Consett Infant School Mathematics Planning Year 2

Autumn Term	Spring Term	Summer Term
Emerging	Developing	Secure
Begin to count in steps of 2 from 0 forwards Begin to count in steps of 2 backwards to 0. Count in tens from any number. Recognise the value of each digit in a 2 digit number (tens and ones) Identify and represent numbers up to 100- including using number line. Use language such as equal to, more than, less than, most, least. Begin to compare and order numbers from 0 to 100. Use an = sign. Read and write numerals to 100. Begin to use number facts to solve problems.	 Count in steps of 5 from 0, forwards and backwards. Recognise the value of each digit in 2 digit number. Estimate numbers up to 100 with increasing confidence. Compare and order numbers to 100. Begin to use < ,> and = signs when comparing numbers. Read and write numbers to at least 50 in words. Use number facts to solve problems. 	 Count in multiple of 2 forwards and backwards. Count in multiples of 5 forwards and backwards. Count in multiples of 5 forwards and backwards. Count in multiples of 10 from any given number to 100 forwards and backwards. Count in multiples of 3 to at least 30. Recognise the value of each digit in a 2 digit number. Identify and represent numbers in different ways- including the numberline. Estimate numbers. Compare and order numbers from 0 to 100 using = ,< and >. Read numbers to at least 100 in numerals. Read numbers to at least 100 in words. Write numbers to at least 100 in numerals. Write numbers to at least 100 in numerals. Use place value and number facts to solve problems.

- Recall addition facts to 50.
- Recall subtraction facts to 50.
- Use related addition and subtraction facts up to 50.
- Add and subtract using pictorial representations.
- Add and subtract using concrete objects.
- Add and subtract mentally.
- Add a single digit number to a 2 digit number
- Subtract a single digit number from a 2 digit number.
- Add three single digit numbers
- Recognise that a smaller number can only be subtracted from a larger number.

- Begin to solve 1 and 2 step problems using addition and subtraction.
- Use concrete materials and pictorial representations to add and subtract.
- Add and subtract in context.
- Apply knowledge of mental methods for addition.
- Apply knowledge of mental methods for subtraction.
- Use related facts for addition and subtraction to 100.
- Add/ subtract tens to a 2 digit number.
- Show addition can be done in any order.
- Use number lines to solve addition and subtraction problems.
- Begin to use column methods for addition and subtraction
- Recognise and use inverses to solve problems.
- Use inverses to solve missing number problems.

- Solve problems with addition and subtraction.
- Use concrete materials and pictorial representations to add and subtract numbers, quantities and measures.
- Apply knowledge of mental and written methods to record addition and subtraction.
- Recall addition and subtraction facts to 20 and derive and use related facts to 100.
- Add and subtract numbers using concrete materials, pictorial representations and mentally including:
- Adding and subtracting a single digit number to a 2 digit number.
- Adding and subtracting tens numbers to a 2 digit number.
- Adding and subtracting two 2 digit numbers(not bridging 10)
- Adding three one digit numbers.
- Show how addition can be done in any order and subtraction cannot.
- Recognise the inverse relationship between addition and subtraction and use this to check calculations.
- Use inverses to solve missing number problems.

Multiplication and Division	 Recall multiplication facts for the 2X table. Recall division facts for 2X table. Recall multiplication facts for 10x table. Recall division facts for 10X table. Recognise odd and even numbers to 50. Begin to calculate multiplications and record using X and= Begin to calculate division and record using÷ and = Explore multiplication using concrete objects, arrays and pictorial representations. Explore division using concrete objects, arrays and pictorial representations. 	 Recall multiplication facts for the 5X table. Recall division facts for 5X table. Recognise odd and even numbers to at least 100. Count in multiples of 3 to at least 30. Calculate multiplication statements and record using X and =. Calculate division statements and record using ÷ and = Show how multiplication can be carried out in any order. Begin to show how division of one number by another can only be carried out by dividing the larger number by the smaller number. Solve problems using multiplication and division using materials, arrays, repeated addition, mental methods, multiplication and division facts. 	 Recall multiplication and division facts for 2X table Recall multiplication and division facts for 5X table. Recall multiplication and division facts for 10x table Recognise odd and even numbers to at least 100. Calculate multiplication and division statements and record them using X, ÷ and =. Show that multiplication of 2 numbers can be done in any order. Show ho division can only be carried out by dividing the larger number by the smaller number. Solve problems, including those in context, involving multiplication and division by using materials, arrays, repeated addition, mental methods, multiplication and division facts
Fractions		 Recognise and find \(\frac{1}{4}\) of a length, shape, set of objects or a quantity. Recognise and find 2/4 of a length, shape, set of objects or a quantity, Recognise and find \(\frac{3}{4}\) of a length, shape, set of objects or a quantity. Recognise the equivalence of \(\frac{1}{2}\) and 2/4 Begin t write simple fractions i.e. \(\frac{1}{2}\) of 4 is 2. 	 Recognise, find , name and write fractions: \$\frac{1}{4},1/3\$, 2/4and \$\frac{3}{4}\$ of a length , shape, set of objets or a quantity. Write simple fractions i.e. \$\frac{1}{2}\$ of 6= 3. Recognise equivalence i.e.1/2 = 2/4

- Choose and use appropriate standard units to measure length(m/cm)using rulers
- Use appropriate associated vocabulary when measuring ie longer/shorter, double/ half
- Begin to sequence intervals of time
- Begin to read and write the time to quarter past
- Begin to draw hands on a clock face to show quarter past
- Understand the number of minutes in an hour.
- Begin to understand the number of hours in a day
- Recognise language associated with dates i.e. days of the week, weeks, months, years

- Choose and use appropriate standard units to measure mass (kg/g) using scales
- Begin to use thermometers and recognise °C
- Compare length/mass/capacity and use < and> to record results.
- Recognise and use symbols for pounds £ and pence p and begin to solve simple problems involving money.
- Find different combinations of coins that equal the same amounts of money.
- Solve simple problems involving addition and subtraction of money of the same unit.
- Find change from a given amount.
- Tell the time to quarter to and draw hands on the clock face to show these.
- Begin to tell the time to 5 minute intervals.

- Choose appropriate standard units to estimate and measure length/height; mass; temperature; capacity to the nearest appropriate unit
- Use rulers, scales, thermometers and measuring vessels
- Compare and order mass, length, capacity and record results using < > and =.
- Reason abut simple multiplicative relationships i.e. twice as long/ ten times heavier
- Recognise symbols for pounds and pence and combine amounts to make a particular value.
- Find different combinations of coins that equal the same amount of money.
- Solve simple problems in a practical context which involve addition and subtraction of money of the same unit including giving change.
- Compare and sequence intervals of time.
- Tell and write the time to five minutes including quarter past/ quarter to the hour - raw hands on a clock face to show these times.
- Know the number of minutes in an hour and the number of hours in a day.

Geometry Properties of Shape	 Begin to identify and describe the properties of 2D shapes, including the number of sides. Begin to compare and sort common 2D and 2D shapes. 	 Identify and describe the properties of 3D shapes. Identify 2D shapes on the surface of 3D shapes. Compare and sort everyday objects, 3D shapes according to their geometric properties. Begin to identify vertical lines of symmetry in 2D shapes 	 Identify and describe the properties of 2D shapes including the number of sides and a vertical line o symmetry on a wide range of shapes. Identify and describe the properties of 3D shapes including the number of edges, vertices, and faces on a wide range of shapes. Identify 2D shapes on the surface of a wide range of 3D shapes. Compare and sort 2D shapes on the basis of their properties. Compare and sort 3D shapes on the basis of their properties.
Geometry Position and Direction	 Consolidate year1 language of position and direction e.g. forwards, backwards, up down etc. Order combinations of mathematical objects in patterns and sequences. Begin to understand rotation as a turn - 1/4, 1/2 and 3/4. 	 Use mathematical vocabulary to describe position. Use mathematical vocabulary to describe movement an a straight line - distinguish between ¹/₄ turns, ¹/₂ turns and ³/₄ turns. 	 Order and arrange combinations of mathematical objects in patterns and sequences. Use mathematical vocabulary to describe position. Use mathematical vocabulary to describe movement in a straight line. Use mathematical vocabulary to describe rotation in terms of right angles for ½ turns, ½ turns and ¾ turns. Use terms clockwise and anticlockwise to describe rotation

- Interpret and construct simple pictograms.
- Interpret and construct tally charts.
- Begin to interpret and construct block diagrams.
- Ask and answer simple questions by counting the number of objects.
- Interpret and construct simple tally charts
- Interpret and construct simple block diagrams.
- Interpret and construct simple tables.
- Ask and answer simple questions by counting the number of objects in each category.
- Ask and answer simple questions by sorting and counting the objects in categories.
- Ask and answer questions about totalling.
- Begin to compare categorical data.

- Interpret simple pictograms.
- Construct simple pictograms.
- Interpret and construct tally charts.
- Interpret and construct block diagrams where the scale is divided into 2s.
- Interpret and construct block diagrams where the scale is divided into 5s.
- Interpret and read simple tables.
- Ask and answer simple questions by counting the number of objects in each category.
- Ask and answer simple questions by sorting by quantities.
- Ask and answer questions about totalling and comparing categorical data.