Mathematics

Counting and understanding number

- To count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number.
- To count, read and write numbers to 100 in numerals, count in multiples of twos, fives and tens.
- When given a number, identify one more and one less.
- To read and write numbers from 1 to 20 in numerals and words.

Number and Place Value

- To count in steps of 2, 3, and 5 from 0, and count in tens from any number, forward or backward.
- To recognise the place value of each digit in a 2-digit number (tens, ones).
- To identify, represent and estimate numbers using different representations, including the number line.
- To compare and order numbers from 0 up to 100; use <, > and = signs.
- To read and write numbers to at least 100 in numerals and in words.
- To use place value and number facts to solve problems.

Addition and Subtraction

- To represent and use number bonds and related subtraction facts within 20.
- To add and subtract one-digit and two-digit numbers to 20, including zero.
- To solve one-step problems that involve addition and subtraction, using concrete
- objects and pictorial representations, and missing number problems.
- To add and subtract one-digit and two-digit numbers to 20, including zero.
- To solve one-step problems that involve addition and subtraction, using objects
- and pictorial representations, and missing number problems.
- To 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.
- To recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100.
- To add and subtract using concrete objects, pictorial representations, and mentally, including: a two-digit number and ones; a 2digit number and tens; two 2-digit numbers; adding three one-digit numbers.
- To show that addition can be done in any order (commutative) and subtraction cannot.
- To recognise and use the inverse relationship between addition and subtraction and use this to check calculations and missing number problems.
- To 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.
- To add and subtract using concrete objects, pictorial representations, and mentally, including: a two-digit number and ones; a 2 digit number and tens; two

Science

Materials

- Distinguish between an object and the material from which it is made.
- Identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock.
- Describe the simple physical properties of a variety of everyday materials.
- Compare and group together a variety of everyday materials on the basis of their simple physical properties.
- Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses.
- Find out how the shapes of solid objects made from some materials can be changed by squashing, ending, twisting and stretching.

- 2-digit numbers; adding three one-digit numbers.
- To show that addition can be done in any order (commutative) and subtraction cannot.
- To recognise and use the inverse relationship between addition and subtraction and use this to check calculations and missing number problems.

Multiplication and Division

- To solve one-step problems involving multiplication and division, calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher.
- To recall and use multiplication and division facts for the 2,5 and 10 multiplication tables, including recognising odd and even
- To calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (\times), division (\div) and equals (=) signs.
- To recognise and use the inverse relationship between multiplication and division in calculations.
- To show that multiplication of two numbers can be done in any order
- (commutative) and division for one number by another cannot.
- To solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods and multiplication and division facts, including problems in contexts

Fractions

To recognise, find and name a half as one of two equal parts of an object, shape or quantity.

Geometry

- To identify and describe the properties of 2D shapes, including the number of sides and symmetry in a vertical line.
- To identify and describe the properties of 3D shapes including the number of edges, vertices and faces.
- To identify 2D shapes on t

Measures

- To sequence events in chronological order using language such as: before and after, next, first, today, yesterday, tomorrow, morning, afternoon and evening.
- To tell the time to the hour and half past the hour and draw the hands on a clock face to show these times.
- To measure and begin to record the following:

lengths and heights

mass/weight

capacity and volume

time (hours, minutes, seconds).

- To choose and use appropriate standard units to estimate and measure length/ height in any direction (m/cm/mm); mass (kg/g)
- To compare and order lengths, mass, volume/capacity and record the results using >, < and =