NCETM Mastering Number Overview

(**ELG in bold**)

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer Terms
Subitising (being able to see how many in a set without counting)	• Subitise within 3 • Identify sub-groups into larger arrangements • Create own patterns for numbers within 4 • Use of fingers to represent quantities • Experience subitizing in range of contexts	• **Subitise within 5**	• **Subitise by exploring patterns within 5 in random and structured arrangements**	• **Explore symmetrical patterns, including familiar patterns, to make link to doubles**	• **Practice subitising arrangements including '1 more' and 'double' patterns** • **Subitise to identify when patterns show the same number in a different way** • Subitise to identify when patterns are similar, but have a different number • Subitise structured and unstructured patterns within 10 • Identify when it is right to count or subitise
Cardinality (parts of a set) Ordinality (number relationships and order) Counting	• Relate counting to seeing that the last number spoken is the set • Develop knowledge of counting sequence through rhyme and song • Develop 1:1 counting correspondence • Develop understanding that anything can be counted • Explore strategies to support accurate counting	• Link the cardinality of 5 to dice and fingers on 1 hand • Begin to count beyond 5 • Recognise numerals and relate to quantities	• **Develop verbal counting to 20 and beyond** • Develop object counting skills to develop accuracy • Link counting to parts of a set using fingers to represent numbers to 10 • **Order numbers linking cardinal and ordinal representations of number**	• Consolidate own understanding of parts of a set with numbers over 10 • **Become familiar with the counting pattern beyond 20**	• **Verbally count to 20 and beyond, from different starting numbers** • Develop confidence and accuracy in verbal and object counting
Composition (knowing numbers are made of smaller numbers)	• Understand that numbers are made of ones • Compose own sets within 4	• Learn concept of 'whole' and 'part' with different objects composed of parts • Understand 'whole' and 'part' using objects that cannot be taken apart • Compose numbers within 5	• Composition of 5 recalling 'hidden' parts for 5 • Composition of 6 linked to familiar patterns (dice) including symmetrical • **Number within 10 can be composed of '5 and a bit'**	• **Composition of odd and even numbers, looking at the 'shape'** • **Link even numbers to doubles** • **Explore the composition of numbers within 10**	
Comparison (Knowing which numbers are worth more or less)	• Understand sets can be compared according to different attributes • Use language of comparison • Compare sets just by looking	• **Compare sets in different ways e.g. 'just looking', subitizing or matching** • **Compare sets by matching to one in the other set which contain same or equal amounts**	• **Compare sets using the language of comparison** • **Play games involving comparing sets** • **Compare by matching and identifying when sets are equal** • Explore ways to make unequal sets equal	• **Compare numbers, reasoning which is more** • **Compare using both an understanding of the 'howmanyness' of a number and its position within the number system**	• **Order sets of objects linking to their understanding of the ordinal number system**

Other Mathematical Learning Overview

(**NCETM scheme followed to match with Mastering Number**)

	Autumn Terms	Spring Terms	Summer Terms
Pattern Sequencing	• Detect and use patterning intuitively • Recognise sequenced pattern	• Recognise, describe and build repeating ABAB patterns • Create own specific patterns	• Translate patterns into new media or using new materials
2D Shapes	• Match shapes that are familiar when in same orientation and size • Make a picture by placing shapes in outlines areas • Represent some specific shapes eg: circle • Match shapes in different sizes and orientation	• Compare and match a wider range of shapes with the same size and orientation • Compare and match a wider range of shapes with different sizes and orientations • Compares and matches combinations of shapes together • Combine shapes to make parts of the picture. • Trace the outer frame of a picture that contains other shapes.	• Name 2D shapes: circles, squares and triangles • Construct shapes from parts • Recognise more rectangle sizes, shapes and orientations • Decompose a shape into smaller known shape • Rotate and reflect shapes to fit into a puzzle to create a shape or picture. • Name and locate a shape within a shape.
3D Shapes	• Recognise a sphere or cube from a set of 3D shapes • Sort and stack similar blocks • Create a “house” using blocks in a horizontal pattern	• Name some 3D shapes • Build arches/bridges, enclosures, corners, and crosses, using trial and error and simple addition of pieces	• Identify and count the faces on a cube or prism • Build arches/bridges, enclosures, corners, and crosses with prediction and understanding • Build by making specific multiple internal spaces
Small Step Spatial Visualisation	• Move shapes to a location by physical trial and error • Move shapes to achieve an outcome	• Rotate shape or object through turns and reflect in horizontal or vertical line to match another shape	• Know that shapes can be turned or flipped to fit into place e.g. puzzle piece • To know how a shape can be moved to fit into place before moving it •
Measures	• Recognise length, weight and height • Sort objects into long and short. thin and thick, wide and narrow, big and small, heavy and light, full and empty • find something that is longer/shorter or heavier/lighter than a given reference item	• can use one thing to compare with two others, • compare units of different sizes in practical contexts. • use units to ‘measure’ and compare	• use positional language of time I can state the order of the days of the week • sequence se events in terms of length eg: Playtime and the school day.