backwards, beginning with 0 or 1, or from any given number. Count objects up to 4 or 5 objects by saying one number name for each item  Count to 5 correctly Put out up to 5 objects  Recite numbers to 10 in order  Count an irregular arrangement of objects to 10 Develop one-to-one correspondence Put out up to 10 objects  Salect the correct numeral to represent quantities from 1 to 3 by the number to 10 Find a given number there to 20 in numerals and words.  Salect the correct numeral to represent quantities from 1 to 3 by the number to 10 Find a given number to 20 in numerals and words.  Salect the correct numeral to represent quantities from 1 to 3 by the number to 10 Find a given number there to 3 bin the missing numbers to 30 in numerals and words.  Salect the correct numeral to represent quantities from 1 to 3 by the number to 10 Find a given number there to 3 bin numerals and words.  Salect the correct numeral to represent quantities from 1 to 3 by the number to 10 Find a given number there to 3 bin numerals and words.  Salect the correct numeral to represent quantities from 1 to 3 bin numerals and words.  Salect the correct numeral to represent quantities from 1 to 3 bin wire to 30 bin numerals and words.  Salect the correct numeral to represent quantities from 1 to 3 bin wire to 30 bin numerals and words.  Salect the correct numeral to represent quantities from 1 to 3 bin wire to 30 bin numerals and words.  Salect the correct numeral to represent quantities from 1 to 3 bin wire to 30 bin numerals and words.  Salect the correct numeral to represent quantities from 1 to 3 bin wire to 30 bin numerals and words.  Salect the correct numeral to represent quantities from 1 to 3 bin wire to 30 bin numerals and words.  Salect the correct numeral to represent quantities from 1 to 3 bin wire to 30 bin numerals and words.  Salect the correct numeral to represent quantities from 1 to 3 bin wire to		Step 5	Step 6	Step 7	Step 8
Number and place   Pupils will be taught to:   Count to and across 20, forwards and backwards, beginning with 0 or 1, or from any given number.   Count to and across 20, forwards and backwards, beginning with 0 or 1, or from any given number.   Count to a facross 20, forwards and backwards, beginning with 0 or 1, or from any given number.   Count to a facross 20, forwards and backwards, beginning with 0 or 1, or from any given number.   Count to a facross 20, forwards and backwards, beginning with 0 or 1, or from any given number.   Count to a facross 20, forwards and backwards, beginning with 0 or 1, or from any given number.   Count to and across 40, forwards and backwards, beginning with 0 or 1, or from any given number.   Count to and across 40, forwards and backwards, beginning with 0 or 1, or from any given number.   Count to and across 40, forwards and backwards, beginning with 0 or 1, or from any given number.   Count to and across 40, forwards and backwards, beginning with 0 or 1, or from any given number.   Count to and across 40, forwards and backwards, beginning with 0 or 1, or from any given number.   Count to and across 40, forwards and backwards, beginning with 0 or 1, or from any given number.   Count to and across 40, forwards and backwards, beginning with 0 or 1, or from any given number.   Count to and across 40, forwards and backwards, beginning with 0 or 1, or from any given number.   Count to and across 40, forwards and backwards, beginning with 0 or 1, or from any given number.   Count to and across 40, forwards and backwards, beginning with 0 or 1, or from any given number.   Count to and across 40, forwards and backwards, beginning with 0 or 1, or from any given number.   Count to and seven working 40.   Count to an aumber to 40 in numbers to 40 in number	Area of				
Count to jects up to 4 or 5 objects by saying one number name for each item  Count to 5 correctly  Put out up to 5 objects  Recite numbers to 10 in order  Count an irregular arrangement of objects to 10  Develop one-to-one correspondence  Put out up to 10 objects  Count an irregular arrangement of objects to 10  Develop one-to-one correspondence  Put out up to 10 objects  Count an irregular arrangement of objects to 10  Develop one-to-one correspondence  Put out up to 10 objects  Count to incorrect number is to 10  Develop one-to-one correspondence  Put out up to 10 objects  Count an irregular arrangement of objects to 10  Develop one-to-one correspondence  Put out up to 10 objects  Count an irregular arrangement of objects to 10  Develop one-to-one correspondence  Put out up to 10 objects  Put out up to 10 objects  Put out up to 10 objects  Count an irregular arrangement of objects to 10  Develop one-to-one correspondence  Put out up to 10 objects  Count an irregular arrangement of objects to 10  Develop one-to-one correspondence  Put out up to 10 objects  Put out up to 10 objects  Put out up to 10 objects  Count in 12 to 20  Develop one-to-one correspondence  Put out up to 10 objects  Count in 12 to 20  Develop one-to-one correspondence  Put out up to 10 objects  Put out up to 10 objects  Put out up to 10 objects  Count in 12 to 20  Develop one-to-one correspondence  Put out up to 10 objects  Stages to achieving this outcome  Pind a given number to 20 in numerals to 20  Defined ne more or eless than a given number to 10  Pind one more or one less from a group up to 10 objects  Stages to achieving this outcome  Pind on more or one less from a group up to 10 objects  Stages to achieving this outcome  Pind on more or one less from a group up to 10 objects  Stages to achieving this outcome  Pind on more or one less from a group up to 10 objects  Stages to achieving this outcome  Pind one more or one less from a group up to 10 objects  Stages to achieving this outcome  Pind on more or one less from a group up to 1					
Use a range of scaffolding resources to identify the number before, and after, one more and one less from a given number to ten  Develop consistency counting a range of objects to ten, appreciating that the last number counted represents the total size of the group  Identify and write numerals to ten and transfer into functional contexts, such as telephone keypad, phone numbers, bus numbers, lockers etc  Within numbers to 50  **  EL1 N02 Use whole numbers to count up to 20 items including zero  Count in different multiples including ones, twos, fives and tens  **  Cross reference with multiplication and division steps 6 and 7	maths Number and place	Recognise numerals 1 to 5  Count objects up to 4 or 5 objects by saying one number name for each item  Count to 5 correctly Put out up to 5 objects  Recite numbers to 10 in order  Count an irregular arrangement of objects to 10 Develop one-to-one correspondence Put out up to 10 objects  Select the correct numeral to represent quantities from1 to 10 Say the number that is one more or less than a given number to 10 Find one more or one less from a group up to 10 objects Stages to achieving this outcome From 0-10 find the number before or after a given number. Identify missing numbers on a number line between 0-10 Identify the number between two given numbers 0-10 Identify which number is more and which number is less.  Using concrete apparatus and number lines  Record, using marks that they can interpret and explain  Steps for life 7 When comparing two quantities to ten, students will be supported to use terms 'fewer', 'larger', less', 'smaller' Use a range of scaffolding resources to identify the number before, and after, one more and one less from a given number to ten  Develop consistency counting a range of objects to ten, appreciating that the last number counted represents the total size of the group Identify and write numerals to ten and transfer into functional contexts, such as telephone keypad, phone numbers, bus	Count to and across 20, forwards and backwards, beginning with 0 or 1, or from any given number.  Stages to achieving this outcome:  • Join in with rote counting between numbers 10-20.  • Continue counting onwards from a given number between 10 and 20.  • Begin to count up to 20 objects that can be moved.  Read numbers to 20 in numerals and words.  EL1 N01 Read, write, order and compare numbers up to 20.  Stages to achieving this outcome  • Find a given number between 10 and 20  • Order numbers to 20 physically and using the computer.  • Match objects to numerals to 20.  • Identify all numbers in all familiar situations (e.g. clock, telephone, shop)  • Estimate how many objects they can see and check by counting them Stages to achieving this outcome  • Understand that an estimate is a guess  • Accept that their guess won't always be correct  Write numbers to 20 in numerals.  • Use numbers to record up to 20  • Record up to 20 objects. (use stickers, I.C.T, drawing)  • EL1 N02 Use whole numbers to count up to 20 items including zero  Count in different multiples including ones, twos, fives and tens  • Cross reference with multiplication and division steps 6	Count to and across 50, forwards and backwards, beginning with 0 or 1, or from any given number.  Read numbers to 50 in numerals and words.  • Find a given number between 20 and 50.  • Fill in the missing numbers working within 50.  • Relate cardinal numbers to date.  Write numbers to 50 in numerals.  • Use numbers to record up to 50  • Record up to 50 objects. (use stickers, I.C.T, drawing)  Count in different multiples including ones, twos, fives and tens  • Rote count in 2's to 20.  • Group objects into groups of 2.  • Count in 10s to 100  • Group objects such as coins, into groups of ten (Cross reference multiplication and division steps 6 and 7)  Given a number, identify one more and one less to 50  • From 20 to 50 find the number before or after a given number.  • On a number line find 1 more than a given number working 20 - 50.  • On a number line find 1 less than a given number working 20-50.  • Identify missing numbers on a number line between 20-50  • Identify the number between two given numbers (20-50)  • Identify which number is more and which number is less of two given numbers to 50.  Understand and use mathematical language of:	Count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number.  EL2 N01 Count reliably up to 100 items  Continue rote counting onwards from a given number between 50 and 100.  Read numbers to 100 in numerals and words. Find a given number between 50 and 100. Fill in the missing numbers working within 50.  Write numbers to 100 in numerals. Use numbers to record up to 100 Record up to 100 objects. (use stickers, I.C.T, drawing)  Count in different multiples including ones, twos, fives and tens Rote count in 5's to 100. Group objects into groups of 5. Begin to use appropriate multiple for counting large numbers of objects.  Write numbers from 1 to 50 in words, and beyond if appropriate. Given a number, identify one more and one less to 100 From 50 to 100 find the number before a given number. From 50 to 100 find the number after a given number. Say 1 more than a give number working within 100. Say 1 less than a give number working within 50-100. Understand and use mathematical language of: equal to, more than, less than (fewer), most, least within

Under equal	working within 10-20.  Identify missing numbers on a number line between 0-20  Identify the number between two given numbers (0-20)  Identify which number is more and which number is less.  Ing concrete apparatus and number is erstand mathematical language of: al to, more than, less than (fewer), st, least within numbers to 20.		
in two groups by counting all of them  With verbal prompts push two given objects together Count all of the new objects in the new larger group Pupils should be provided with opportunities, in practical situations, for discussion to begin to use the vocabulary involved in addition and subtraction  Add, take away Makes, equals Same, difference More, less  Steps for life 7 Undertake basic addition and subtraction using concrete apparatus to add/ remove one, and count how many are there now/left, to Five, then ten Understand the idea of not many / a lot Be confident to estimate based on level of understanding Use simple language to explain the meaning of 'add', 'altogether', make, more, take away.  Pupils should be encouraged to identify own mathematical problems based on own interests and fascinations  Invent number problems in their play  recognized to equals  recognized the meaning of them equals  recognized the meaning of them equals  recognized the new objects together equals  subtraction  **Count all of the new objects in the new larger group  Pupils should be provided with opportunities, in practical situations  **Count all of the new objects in the new larger group  equals  **Count all of the new objects in the new larger group  equals  **Count all of the new objects in the new larger group  **Count all of the new objects in the new larger group  equals  **Count all of the new objects in the new larger group  equals  **Count all of the new larger group  equals  **Count all of the new larger group  **Count all of them  **Count all of themes later and later	<ul> <li>als (=) signs.</li> <li>Recognise and use appropriate language relating to addition (+)</li> <li>Recognise and use appropriate language relating to subtraction (-)</li> <li>Recognise and use appropriate language relating to equals (=)</li> <li>N04 Recognise and interpret symbols +, - and = appropriately</li> <li>Answer simple addition problems related to life</li> <li>Compare 2 sets to find numerical differences</li> <li>and subtract one-digit</li> <li>nbers.</li> <li>N03a Add numbers which total</li> </ul>	<ul> <li>subtraction (-) and equals (=) signs</li> <li>Realise that addition involves combining two groups</li> <li>Use objects to add 2 groups together</li> <li>Read a calculation involving – and =</li> <li>Realise that subtraction means taking away</li> <li>Identify the operation required to solve a problem</li> <li>Use objects to find the difference between two numbers</li> <li>add and subtract one-digit and two-digit</li> <li>numbers to 20 (9 + 9, 18 - 9)</li> <li>EL1 N03a Add numbers which total up to 20</li> <li>EL1 N03b Subtract numbers from numbers up to</li> </ul>	Pupils should be taught to: read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs  • Use a range of methods to solve calculations (drawing the question/objects/counting on and back)  • Record addition problems (pictures, symbols, stickers, I.C.T, writing)  represent and use number bonds and related subtraction facts within 20.  • Know number bonds to make a given number within 20  • Record ways of making a given number add and subtract one-digit and two-digit numbers to 20 (9 + 9, 18 - 9), including zero  Pupils should be taught to solve simple one-step problems that involve addition and subtraction  • Identify which operation they need to solve the problem  • Use an appropriate method to solve the problem  • Select resources to help solve the problem

Multiplica tion and division	Pupils should be given opportunities to: -divide a group of objects into two equal groups.  • Share objects, sweets, etc. between two people • Divide a piece of play dough into two roughly equal pieces -share objects equally • Recognise that the term 'to share' means giving everyone the same amount • Sets the table with the correct number of cutlery for each place  Pupils will be supported to use doubling to solve problems using concrete objects	Separate groups of 10 objects into 2 groups  Know several ways how sets to 10 may be separated into 2 groups  Pupils will learn how to solve one-step problems involving multiplication and division, by:  - calculating the answer using concrete objects, - pictorial representations and - arrays with the support of the teacher.  Pupils will be taught to: Double any number to ten (Practically) Give the half of even numbers to 10 (Practically) Give the half of even numbers to 20 (Practically)  Pupils will learn that: - multiplication is repeat addition  - doubling is the inverse of halving - division is sharing equally  - Give the half of even numbers to 10  Give the half of even numbers to 20	Pupils will be given opportunities to practise and learn to:  - recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers  - Describe the effects of multiplying a number by 10  - Recall halves of numbers to 20  Recall number doubles from 1 to 15  Use read and begin to understand 'share' / 'halve'/ 'divide'/, 'double'/ 'times'/ 'multiply'	Pupils will be taught to: calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (x), division (÷) and equals (=) signs Use calculation skills to solve real life problems  Pupils will be taught to: solve problems involving multiplication and division: - using materials, - arrays, - repeated addition, - mental methods, and - multiplication and division facts, including problems in contexts.  Pupils will be taught how to: Identify the process required to solve a problem Round up or down after division Break down sums Multiply a 2 digit number Divide a 2 digit number Answer mental division problems
Fractions	Pupils should be supported to divide a group of objects into two equal groups.  • Share objects, sweets, etc. between two people • Divide a piece of play dough into two roughly equal pieces  Pupils should be supported to share objects equally • Recognise that the term 'to share' means giving everyone the same amount • Sets the table with the correct number of cutlery for each place  Pupils should be shown how to use doubling to solve problems  Steps 4 life 6  Create multiple opportunities for students to share objects between others to develop awareness of simple division and equal sharing. Fold paper roughly in half eg to make a card Share objects between a group so that everyone has the same quantity up to five  Steps 4 life 7  Use vocabulary for simple fractions in conversation eg Half each Share objects into groups	Pupils should be taught to: recognise, find and name a half as one of two equal parts of an object, shape or quantity recognise the term 'share' as meaning divide into equal amounts  Divide an item into two pieces and know this is a 'half'.  - know that half is written as ½ - shade ½ of symmetrical shapes (links: symmetry, time) - Find ½ of a number (links: even numbers, 2 x table and division by 2)	Pupils should be taught to recognise, find and name a quarter as one of four equal parts of an object, shape or quantity.  Know that quarter is written as ¼  - find ¼ of a number (links: 4 x table)  - shade ½ of symmetrical shapes (links: SSM symmetry, time)	Give whole number remainder  Pupils should be taught to write simple fractions for example, $\frac{1}{2}$ of 6 = 3  and recognise the equivalence of $\frac{2}{4}$ and $\frac{1}{2}$ - find half of even numbers and record as a fraction (ie $\frac{1}{2}$ of $x = y$ )  - know that $\frac{2}{4}$ is the same as $\frac{1}{2}$ - shade $\frac{2}{4}$ and $\frac{3}{4}$ of a shape  - divide a quantity into quarters and then identify $\frac{3}{4}$ as a group or an amount  - find $\frac{3}{4}$ of a number  Pupils should be taught to 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 or quantity

MATHS PLANNING GRID STEPS 5-8				
Share concrete objects so that everyone in a group has up to eight each Count two halves of a group of objects to check they have the same amount				

backwards, beginning with 0 or 1, or from any given number. Count objects up to 4 or 5 objects by saying one number name for each item  Count to 5 correctly Put out up to 5 objects  Recite numbers to 10 in order  Count an irregular arrangement of objects to 10 Develop one-to-one correspondence Put out up to 10 objects  Salect the correct numeral to represent quantities from 1 to 3 by the number to 10 Find a given number there to 20 in numerals and words.  Salect the correct numeral to represent quantities from 1 to 3 by the number to 10 Find a given number to 20 in numerals and words.  Salect the correct numeral to represent quantities from 1 to 3 by the number to 10 Find a given number there to 3 bin the missing numbers to 30 in numerals and words.  Salect the correct numeral to represent quantities from 1 to 3 by the number to 10 Find a given number there to 3 bin numerals and words.  Salect the correct numeral to represent quantities from 1 to 3 by the number to 10 Find a given number there to 3 bin numerals and words.  Salect the correct numeral to represent quantities from 1 to 3 bin numerals and words.  Salect the correct numeral to represent quantities from 1 to 3 bin wire to 30 bin numerals and words.  Salect the correct numeral to represent quantities from 1 to 3 bin wire to 30 bin numerals and words.  Salect the correct numeral to represent quantities from 1 to 3 bin wire to 30 bin numerals and words.  Salect the correct numeral to represent quantities from 1 to 3 bin wire to 30 bin numerals and words.  Salect the correct numeral to represent quantities from 1 to 3 bin wire to 30 bin numerals and words.  Salect the correct numeral to represent quantities from 1 to 3 bin wire to 30 bin numerals and words.  Salect the correct numeral to represent quantities from 1 to 3 bin wire to 30 bin numerals and words.  Salect the correct numeral to represent quantities from 1 to 3 bin wire to		Step 5	Step 6	Step 7	Step 8
Number and place   Pupils will be taught to:   Count to and across 20, forwards and backwards, beginning with 0 or 1, or from any given number.   Count to and across 20, forwards and backwards, beginning with 0 or 1, or from any given number.   Count to a facross 20, forwards and backwards, beginning with 0 or 1, or from any given number.   Count to a facross 20, forwards and backwards, beginning with 0 or 1, or from any given number.   Count to a facross 20, forwards and backwards, beginning with 0 or 1, or from any given number.   Count to a facross 20, forwards and backwards, beginning with 0 or 1, or from any given number.   Count to and across 40, forwards and backwards, beginning with 0 or 1, or from any given number.   Count to and across 40, forwards and backwards, beginning with 0 or 1, or from any given number.   Count to and across 40, forwards and backwards, beginning with 0 or 1, or from any given number.   Count to and across 40, forwards and backwards, beginning with 0 or 1, or from any given number.   Count to and across 40, forwards and backwards, beginning with 0 or 1, or from any given number.   Count to and across 40, forwards and backwards, beginning with 0 or 1, or from any given number.   Count to and across 40, forwards and backwards, beginning with 0 or 1, or from any given number.   Count to and across 40, forwards and backwards, beginning with 0 or 1, or from any given number.   Count to and across 40, forwards and backwards, beginning with 0 or 1, or from any given number.   Count to and across 40, forwards and backwards, beginning with 0 or 1, or from any given number.   Count to and across 40, forwards and backwards, beginning with 0 or 1, or from any given number.   Count to and seven working 40.   Count to an aumber to 40 in numbers to 40 in number	Area of				
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(use stickers, I.C.T, drawing)  • EL1 N02 Use whole numbers to count up to 20 items including zero  Count in different multiples including ones, twos, fives and tens  • Cross reference with multiplication and division steps 6	Count to and across 50, forwards and backwards, beginning with 0 or 1, or from any given number.  Read numbers to 50 in numerals and words.  • Find a given number between 20 and 50.  • Fill in the missing numbers working within 50.  • Relate cardinal numbers to date.  Write numbers to 50 in numerals.  • Use numbers to record up to 50  • Record up to 50 objects. (use stickers, I.C.T, drawing)  Count in different multiples including ones, twos, fives and tens  • Rote count in 2's to 20.  • Group objects into groups of 2.  • Count in 10s to 100  • Group objects such as coins, into groups of ten (Cross reference multiplication and division steps 6 and 7)  Given a number, identify one more and one less to 50  • From 20 to 50 find the number before or after a given number.  • On a number line find 1 more than a given number working 20 - 50.  • On a number line find 1 less than a given number working 20-50.  • Identify missing numbers on a number line between 20-50  • Identify the number between two given numbers (20-50)  • Identify which number is more and which number is less of two given numbers to 50.  Understand and use mathematical language of:	Count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number.  EL2 N01 Count reliably up to 100 items  Continue rote counting onwards from a given number between 50 and 100.  Read numbers to 100 in numerals and words. Find a given number between 50 and 100. Fill in the missing numbers working within 50.  Write numbers to 100 in numerals. Use numbers to record up to 100 Record up to 100 objects. (use stickers, I.C.T, drawing)  Count in different multiples including ones, twos, fives and tens Rote count in 5's to 100. Group objects into groups of 5. Begin to use appropriate multiple for counting large numbers of objects.  Write numbers from 1 to 50 in words, and beyond if appropriate. Given a number, identify one more and one less to 100 From 50 to 100 find the number before a given number. From 50 to 100 find the number after a given number. Say 1 more than a give number working within 100. Say 1 less than a give number working within 50-100. Understand and use mathematical language of: equal to, more than, less than (fewer), most, least within

Under equal	working within 10-20.  Identify missing numbers on a number line between 0-20  Identify the number between two given numbers (0-20)  Identify which number is more and which number is less.  Ing concrete apparatus and number is erstand mathematical language of: al to, more than, less than (fewer), st, least within numbers to 20.		
in two groups by counting all of them  With verbal prompts push two given objects together Count all of the new objects in the new larger group Pupils should be provided with opportunities, in practical situations, for discussion to begin to use the vocabulary involved in addition and subtraction  Add, take away Makes, equals Same, difference More, less  Steps for life 7 Undertake basic addition and subtraction using concrete apparatus to add/ remove one, and count how many are there now/left, to Five, then ten Understand the idea of not many / a lot Be confident to estimate based on level of understanding Use simple language to explain the meaning of 'add', 'altogether', make, more, take away.  Pupils should be encouraged to identify own mathematical problems based on own interests and fascinations  Invent number problems in their play  recognized to equals  recognized the meaning of them equals  recognized the meaning of them equals  recognized the new objects together equals  subtraction  **Count all of the new objects in the new larger group  Pupils should be provided with opportunities, in practical situations  **Count all of the new objects in the new larger group  equals  **Count all of the new objects in the new larger group  equals  **Count all of the new objects in the new larger group  **Count all of the new objects in the new larger group  equals  **Count all of the new objects in the new larger group  equals  **Count all of the new larger group  equals  **Count all of the new larger group  **Count all of them  **Count all of themes later and later	<ul> <li>als (=) signs.</li> <li>Recognise and use appropriate language relating to addition (+)</li> <li>Recognise and use appropriate language relating to subtraction (-)</li> <li>Recognise and use appropriate language relating to equals (=)</li> <li>N04 Recognise and interpret symbols +, - and = appropriately</li> <li>Answer simple addition problems related to life</li> <li>Compare 2 sets to find numerical differences</li> <li>and subtract one-digit</li> <li>nbers.</li> <li>N03a Add numbers which total</li> </ul>	<ul> <li>subtraction (-) and equals (=) signs</li> <li>Realise that addition involves combining two groups</li> <li>Use objects to add 2 groups together</li> <li>Read a calculation involving – and =</li> <li>Realise that subtraction means taking away</li> <li>Identify the operation required to solve a problem</li> <li>Use objects to find the difference between two numbers</li> <li>add and subtract one-digit and two-digit</li> <li>numbers to 20 (9 + 9, 18 - 9)</li> <li>EL1 N03a Add numbers which total up to 20</li> <li>EL1 N03b Subtract numbers from numbers up to</li> </ul>	Pupils should be taught to: read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs  • Use a range of methods to solve calculations (drawing the question/objects/counting on and back)  • Record addition problems (pictures, symbols, stickers, I.C.T, writing)  represent and use number bonds and related subtraction facts within 20.  • Know number bonds to make a given number within 20  • Record ways of making a given number add and subtract one-digit and two-digit numbers to 20 (9 + 9, 18 - 9), including zero  Pupils should be taught to solve simple one-step problems that involve addition and subtraction  • Identify which operation they need to solve the problem  • Use an appropriate method to solve the problem  • Select resources to help solve the problem

Multiplica tion and division	Pupils should be given opportunities to: -divide a group of objects into two equal groups.  • Share objects, sweets, etc. between two people • Divide a piece of play dough into two roughly equal pieces -share objects equally • Recognise that the term 'to share' means giving everyone the same amount • Sets the table with the correct number of cutlery for each place  Pupils will be supported to use doubling to solve problems using concrete objects	Separate groups of 10 objects into 2 groups  Know several ways how sets to 10 may be separated into 2 groups  Pupils will learn how to solve one-step problems involving multiplication and division, by:  - calculating the answer using concrete objects, - pictorial representations and - arrays with the support of the teacher.  Pupils will be taught to: Double any number to ten (Practically) Give the half of even numbers to 10 (Practically) Give the half of even numbers to 20 (Practically)  Pupils will learn that: - multiplication is repeat addition  - doubling is the inverse of halving - division is sharing equally  - Give the half of even numbers to 10  Give the half of even numbers to 20	Pupils will be given opportunities to practise and learn to:  - recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers  - Describe the effects of multiplying a number by 10  - Recall halves of numbers to 20  Recall number doubles from 1 to 15  Use read and begin to understand 'share' / 'halve'/ 'divide'/, 'double'/ 'times'/ 'multiply'	Pupils will be taught to: calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (x), division (÷) and equals (=) signs Use calculation skills to solve real life problems  Pupils will be taught to: solve problems involving multiplication and division: - using materials, - arrays, - repeated addition, - mental methods, and - multiplication and division facts, including problems in contexts.  Pupils will be taught how to: Identify the process required to solve a problem Round up or down after division Break down sums Multiply a 2 digit number Divide a 2 digit number Answer mental division problems
Fractions	Pupils should be supported to divide a group of objects into two equal groups.  • Share objects, sweets, etc. between two people • Divide a piece of play dough into two roughly equal pieces  Pupils should be supported to share objects equally • Recognise that the term 'to share' means giving everyone the same amount • Sets the table with the correct number of cutlery for each place  Pupils should be shown how to use doubling to solve problems  Steps 4 life 6  Create multiple opportunities for students to share objects between others to develop awareness of simple division and equal sharing. Fold paper roughly in half eg to make a card Share objects between a group so that everyone has the same quantity up to five  Steps 4 life 7  Use vocabulary for simple fractions in conversation eg Half each Share objects into groups	Pupils should be taught to: recognise, find and name a half as one of two equal parts of an object, shape or quantity recognise the term 'share' as meaning divide into equal amounts  Divide an item into two pieces and know this is a 'half'.  - know that half is written as ½ - shade ½ of symmetrical shapes (links: symmetry, time) - Find ½ of a number (links: even numbers, 2 x table and division by 2)	Pupils should be taught to recognise, find and name a quarter as one of four equal parts of an object, shape or quantity.  Know that quarter is written as ¼  - find ¼ of a number (links: 4 x table)  - shade ½ of symmetrical shapes (links: SSM symmetry, time)	Give whole number remainder  Pupils should be taught to write simple fractions for example, $\frac{1}{2}$ of 6 = 3  and recognise the equivalence of $\frac{2}{4}$ and $\frac{1}{2}$ - find half of even numbers and record as a fraction (ie $\frac{1}{2}$ of $x = y$ )  - know that $\frac{2}{4}$ is the same as $\frac{1}{2}$ - shade $\frac{2}{4}$ and $\frac{3}{4}$ of a shape  - divide a quantity into quarters and then identify $\frac{3}{4}$ as a group or an amount  - find $\frac{3}{4}$ of a number  Pupils should be taught to 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 or quantity

MATHS PLANNING GRID STEPS 5-8				
Share concrete objects so that everyone in a group has up to eight each Count two halves of a group of objects to check they have the same amount				

	Step 1	Step 2	Step 3	Step 4
Area of				Huey Liam
maths				
maths  Number and place value	Pupils will encounter experiences which enable them to: Develop an awareness of number names through their enjoyment of action rhymes and songs that relate to their experience of numbers.  • Listen to number songs as part of a small group  • Participate in reciting number rhymes and songs  • Use number names in rhymes  Have an understanding that things exist, even when out of sight  • Watch items as they are thrown or fall  • Observe an object being put into a container and removes it  • Look to see if an object is where they put it  • Look for objects inside or under a container.	Pupils will encounter experiences which enable them to:  Say some counting words randomly  • Count when playing in any order  • Use counting words while sorting, counting objects – numbers are not accurately sequential  • Follow an adults counting sequence  Help to count	Pupils will be provided with opportunities to: Select a small number of objects from a group when asked  • Respond to give me some • Respond to give me some more • Hand an adult the correct number of counters when asked 'please give me one/two' Recite some numbers in sequence  Experiment with symbols and marks representing ideas of number  Begin to make comparisons between quantities  • Make a group of one; Make a group of 'lots'  • Use the terms 1 and lots  • Begin to match one to one  • Begin to match to equal sets  • Contrast quantities  Use some language of quantities, such as 'more' and 'a lot'  Steps 4 life 5  Students will be encouraged to use and respond to mathematical language in context such as	Pupils will be provided with opportunities to:  Use some number names and language spontaneously Use some number names accurately in play Recite numbers in order to 5  • Rote counting  • Point to objects as they count  • Count objects in a picture Know that numbers identify how many objects in a set  • Use number names when asked how many – not always accurate  • Match numerals to sets - not always accurate Begin to represent numbers using fingers  • Show up to 5 fingers correctly  • Know that they have five fingers on each hand Sometimes matches numeral and quantities correctly  • Place objects in numbered containers  • Place objects onto number cards Show an interest in numerals in the environment  • Points out numbers they see around them but doesn't always accurately name them Show an interest in representing numbers
	Pupils will be given opportunities to recognise big and small things in meaningful contexts	Pupils will begin to identify big and small objects on request  Begin to understand that things might happen now	'Gone' or 'All gone', 'Give me some, Give me some more of' Students will be given opportunities to use quantitative language, signs or symbols when asking for things, such as 'some, more' Students will have many opportunities to apply counting skills in real situations such as items in basket, contents of cupboard, setting the table developing one-to-one correspondence Students are made aware of numbers in the environment, such as press buttons on calculator, phone, TV remote and looks at number display  Steps 4 life 5 Students will develop early division by sharing things between peers  Pupils will be given opportunities to:  categorise objects according to size, and begin to use the language of size -  • Big, Small • Bigger, Smaller • Tall, Short • Little	<ul> <li>Attempt to use appropriate ways to represent numbers (e.g. stickers, I.C.T, mark making, drawing)</li> <li>Steps 4 life 6</li> <li>Show basic awareness of difference in quantity eg one, lots</li> <li>Know when 'more' of something is required</li> <li>Give objects out so that everyone has one each Identify and create differing quantities up to 5</li> <li>Compare two sets of up to 5 objects identifying which has fewer/greater, less/more, smaller/larger</li> <li>Be able to respond to 'How many?', by counting accurately one, two or three</li> <li>Develop familiarity with numerals to 5 including in sequence</li> <li>Link numeral to quality to 5</li> <li>Count accurately to 5</li> <li>Know when more is needed to make a total to 5</li> <li>Match two equal sets</li> <li>Use knowledge of numerals when using equipment such as phones, remote control</li> <li>Copy and continue simple patterns using real-life materials, e.g. apple, orange, apple, orange, etc.</li> </ul>

		Know that equal sharing requires distributing objects
easures c money	Pupils will be supported to: talk about immediate past and future e.g. • Before, Later, Soon  anticipate specific time-based events such as • Meal times • Play times • Home time	Pupils will be given opportunities to practise the language of size  • Big, Small, • Bigger, Smaller, • Tall, Short • Taller, Shorter, shortest • Little, Long • Heavy, Light • Full, Empty
	Steps 4 life 5 Use coins in role play and real situations Provide activities which enable early comparison skills for big/ small, full/ empty, hot/ cold, light/dark	Steps 4 life 6 Create opportunities for students to use and develop comparative language big/ small, 'heavy' and 'light', more/less, hot/cold, Find two items which are the same length  Introduce measures in context, eg kitchen measuring scales, boxes and bags of different sizes, correct size lids on jars, fill jugs, add specified amount of spoons full to mixture etc Stack three items in size order  Understand some talk about immediate past and future e.g.  Before, after, Later, Soon Morning, Afternoon  Steps 4 life 6 Relate present activities and past experiences
		Steps 4 life 6 Enable students to handle coins and notes, and lead the difference Rehearse the purpose of money as exchange for go or services Match and sort coins. Count coins up to 5

Addition and subtraction		Pupils should be given opportunities to notice that groups of things change when something is added or taken away  • Join in with number rhymes  • Understand that the number will change as the rhyme progresses  • Add objects to a group of objects and attempts to count them  • Take objects away from a group of objects and attempts to count them	Pupils should be provided with opportunities to show an interest in number problems  • Join in self-registration • Help to check how many children are away • Help to find out how many more snacks are need  Pupils should be supported to separate a group of three or four objects in different ways beginning to realise that the total is still the same  Steps 4 life 6  Request items to make up to three/ five
Geometry- Properties of shape	Pupils should be provided with opportunities and support to: Attempt to fit shapes into spaces on inset boards and jigsaw boards  • Choose to play with inset puzzles and jigsaws  • Watch how an adult manipulates the pieces to complete the puzzles  • Tries to place the pieces into the form board Use blocks to create their own simple structures and arrangements  • Choose to play with construction toys  • Make simple structures based on their prior learning and experiences Enjoy filling and emptying containers	Pupils should be provided with opportunities and support to:  Notice simple shapes and patterns in pictures  • Observe shapes being put into a form board  • Handle shapes  • Roll a cylinder  Begin to categorise objects by shape  • Sort objects by their shape  • Match 2d shapes  Steps 4 life 5  Students identify similar or identical objects to those selected by an adult  Attempt to form circular, horizontal or vertical lines using an implement or pointed finger  Explore containers in a functional way, such as for storage or to retrieve objects  Use visual cues to access, or show awareness of specified location or activity  Associate specific location with linked activity eg, kitchen with cooking, toilet symbol with personal care etc	Pupils should be provided with opportunities and support to: Show an interest in shape and space by playing with shapes and making arrangements with objects  • Choose to play with construction toys  • Make simple structures based on their prior learning and experiences  • Choose specific shapes for a specific purpose  • Make pictures by arranging 2d shapes  • Use shapes on a drawing package to make a picture/pattern  Talk about the arrangements and models they have made  Show an interest in shapes in the environment and an awareness of similarities of shapes  • Point out shapes they see in their environment  • Talk about everyday objects having the same shape e.g. the clock and the plate  • Use gesture and some simple mathematical language to show properties of shapes  Use shapes appropriately for tasks  • Choose specific shapes for a specific purpose  Use familiar objects and common shapes to create and recreate patterns and build 3D shapes  • Choose to work with a variety of materials to make 3D shapes  • Choose specific shapes for a specific purpose e.g. squares to make a 3D shape  Begin to talk about the shapes of everyday objects e.g. it's round  Steps 4 life 6  Explore 2D shapes and introduce 'square, round', encourage copying of lines and shapes Identify movement as 'up' or 'down', in and out  Steps 4 life 6 handling data  Create a symbol/word/picture list of shopping  Find the odd one out from three objects, and identify those that are the same  Use calendars to show simple events or activities

	Step 9	Step 10	Step 11	Step 12
Area of				
maths				
Measures inc money	Pupils will be taught to:	Pupils will be taught to:	Pupils will be taught to:	<ul> <li>Convert between different units of measure [for example, kilometre to metre; hour to minute]</li> </ul>
,,	solve simple problems in a practical context	recognise and use symbols for pounds (£) and	add and subtract amounts of money to give	<ul> <li>measure and calculate the perimeter of a rectilinear figure</li> </ul>
	involving addition and subtraction of money of	pence (p);	change, using both £ and p in practical contexts	(including squares) in centimetres and metres
	the same unit, including giving change  EL2 M12 Calculate money with pence up to	combine amounts to make a particular value find different combinations of coins that equal the	EL3 M10 Calculate with money using	<ul> <li>find the area of rectilinear shapes by counting squares</li> </ul>
	one pound and in whole pounds of multiple	same amounts of money	decimal notation and express money	
	items and write with the correct symbols (£ or	<b>E2M12</b> Calculate money with pence up to one pound	correctly in writing in pounds and pence	<ul> <li>estimate, compare and calculate different measures, including money in pounds and pence</li> </ul>
	p)	and in whole pounds of multiple items and write with the	EL3 M11 Round amounts of money to the	
	Solve practical problems relating to time	correct symbols (£ or p)	nearest £1 or 10p	<ul> <li>read, write and convert time between analogue and digital</li> <li>12- and 24-hour clocks</li> </ul>
	measure and begin to record:	compare and sequence intervals of time:	·	
	hours, minutes, seconds	tell and write the time to five minutes, including	tell and write the time from an analogue clock,	solve problems involving converting from hours to
	weeks, months and years	quarter past/to the hour and draw the hands on a	including using Roman numerals from I to XII, and	minutes; minutes to seconds; years to months; weeks to
	understand the relationship between the months of the year, and that January follows December	clock face to show these times	12-hour and 24-hour clocks	days.
	of the year, and that January follows December	know the number of minutes in an hour and the	<b>EL3 M13</b> Read time from analogue and 24	
	EL2 M13 Read and record time in common	number of hours in a day.	hour digital clocks in hours and minutes	
	date formats, and read time displayed on	tell and write the time from an analogue clock,		
	analogue clocks in hours, half hours and	including using Roman numerals from I to XII,		
	quarter hours, and understand hours from a 24-hour clock	read, write and convert time between analogue and	estimate and read time with increasing accuracy to the nearest minute; record and compare time in	
	21 Hour Glook	digital 12-hour clocks	terms of seconds, minutes and hours; use	
	<b>EL2 M07</b> Know the number of hours in a day		vocabulary such as o'clock, a.m./p.m., morning,	
	and weeks in a year, be able to name and	Recognise and use language relating to dates, including months and years	afternoon, noon and midnight	
	sequence.	including months and years	EL3 M12 Read, measure and record time	
		compare and order lengths, mass, volume/capacity	using am and pm	
	choose and use appropriate standard units to estimate and measure length/height in any	and record the results using >, < and =	know the number of seconds in a minute and the	
	direction (m/cm);	know that 100cm=1m, 1,000m=1km 1000g=1kg	number of days in each month, year and leap year	
	EL2 M14 Use metric measures of length	1000g=1kg   1000ml=1L		
	including millimetres, centimetres, metres and kilometres		compare durations of events [for example to calculate the time taken by particular events or	
	RIIOTTCTCS	<b>E2M14</b> Use metric measures of length including millimetres, centimetres, metres and kilometres	tasks]	
	-choose and use appropriate standard units to	- read scales to the nearest labelled or unlabelled division	,	
	estimate and measure weight/ mass (kg/g) EL2 M15 Use measures of weight including	– know that 10 mm = 1 cm; 1000 mm = 1 m	EL3 M14 Use and compare measures of	
	grams and kilograms	<b>E2M15</b> Use measures of weight including grams and	length, capacity, weight and temperature	
	chance and use appropriate standard units to	kilograms	using metric or imperial units to the nearest	
	-choose and use appropriate standard units to estimate and measure capacity (litres/ml) to	<ul> <li>read scales to the nearest labelled or unlabelled division</li> <li>know that 1000 g = 1 kg</li> </ul>	labelled or unlabelled divisions	
	the nearest appropriate unit,			
	<b>EL2 M16</b> Use measures of capacity including millilitres and litres	<b>E2M16</b> Use measures of capacity including millilitres and litres	EL3M16 Compare measures of weight	
	moduling millillites and littles	- read scales to the nearest labelled or unlabelled division: - know	including grams and kilograms	
	choose and use appropriate standard units to	that 1000 ml = 1 litre	E3M17 Compare measures of capacity	
	estimate and measure - temperature (°C);		including millimetres and litres	
	tomporatore ( o),			
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## PRACTICAL MATHS PLANNING GRID STEPS 9-12

<b>EL2 M17</b> Read and compare positive temperatures	EL3 M18 Use a suitable instrument to measure
	mass and length
using rulers, scales, thermometers and	measure the perimeter of simple 2-D shapes
measuring vessels	measure, compare, add and subtract: lengths
EL2 M18 Read and use simple scales to the	(m/cm/mm); mass (kg/g); volume/capacity (l/ml)
nearest labelled division	EL3 M15 Compare metric measures of
<ul><li>understand that scales measure in different units</li><li>understand labelled divisions on different scales</li></ul>	length including millimetres, centimetres,
- understand labelled divisions on different scales	metres and kilometres

Geometry-
Properties
of shape

Pupils should be taught to:

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 and faces

identify 2-D shapes on the surface of 3-D shapes [eg, a circle on a cylinder, a triangle on a pyramid]

compare and sort common 2-D and 3-D shapes and everyday objects.

recognise 3-D shapes in different orientations and describe them

**EL2 M20** Describe the properties of common 2-D and 3-D including numbers of sides, corners, edges, faces, angles and base

order and arrange combinations of mathematical objects in patterns and sequences

use mathematical vocabulary to describe position, direction and movement, including movement in a straight line and distinguishing between rotation as a turn.

**EL2 M21** Use appropriate positional vocabulary to describe position and direction including between, inside, outside, middle, below, on top, forwards and backwards

Recognise right angles for quarter, half and three-quarter turns (clockwise and anti-clockwise).

identify pairs of perpendicular and parallel lines.

Pupils should be taught to:

identify right angles, recognise that two right angles make a half-turn, three make three quarters of a turn and four a complete turn;

identify whether angles are greater than or less than a right angle

identify horizontal and vertical lines and pairs of perpendicular and parallel lines.

**EL3M19** Sort 2-D and 3-D shapes using properties including lines of symmetry, length, right angles, angles including rectangles and triangles

understand and use vocabulary related to shape, e.g. side length, angle, line of symmetry

identify right angles in 2-D shapes and in the environment

recognise that a straight line is equivalent to two right angles

**EL3 M20** Use appropriate positional vocabulary to describe position and direction including eight compass points and including full/half/quarter turns using properties e.g. lines of symmetry, side, length, angles

Pupils should be taught to:

compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes

**EL3 M19** Sort 2-D and 3-D shapes using properties including lines of symmetry, length, right angles, angles including rectangles and triangles

identify acute and obtuse angles and compare and order angles up to two right angles by size

identify lines of symmetry in 2-D shapes presented in different orientations

complete a simple symmetric figure with respect to a specific line of symmetry

describe positions on a 2-D grid as coordinates in the first quadrant

describe movements between positions as translations of a given unit to the left/right and up/down

plot specified points and draw sides to complete a given polygon.

**EL3 M20** Use appropriate positional vocabulary to describe position and direction including eight compass points and including full/half/quarter turns

## PRACTICAL MATHS PLANNING GRID STEPS 9-12

Handling	Step 9	Step 10	Step 11	Step 12
EL2 H22 tables, c  EL2 H22 bar char  EL2 H24 criteria  EL2 H25 and repi	should be taught to: interpret and present data using bar charts, pictograms and tables solve one-step and two-step questions [for example, 'How many more?' and 'How many fewer?']  1 Extract information from lists, diagrams and bar charts  3 Make numerical comparisons from rts  4 Sort and classify objects using two  5 Take information from one format resent the information in another ncluding use of bar charts	Pupils should be taught to:  interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs.  solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs.	EL3 H21 Extract information from lists, tables, diagrams and charts and create frequency tables  EL3 H22 Interpret information, to make comparisons and record changes, form different formats including bar charts and simple line graphs  EL3 H23 Organise and represent information in appropriate ways including tables, diagrams, simple line graphs and bar charts	

	Step 5	Step 6	Step 7	Step 8
Area of	210 21	5356.5		
maths				
Measures	Pupils will be taught to:	Pupils will be taught to:	Pupils will be taught to:	Pupils will be taught to:
- order two or three items by length or height - order two items by weight - Groups objects into heavy and light  use everyday language related to time - Morning, Afternoon - Day time, Night time - Yesterday, Tomorrow - Minutes, Hours  Order and sequence familiar events	<ul> <li><u>Compare</u> lengths and height         <ul> <li>Explore, sort and group objects that are long and short</li> <li>Notice differences in height</li> </ul> </li> <li>[for example, long/short, longer/shorter, tall/short,</li> </ul>	<b>EL1 M08</b> Describe and make comparisons in word between measures of times including size, length, width, height, weight and capacity	Solve practical problems relating to size  - measure and begin to record lengths and heights using appropriate standard equipment	
	double/half]  Steps 4 Life 7  Compare/order up to five items to a specific measure e.g. the lightest, longest, smallest Find two items a similar length  Compare large and small  Explore, sort and group similar objects that are large and small	<ul> <li>Describe lengths and height         <ul> <li>Explore, sort and group objects that are long and short</li> <li>[for example, long/short, longer/shorter, tall/short, double/half]</li> </ul> </li> <li>Describe weight/ mass         <ul> <li>Explore, sort and group objects that are</li> </ul> </li> </ul>	Solve practical problems relating to weight  - measure and begin to record mass/weight using appropriate standard equipment  Solve practical problems relating to capacity measure and begin to record capacity and volume using appropriate standard equipment	
	<ul> <li>Begin to understand now and then</li> <li>Begin to use schedules</li> </ul> Measure short periods of time in simple ways	Steps 4 Life 7 Use comparative terms in a range of contexts correctly, e.g. longer/taller and shorter, heavy, large	<ul> <li>heavy and light</li> <li>Notice differences in weight</li> <li>[for example, heavy/light, heavier than, lighter</li> </ul>	- Sequence events in chronological order using appropriate language.
Use a variety of simple timers to measure a short period of time.  Begin to use everyday language related to money     use money in their pretend play     count out 1p coins     pretend to pay a given amount and accept change (not calculated accurately)     pay for snack  Steps 4 Life 7 Role play 'buying' items with individual coin values, and explain equal amounts eg 10x 1p = 10p, 5 x 10p = 50p	short period of time.  Begin to use everyday language related to	Compare weight/ mass	<ul> <li>than]</li> <li>Describe capacity/ volume</li> <li>Sort containers that hold more or less</li> </ul>	[for example, before and after, next, first, today, yesterday, tomorrow, morning, afternoon and evening]
	[for example, heavy/light, heavier than, lighter than]  Steps 4 Life 7  Find two items of a similar weight, and explore the	<ul> <li>Notice differences in capacity</li> <li>[for example, full/empty, more than, less than, half, half full, quarter]</li> </ul>	Recount the months of the year in order	
	concept that a small item maybe heavier than a large item  Use a range of different weighing scales in a range of contexts  Read the numeric display on pressure and digital scales	<ul> <li>Refer to periods of time</li> <li>Show an awareness of time passing</li> <li>[for example, quicker, slower, earlier, later]</li> </ul>	Recognise and know the value of different denominations of UK coins and notes	
	Compare capacity/ volume  Explore a range of containers, sort containers that hold more or less  Notice differences in capacity	tell the time to the hour and draw the hands on a clock face to show these times and half past the hour and draw the hands on a clock face to show these times	<b>EL2 M12</b> Calculate money with pence up to one pound and in whole pounds of multiple items and w with the correct symbols (£ or p)	
		[for example, full/empty, more than, less than, half, half full, quarter]	<b>EL1 M06</b> Read the 12 hour digital and analogue clocks in hours	
		Steps 4 Life 7 Use a thermometer to notice changes in temperature e.g. when placed in the fridge	<b>EL1 M07</b> Know the number of days in a week, months, and seasons in a year. Be able to name and sequence	
		or in the sunlight  Compare periods of time  • Shows an awareness of time passing [for example, quicker, slower, earlier, later]	Describe and identify coins and notes  EL1M05 Recognise coins and notes and write them in numbers with the correct symbols (£ & p), where these involve numbers up to 20	

## PRACTICAL MATHS PLANNING GRID STEPS 5-8

<ul> <li>recognise and use language relating to dates,</li> <li>including days of the week,</li> <li>know dates of significance, such as the month</li> </ul>	Use money in everyday situations
of their birthday	
Steps 4 Life 7	
Explore digital and analogue clock displays, and identify numerals	
Develop familiarity with days of the week and the	
sequence of these	
Understands the use of a TV guide/bus timetable	
Sequence their day in pictures, and use a range of	
vocabulary to describe key parts of the day	
e.g. afternoon, bedtime, meal time, day Use and respond to time-based terminology,	
e.g. we will do that in the morning, where are we	
going after lunch? etc.	
Match and copy the numerical date	
Compare coins and notes	
Explore a range of coins and notes (real and	
play)	
<ul><li>Sort coins and notes by appearance</li><li>Notice differences between coins</li></ul>	
• Notice differences between coms	
Steps 4 Life 7	
Recognise 1p, 2p, and 5p coins	
Recognise 10p, 20p, 50p and £1, £2 coins	
Recognise £5.00 and £10.00 notes	

Geometry-Properties of shape Pupils should be encouraged to:

<u>Begin</u> to use mathematical names for solid 3D shapes and flat 2D shapes, and the mathematical language to describe them.

- Circle, triangle, square, rectangle
- semi-circle, oval
- curved side, straight side
- Begin to count the number of sides
- Begin to identify the corners

#### Select a particular named shape

Use familiar objects and common shapes to create and recreate patterns and build models

- Choose to play with construction toys
- Make simple structures based on their prior learning and experiences
- Choose specific shapes for a specific purpose

#### Steps 4 Life 7

Use and respond to shape- based vocabulary e.g. where's the round shape, pass me the box, etc. Describe shapes, listing some properties e.g. sides, round Match objects according to shape disregarding size, e.g. all cars Draw some simple shapes Use generalised shape terms to describe objects

#### Steps 4 Life 7

**Solving Mathematical Problems & Decision Making** 

Uses given mathematical information and recognises and uses simple mathematical terms appropriate to Step 7 Follows the methods shown to produce results Provides a simple explanation for their results with guided questioning Applies own method of recording results of mathematical operations

Pupils should be taught to:

#### Recognise and name common 2D shapes:

- circle, triangle, square, rectangle
- semi-circle, oval, pentagon, other 2D shapes

#### Recognise and name common 3D shapes

- cone, sphere, cube
- cuboids, pyramids, prisms

Recognise position, directions and movements; using vocabulary such as forwards, backwards, turn, top, middle bottom, up, down, inside, outside

### Steps 4 Life 7

Devise activities which enable students to use and respond to familiar words, signs and symbols which describe position, including inside, outside, above, below, front (with some inconsistencies)

Provide opportunities to introduce terms for direction of movement, including forwards, backwards, up, down, (with some inconsistencies) and then support students to use these terms in context. Also left/right

Create simple directional commands for each other Use positional language to describe where objects are in relation to others

Engage with a range of maps, e.g. identify things of interest, ask what a symbol means

#### Pupils should be taught to:

- Find shapes on the face of objects
- Find similar shapes on a group of objects
- Describe a shape in terms of sides, corners and straightness of sides

Sort shapes according to properties e.g. number of corners

**EL1 M09** Identify and recognise common 2-D and 3-D shapes, including circle, cube, rectangle (including square) and triangle.

# Describe and undertake positional directions and movements,

using vocabulary such as forwards, backwards, turn, top, middle bottom, up, down, inside, outside

**EL1 M10** Use every day positional vocabulary to describe position and direction, including left, right, in front, behind, under and above.

Pupils should be taught to:

draw 2-D shapes and make 3-D shapes using modelling materials;

### recognise 3-D shapes in different orientations

**EL2 M19** Recognise and name 2-D and 3-D shapes including pentagons, hexagons, cylinders, cuboids, pyramids and spheres

**EL2 M20** Describe the properties of common 2-D and 3-D including numbers of sides, corners, edges, faces, angles and base

recognise angles as a property of shape or a description of a turn

identify horizontal and vertical lines

Describe and demonstrate position, directions and movements, including turns, half turns, left, right. behind, etc.

**EL2 M21** Use appropriate positional vocabulary to describe position and direction including between, inside, outside, middle, below, on top, forwards and backwards

## PRACTICAL MATHS PLANNING GRID STEPS 5-8

Handling Data and statistics

Note: Handling data does not appear in the formal National Curriculum until statistics appears in step 8 of the Westfield Curriculum. However, elements of number and place value should be used to include examples of 'counting' to introduce the concept of bar and tally charts, as well as 'sorting and grouping objects' in measurement. All objectives in green are equally relevant for younger learners' development.

Step 5	Step 6	Step 7	Step 8
Construct simple pictograms, tally charts, block diagrams and simple tables	Answer simple questions by counting the number of objects in each category	<b>EL1 H11</b> Read numerical information from lists.	Pupils should be taught to: interpret and construct simple pictograms, tally charts block diagrams and simple tables
Interpret simple pictograms, tally charts, block diagrams and simple tables  Steps 4 Life 7		EL1 H12 Sort and classify objects using a	ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity
Complete a tally chart with minimal assistance Record data through pictures, e.g. weather		single criterion.	ask and answer questions about totaling and comparing categorical data.
information using pictures of the sun and rain Complete a simple chart to show their findings, e.g. puts a pictures of trees in one pile and pictures of flowers in another Respond to simple questions relating to their		<b>EL1 H13</b> Read and draw simple charts and diagrams, including a tally chart, block diagram/graph	
Respond to simple questions relating to their collected data		3.3.3. 3. 3pri	