Year R Maths Medium Term Plan

Early Learning Goals

Number

Children at the expected level of development will:

Have a deep understanding of number to 10, including the composition of each number	RLS10	Regrouping the whole
	RLS11	Regrouping parts to find the total (the whole)
	RLS12	Finding the whole and missing parts
Subitise (recognise quantities without counting) up to 5	RLS1	Subitising (including equivalence, more and less) Subitising is then reinforced through most future sequences
Automatically recall (without reference to rhymes, counting or other aids) number bonds up to 5 (including subtraction facts) and some number bonds to 10, including double facts	RLS11	Regrouping parts to find the total (the whole)
	RLS12	Finding the whole and missing parts
	RLS14	Doubling and halving

Numerical Patterns

Children at the expected level of development will:

Verbally count beyond 20, recognising the pattern of the counting system	RLS2	Counting skills (stale order and one to one correspondence)
	RLS6	Counting the sort (including cardinality)
	RLS13	Ten and some more
	RLS16	Counting beyond 20
Compare quantities up to 10 in different contexts, recognising when one quantity is greater than, less than or the same as the other quantity	RLS3	Comparison – measures
	RLS5	Classification
	RLS7	Using counting to compare
	RLS8	Spatial thinking
	RLS9	Magnitude – ordering and estimating
Explore and represent patterns within numbers up to 10, including evens and odds, double facts and how quantities can be distributed equally	RLS4	Pattern recognition
	RLS14	Doubling and halving
	RLS15	Odd and even

Term	Essential Maths
1	RLS1 – Subitising: Subitising numbers up to 5; recognising the amount without counting, recognising numbers to 5 and linking names to their values Step 1: Recognising familiar patterns to subitise, noticing when the patterns are the same and different Step 2: Making the same values in different patterns to subitise Step 3: Noticing when something has a different value when subitising Step 4: Identifying more or less when subitising Step 5: Subitising to identify same, more or less when objects can move RLS5 – Classification: Classifying (grouping) objects using given criteria and their own ideas and comparing the groups after classification Step 1: Identify objects that could be added to a set using given criteria Step 2: Identify an attribute that enables a collection to be classified and then sort into those that belong and those that don't Step 3: Identify an attribute that enables a collection to be classified into multiple groups Step 4: Create sets where some objects don't meet any criteria and some create an intersection by meeting both Step 5: Compare the groups after being classified RLS2 – Counting skills (stable order and one to one correspondence): Counting reliably, using number names in order and one to one correspondence Step 1: Touching a small set of similar objects (more than one) one at a time and rehearsing the number names in the correct order Step 2: Touching a small set of mixed objects one at a time and rehearsing the number names in the correct order Step 3: Using number names to count a set of objects accurately when they could be moving Step 4: Using number names to count a set of moving objects accurately when they cannot be touched and / or seen
	NO FACT OF THE WEEK THIS TERM

Term	Essential Maths
2	RLS4 – Pattern recognition: Noticing, describing and extending patterns, including thinking about what part is the repeating unit – AB PATTERNS Step 1: Comparing patterns – what's the same/different? Step 2: Continuing a pattern with a given unit of repeat Step 3: Identifying the unit of repeat and describing in many contexts. Step 4: Creating varied patterns and independently deciding upon the unit of repeat RLS6 – Counting the sort (including cardinality): Counting a set of items accurately, saying how many are in the set and comparing this to the amount in other sets Step 1: Touching a small set of similar objects (more than one) one at a time and using counting to establish the value of the set Step 2: Comparing sets of mixed objects by their values through counting and matching values in grids to numerals Step 3: Using number names to count and compare sets of objects when their representations are not identical Step 4: Understanding that counting is a tool to identify a quantity (not just a sequence of number names) and using this skill purposefully RLS8 – Spatial thinking: Developing spatial thinking and spatial language linked to position and direction, in movements and using symbols Step 1: Knowledge and application of the language of position Step 2: Knowledge and application of directional language in the real world Step 3: Comparing routes Step 4: Explaining routes and positions of objects in scaled versions of known environments Step 5: Explaining routes and positions of objects in represented known environments where objects are replaced by abstract symbols
	FACT OF THE WEEK: NUMBERS 1, 2, 3, 4, 5 (number formation, counting actions, counting objects etc) – do one number a week (when children are ready)

Term	Essential Maths
3	RLS3 – Comparison – measures: Comparing objects by length, thickness and weight/mass, using appropriate language to describe and order them - LENGTH Step 1: What makes objects similar and different: Explaining what we notice Step 2: Using the language of longer/taller and shorter to compare length or height Step 3: Using the language of wider/fatter/thicker and thinner to compare thickness Step 4: Using the language of heavier and lighter to compare mass/weight. Exploring that bigger things might not be heavier Step 5: Ordering a small set of objects by a given attribute RLS7 – Using counting to compare: Using counting to compare and finding a precise numerical difference in sets of objects in varied contexts Step 1: Use one to one correspondence to compare quantities Step 2: Use counting to compare totals Step 3: To count forward and backwards to identify a difference RLS9 – Magnitude – ordering and estimating: Knowing the position of numbers 0-10 and the relationship to other numbers, such as 0, 5 or 10 Step 1: Recognise that a count starts with nothing (zero) and increases equally by one each time Step 2: Order values in a linear way, noticing and comparing their positions to each other and key benchmarks Step 3: Practice the count – 1 more, 1 less Step 4: Estimate relative position using benchmark numbers RLS16 – Counting beyond 20: Counting beyond 20, recognising the pattern of the counting system, exploring the value of tens and ones in numbers Step 1: Using counting to identify amounts Step 2: Using counting to compare quantities and find a precise difference Step 3: Maintaining an understanding of number magnitude with numbers beyond 20 Step 4: Understanding that the pattern in consecutive numbers continues, using one more and one less Step 5: Regrouping to find the parts and the whole in numbers beyond 20 Step 6: Understanding the special grouping that organises collections into groups of ten
	FACT OF THE WEEK: NUMBERS 6, 7, 8, 9, 10 (number formation, counting actions, counting objects etc) – do one number a week

Term	Essential Maths
4	RLS8 – Spatial thinking: Developing spatial thinking and spatial language linked to position and direction, in movements and using symbols Step 1: Knowledge and application of the language of position Step 2: Knowledge and application of directional language in the real world Step 3: Comparing routes Step 4: Explaining routes and positions of objects in scaled versions of known environments Step 5: Explaining routes and positions of objects in represented known environments where objects are replaced by abstract symbols RLS4 – Pattern recognition: Noticing, describing and extending patterns, including thinking about what part is the repeating unit – ABC PATTERNS Step 1: Comparing patterns – what's the same/different? Step 2: Continuing a pattern with a given unit of repeat Step 3: Identifying the unit of repeat and describing in many contexts. Step 4: Creating varied patterns and independently deciding upon the unit of repeat RLS10 – Regrouping the whole: Developing a deeper understanding that numbers are made up of other numbers and beginning to rehearse number bonds Step 1: Identify parts within a given whole using subitising Step 2: Regroup a whole into two parts using subitising, recognising that when combined, they equal the whole Step 3: Identify that a whole can be broken into many parts Step 4: Use subitising to identify multiple parts within a given whole

	Step 5: Using a mixed set of objects to create a given whole, identify parts and provide reasoning for the groupings RLSADDITIONAL – Shape: Recognise, name and describe simple properties (e.g. sides, corners, faces) of flat, 2D and solid, 3D shapes Step 1: Describing different flat (2D) shapes Step 2: Making comparisons between shapes Step 3: Identify an attribute that enables a collection to be classified into multiple groups Step 4: Exploring solid (3D) shapes Step 5: Reasoning about 3D shapes Step 6: Composing and decomposing shapes to find other shapes Step 7: Composing and decomposing shapes to find other shapes and making links with part and whole understanding
	FACT OF THE WEEK: NUMBERS 1, 2, 3, 4, 5 (1 more, 1 less, finding number on number line etc) – do one number a week

Term	Essential Maths
5	RLS3 – Comparison – measures: Comparing objects by length, thickness and weight/mass, using appropriate language to describe and order them – WEIGHT/MASS Step 1: What makes objects similar and different: Explaining what we notice Step 2: Using the language of longer/taller and shorter to compare length or height Step 3: Using the language of wider/fatter/thicker and thinner to compare thickness Step 4: Using the language of heavier and lighter to compare mass/weight. Exploring that bigger things might not be heavier Step 5: Ordering a small set of objects by a given attribute RLS11 – Regrouping parts to find the total (whole): Combining parts to make a whole and using the part, whole model to develop an understanding of addition Step 1: Regrouping subitisable parts to make subitisable totals Step 2: Regrouping subitisable parts and counting all to find the total Step 3: Recognise that regrouping different combinations of parts can make the same whole Step 4: Subitising one part and then counting on the number in the other part to find the whole Step 5: Counting on from either part makes the same whole RLS14 – Doubling and halving: Exploring doubling and halving, including solving problems involving doubling and halving Step 1: Learning to identify equal and unequal groups Step 2: Identify doubles and halves (including the context of pattern) Step 3: Explore the relationship between doubles and halves Step 4: Establish part, whole understanding where the parts are equal RLS15 – Odd and even: Understanding that numbers are either odd or even, looking at their 'composition' and whether they share fairly into two groups Step 1: Identify and recognise odd and even quantities by sharing into two groups Step 2: Recognise odd and even attributes in mathematical models Step 3: Explore the numerical pattern further in consecutive sequences of number
	FACT OF THE WEEK: NUMBERS 6, 7, 8, 9, 10 (1 more, 1 less, finding number on number line etc) – do one number a week

Term	Essential Maths
6	TERM 6 RLS4 – Pattern recognition: Noticing, describing and extending patterns, including thinking about what part is the repeating unit – ABB PATTERNS Step 1: Comparing patterns – what's the same/different? Step 2: Continuing a pattern with a given unit of repeat Step 3: Identifying the unit of repeat and describing in many contexts. Step 4: Creating varied patterns and independently deciding upon the unit of repeat

	RLS12 – Finding the whole and missing parts: Explores what to do when something is missing; initially the whole but moving on to working out a missing part, different types of problems will be used to teach different strategies Step 1: Finding the missing whole Step 2: Missing part – what could it and what couldn't it be? Step 3: Subitising the missing part Step 4: Missing part – how many more? Step 5: Missing part – how many left? Step 6: Missing part – finding the difference RLS13 – Ten and some more: Understanding values to 20 (focusing on the numbers 10 – 20) by creating the unit of 10, for comparison and finding one more and one less than a number Step 1: Relating the numbers zero – ten to benchmarks of 0, 5 and 10 Step 2: Finding ten – creating the unit of ten Step 3: Making ten and some more Step 4: Making ten and some more and writing them in digits Step 5: Naming ten and some more Step 6: Matching ten and some more, the number names and the number in digits Step 7: Finding one more / one less than a given number
	FACT OF THE WEEK: DOUBLES, ODD AND EVEN, TEEN NUMBERS