects and part-whole models (specifically **discrete** bar models and cherry diagrams) R.8.7 Partition 9 into two parts using concrete objects and part-whole models (specifically **discrete** bar models and cherry diagrams) R.8.8 Partition numbers 6-9 into more than two numbers (e.g. 6 = 1 + 2 + 3) using concrete objects and part-whole models

Block 4	
W1	**R.9.1 Double numbers up to 5 with use of manipulatives and visual representations (including ten-frames)**
W2	**R.9.2 Halve even numbers up to 10 with use of manipulatives and visual representations (including ten frames)** R.9.3 Recognise odd and even numbers (e.g. using a pair structure in a ten-frame) R.9.4 Count even numbers to 10 - skip counting in twos (cardinal and ordinal representations) R.9.5 Count odd numbers to 9 - skip counting in twos (cardinal and ordinal representations)
W3	R.10.1 Know 1 more and one less than numbers 6-9 R.10.2 Know 2 more than an even number is the next even number R.10.3 Know that 2 more than an odd number is the next odd number
W4	**R.10.4 Know number bonds from 6-9 that are based on 1 more (e.g. 8 is composed of 7 and 1) with use of manipulatives and visual representations** **R.10.5 Know number bonds from 6-9 that are based on 2 more (e.g. 8 is composed of 6 and 2) with use of manipulatives and visual representations**
W5	**R.10.6 Know number bonds from 6-9 that are based on '5-and-a-bit' structure (e.g. 8 is composed of 5 and 3) with use of manipulatives and visual representations** **R.10.7 Know numbers bonds to 10 that are based on doubles (e.g. 6 is composed of 3 and 3; 10 is composed of 5 and 5) with use of manipulatives and visual representations**
W6	

Block 5	
W1	R.10.8 Partition 10 using a part-whole model **R.10.9 Know number bonds to 10 with use of manipulatives and visual representations**
W2	
W3	R.10.10 Understand that the quantity of a group can be changed by adding more - an augmentation structure (e.g. using *"First… Then… Now…"* structure); understand that adding zero to a number leaves it unchanged R.10.11 Understand that the quantity of a group can be changed by taking items away - a reduction structure (e.g. using *"First… Then… Now…"* structure); understand that subtracting zero from a number leaves it unchanged
W4	
W5	R.11.1 Recognise number from 11-19 as '10-and-a bit' (e.g. building 'staircases' to see this pattern, using adjacent ten-frames)
W6	**R.11.2 Count up to 20** **R.11.3 Count down from 20** **R.11.4 Count up from any number from 1-20 (cardinal and ordinal representations)** **R.11.5 Count down from any number from 1-20 (cardinal and ordinal representations)** **R.11.6 Count beyond 20 (continuing pattern in ones perhaps as far as 29).**

Block 6	
W1 **W2** **W3**	R.12.1 Recognise common 2D shapes in various orientations R.12.2 Describe common 2D shapes using mathematical language (e.g. sides, corners, straight, curved) R.12.3 Recognise common 3D shapes in various orientations R.12.4 Describe common 3D shapes using mathematical language (e.g. faces, edges, vertices)
W4 **W5** **W6**	R.13.1 Use language of length to describe and compare objects (e.g. *tall, short, long, wide, narrow, near, far* and associated comparative and superlative adjectives) R.13.2 Use manipulatives to make non-standard measurements (e.g. hands, cubes, blocks) R.13.3 Use language of weight to describe and compare objects (e.g. *heavy, light* and associated comparative and superlative adjectives) R.13.4 Use manipulatives and balances to make non-standard measurements (e.g. cubes) R.13.5 Use language of capacity to describe containers (e.g. *full, nearly full, half full, nearly empty, empty, tall, thin, narrow, wide, shallow*) and to compare which objects have greater or lesser capacity (e.g. *holds more, holds less*)

Arithmetic

Fractions

Geometry

Measures & Time

Properties of number and place value

Statistics