Mathematics – Progression Map

Counting

Calculating

Visualising

Estimating

Communicating

Reasoning

Problem Solving

Thinking Mathematically
Daily Routines :

Number and Place Value
- count in steps of 2, 3, and 5 from 0, and in tens from any number, forward and backward
- 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
- read and write numbers to at least 100 in numerals and in words
- use place value and number facts to solve problems.

Addition and Subtraction
- 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
- recall and use addition and subtraction facts to 20 fluently, and derive and use related facts 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 addition of two numbers can be done in any order (commutative) and subtraction one number from another cannot
- recognise and use the inverse relationship between addition and subtraction and use this check calculations and solve missing number problems.

Measures
- 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 using rulers, scales, thermometers and measuring vessels
- compare and order lengths, mass, volume/capacity and record the results using >, < and

Geometry (properties of shapes)
- 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 faces
- identify 2-D shapes on the surface of 3-D shapes, [for example, a circle on a cylinder and triangle on a pyramid]
- compare and sort common 2-D and 3-D shapes and everyday objects.

Half Term

Counting

Calculating

Visualising

Thinking
Dail

Multiplication and Division
- 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 t and write them using the multiplication (×), division (÷) and equals (=) signs
- show that multiplication of two numbers can be done in any order (commutative) and divis of one number by another cannot
- solve problems involving multiplication and division, using materials, arrays, repeated add mental methods, and multiplication and division facts, including problems in contexts.

Fractions
- recognise, find, name and write fractions $\frac{1}{3}, \frac{1}{4}, \frac{2}{4}$ and $\frac{3}{4}$ of a length, shape, set of objects quantity
- write simple fractions for example, $\frac{1}{2}$ of 6 = 3 and recognise the equivalence of $\frac{2}{4}$ and $\frac{1}{2}$.

Non-Statutory Guidance

Number and Place Value	Using materials and a range of representations, and comparing numbers to at least 100 and solv develop fluency. They count in multiples of three third.
	As they become more confident with numbers up numbers to develop further their recognition of p represent them in different ways, including spatia
	Pupils should partition numbers in different ways 23 = 10 + 13) to support subtraction. They becon numbers to reason with, discuss and solve probl digit in two-digit numbers. They begin to underst
Addition and Subtraction	Pupils extend their understanding of the languag sum and difference.
	Pupils practise addition and subtraction to 20 to facts such as using 3 + 7 = 10; 10 – 7 = 3 and 7 30 + 70 = 100; 100 – 70 = 30 and 70 = 100 – 30. by adding to check subtraction and adding numb (for example, 5 + 2 + 1 = 1 + 5 + 2 = 1 + 2 + 5). associativity of addition.
	Recording addition and subtraction in columns s formal written methods with larger numbers.
Multiplication and Division	Pupils use a variety of language to describe mu
	Pupils are introduced to the multiplication tables 2, 5 and 10 multiplication tables and connect th multiplication table to place value, and the 5 mu clock face. They begin to use other multiplicatio including using related division facts to perform
	Pupils work with a range of materials and conte relate to grouping and sharing discrete and con repeated addition. They begin to relate these to ÷ 2 = 20, 20 is a half of 40). They use commuta multiplicative reasoning (for example, 4 × 5 = 2
Fractions	Pupils use fractions as 'fractions of' discrete ar problems using shapes, objects and quantities sharing and grouping, to numbers when they c finding fractions of lengths, quantities, sets of c first example of a non-unit fraction.
	Pupils should count in fractions up to 10, starti
	$\frac{2}{4}$ equivalence on the number line (for exampl the concept of fractions as numbers and that t
Measures	Pupils use standard units of measurement with knowledge of the number system. They use the standard abbreviations.
	Comparing measures includes simple multiples
	They become fluent in telling the time on analo