



Knowledge Progression in counting and place value, addition and subtraction

Number and Place Value						
Counting						
Three and Four-Year-Olds	Mathematics		<ul style="list-style-type: none"> Recite numbers past 5. Say one number name for each item in order: 1, 2, 3, 4, 5. Know that the last number reached when counting a small set of objects tells you how many there are in total ('cardinal principle'). 			
Reception	Mathematics		<ul style="list-style-type: none"> Count objects, actions and sounds. Count beyond ten. 			
ELG-End of Reception Assessment	Mathematics	Numerical Patterns	<ul style="list-style-type: none"> Verbally count beyond 20, recognising the pattern of the counting system. 			
Year Group	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Counting	<ul style="list-style-type: none"> Count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number Count, read and write numbers to 100 in numerals; Count in multiples of twos, fives and tens Recognise odd and even numbers from 1 - 100 	<ul style="list-style-type: none"> Count in steps of 2 and 10, from any number, forward and backward Count in multiples of 5 	<ul style="list-style-type: none"> Count from 0 in multiples of 3, 4, 6, 8, 50 and 100; Find 10 or 100 more or less than a given number bridging 100 	<ul style="list-style-type: none"> Count in multiples of, 7, 9, 25 and 1000 Find 1000 more or less than a given number Count backwards through zero to include negative numbers Find the difference between two negative numbers 	<ul style="list-style-type: none"> Count forwards or backwards in steps of powers of 10 for any given number up to 1 000 000 Interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through zero Find the difference between two numbers 	<ul style="list-style-type: none"> Use negative numbers in context, and calculate intervals across zero Add and subtract negative numbers

					including negative and positive numbers	
Year 1 examples	<p>Expected</p> <p>Compare amounts.</p> <p>What's the same? What's different?</p> <p><i>Children compare the bead strings and notice:</i></p> <p><i>One has 9 beads and the other has 6 beads.</i></p> <p><i>9 is 3 more than 6.</i></p> <p><i>6 is 3 less than 9.</i></p> <p><i>Pupils should be able to successfully respond to questions such as:</i></p> <p><i>Count forwards from 36, etc.</i></p> <p><i>Point to the third object in the line.</i></p> <p><i>Show me 8 cubes.</i></p> <p><i>Pupils should demonstrate one to one correspondence, cardinality and conservation of number.</i></p>					
Year 2 examples	<p><u>Working at</u></p> <p>Steve says, 'My number has two tens and five ones.'</p> <p>What is Steve's number?</p> <p>Amy has two more tens than Steve. What is her number?</p> <p>Sam says, 'My number has five tens.'</p> <p>What numbers can it be?</p> <p>What numbers can't it be?</p>				<p><u>Greater depth</u></p> <p>'When I count in tens from any number the units digit stays the same.'</p> <p>Do you agree?</p> <p>Explain your reasoning.</p>	
Year 3 examples	<p><u>Working at</u></p> <p>$392 + 10 =$</p>				<p><u>Greater depth</u></p> <p>$995 + 100 =$ $4928 + 100 =$</p>	
Year 4 examples	<p>What temperature is 5 degrees lower than -2 degrees Celsius?</p>				<p>The sea level is usually taken as zero.</p> <p>Look at the picture of the lighthouse.</p> <p>If the red fish is at -5 m (5 metres below sea level):</p> <p>Where is the yellow fish?</p> <p>Where is the green fish?</p> <p>Can you draw a fish at -35 m?</p> <p>Can you draw a seagull at 20 m above sea level?</p> <p>What would the position of your fish and the seagull be if each of the intervals on</p>	

the lighthouse represented 7 m?



(NRICH)

Year 5 examples

The temperature at 6 a.m. was recorded each day for one week.
 What was the coldest morning?
 What was the warmest morning?
 What is the difference in temperature between Monday and Tuesday?
 Place the recorded temperatures in order from smallest to largest.

Day	M	T	W	TH	F	SAT	SUN
	1	-1	0	3	2	-3	-3

The temperature at 6 a.m. was recorded each day for one week.

Day	M	T	W	TH	F	SAT	SUN
	1	-1	0	3	2	-3	-3

What is the difference in temperature between the coldest day and the warmest day?
 At what time of year do you think these temperatures were recorded?
 Do you think it might have snowed during the week?
 Explain your reasoning.

Year 6 examples

A scientist measures the depth of some objects below the surface of the sea.
 She records her measurements using negative numbers.

Object	depth
Coral reef	-2
Shipwreck	-11
Pirate treasure	four times as deep as the coral reef
Sleeping shark	3 metres above the shipwreck

A scientist measured the temperature each day for one week at 06:00.
 On Sunday the temperature was 1.6°C.
 On Monday the temperature had fallen by 3°C.
 On Tuesday the temperature had fallen by 2.1°C.
 On Wednesday the temperature had risen by 1.6°C.
 On Thursday the temperature had risen by 4.2°C.
 On Friday the temperature had fallen by 0.9°C.
 On Saturday the temperature had risen by 0.2°C.
 What was the temperature on Saturday?

	<p>Which object is deepest? Explain your choice. Is the sleeping shark deeper than the pirate treasure? Explain your reasoning. A seagull is hovering 1 m above the surface of the sea. How far apart are the seagull and the coral reef?</p>					
<p>Place value and representing number</p>	<ul style="list-style-type: none"> •Recognise the place value of each digit in a two-digit number •Identify and represent numbers using objects and pictorial representations including the number lines, diennes, and ten frames •Compare and order numbers from 0 up to 100; • Use language of: equal to, more than, less than (fewer), most, least • Read and write numbers from 1 to 20 in numerals and words 	<ul style="list-style-type: none"> •Recognise the place value of each digit in a two -digit number •Identify, represent and estimate numbers using different representations, including the number line diennes, and ten frames •Compare and order numbers up to 100 using <,> and = signs •Read and write numbers to at least 100 in numerals and in words 	<ul style="list-style-type: none"> •Recognise the place value of each digit in a three-digit number •Identify, represent and estimate numbers using different representations such as diennes •Order and compare numbers to 1000 •read and write numbers up to 1000 in numerals and in words 	<ul style="list-style-type: none"> •Read, write, order and compare numbers up to 10 000 and determine the value of each digit •Identify, represent and estimate numbers using different representations such as diennes •Round any number to the nearest 10, 100 or 1000 •Read Roman numerals to 100 (I to C) and know that over time, the numeral system changed to include the concept of zero and place value 	<ul style="list-style-type: none"> •To be able to read, write, compare and order any number to 1 000 000 and determine the value of each digit •Round any number up to 1 000 000 to the nearest 10, 100, 1000, 10 000 and 100 000 <p>Read Roman numerals to 1000 (M) and recognise years written in Roman numerals</p>	<ul style="list-style-type: none"> •Read, write, order and compare numbers up to 10 000 000 and determine the value of each digit •Round any whole number to a required degree of accuracy

<p>Year 1 examples</p>	<p><u>Expected</u> Write the numbers in order of size. 15 16 5 71 50 What is one more than...? What is one less than...? Complete: 19 _ 21, 22, _, _</p>	<p><u>Greater Depth</u> 2 3 4 5 6 Use two of the digit cards to make a number greater than 50. Use two of the digit cards to make a number less than 30. Use two of the digit cards to make an odd/even number. Use two of the digit cards to make a number between 47 and 59. What is the smallest 2-digit number you can make? What is the largest 2-digit number you can make? Explain your reasoning.</p>
<p>Year 2 examples</p>	<p><u>Working at</u> Put a circle around the larger number. 1) 50 48 2) 77 81 3) 78 87</p>	<p><u>Greater depth</u> Write all the 2-digit numbers greater than 40 using these digits. 2 4 6 6 How do you know you have them all? Prove it.</p>
<p>Year 3 examples</p>	<p><u>Working at</u> 8 hundreds, 3 tens and 6 ones together make _____. 457 is made of ___ hundreds, ___ tens and ___ ones. 250 is made of ___ hundreds and ___ tens.</p>	<p>674 is made of 6 hundreds, 7 tens and 4 ones. 674 is also made of 67 tens and 4 ones. 674 is also made of 6 hundreds and 74 ones. Find different ways of expressing: 630 704 867</p>
<p>Year 4 examples</p>	<p><u>Working at</u> Match 4600 to numbers with the same value. 460 tens 460 hundreds 46 hundreds 4600 ones 46 tens</p>	<p><u>Greater Depth</u> How many different ways can you write 5510? <i>Pupils should suggest answers such as:</i> <i>551 tens</i> <i>55 hundreds and 1 ten</i> <i>5 thousands and 510 ones</i></p>
<p>Year 5 examples</p>	<p><u>Working at</u> What can we say about 48 000? It is _____ less than 50 000.</p>	<p><u>Greater depth</u> Using all of the digits from 0 to 9, write down a 10-digit number. What is the largest number you can write?</p>

	<p>It is made of 40 000 and _____ together. It is made of _____ thousands. It is made of _____ hundreds. It is made of _____ tens.</p>			<p>What is the smallest number you can write? Write down the number that is one less than the largest number. Write down the number that is one more than the smallest number. , 'Using the digits 0 to 9 we can write any number, no matter how large or small.' Do you agree? Explain your reasoning.</p>		
	<p><u>Working at</u> Estimate the answer to $4243 + 1734$ by rounding the numbers to: the nearest 1000 the nearest 100 the nearest 50 the nearest 10.</p>			<p><u>Greater depth</u> Three pupils are asked to estimate the answer to the sum $4243 + 1734$. Andrew says, 'To the nearest 100, the answer will be 5900.' Bilal says, 'To the nearest 50, the answer will be 6000.' Cheng says, 'To the nearest 10, the answer will be 5970.' Do you agree with Andrew, Bilal or Cheng? Can you explain their reasoning?</p>		
<p>Number facts (+/-)</p>	<ul style="list-style-type: none"> •Read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs <p><u>Number bonds</u></p> <ul style="list-style-type: none"> •Represent and use number bonds and related subtraction facts within 20 •To know number bonds for 20 <p>Demonstrate an understanding of inverse +/-</p> <ul style="list-style-type: none"> •Given a number, identify one more and one less <p><u>Doubling and halving</u></p>	<p><u>Number bonds</u></p> <ul style="list-style-type: none"> •Use place value and number facts to solve problems recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100 <p>e.g. All pairs of multiples of 10 with a total of 100 e.g. $30 + 70$</p> <p>All pairs of multiples of 5 with a total of 100 e.g. $45 + 55$</p> <ul style="list-style-type: none"> •Recall and use doubles and halves to 20 To be able to double all multiples of 10 to 100 (100+ 100) 	<p><u>Number bonds</u></p> <ul style="list-style-type: none"> •To be able to calculate pairs of 2 digit numbers which total 100 (36 + 64) <p><u>Doubling and halving</u></p> <ul style="list-style-type: none"> •To be able to double and half all 2 digit and numbers half of 36 is 18 To be able to halve all odd numbers to 10 e.g. half of 7 = 3.5 •To be able to double and halve all multiples of 10 to 1000 e.g. half of 900 is 450 <p><u>Near doubles</u></p> <ul style="list-style-type: none"> •To know 	<p><u>Number Bonds</u></p> <ul style="list-style-type: none"> •To be able to calculate number bonds for 1000 (362 + 628) •Number bonds to 1 decimal place e.g. $0.8 + 0.2$ •All number bonds to 2 decimal places e.g. $0.12 + 0.88$ <p><u>Doubling and halving</u></p> <ul style="list-style-type: none"> •To be able to double and halve all 1,2 3 digit odd and even numbers by partitioning or recall e.g. $346 \times 2 = 600 + 80 + 12$ •To be able to find a quarter of 3 digit numbers by halving twice 	<ul style="list-style-type: none"> •To be able to find fractions and percentages of different amounts by Halving and doubling 20% of £15 = 10% of £15 x 2 $36 \times 25 = 36 \times 100 \div 4 = (36 \div 4) \times 100$ $1.6 \div 2 = 0.8$ •Near doubles 421 + 387 is double 400 add 21 and then subtract 13 •Near doubles 1.5 + 1.6 is double 1.5 and add 0.1 or double 1.6 and subtract 0.1 	

	<ul style="list-style-type: none"> •Doubles to 20 (10+10) To be able to halve even numbers to 20 •Near Doubles To know 5 + 6 is double 5 and add 1 or double 6 and subtract 1 	<ul style="list-style-type: none"> •To be able to half all even numbers to 20. •To be able to halve all multiples of 10 Near doubles •To know 13 + 14 is double 13 and add 1 40 + 39 is double 40 and subtract 1 18 + 16 is double 18 and subtract 2 or double 16 and add 2 60 + 70 is double 60 and add 10 or double 70 and subtract 10 	<u>38 + 35 is double 35 and add 3</u>	<ul style="list-style-type: none"> • To be able to double tenths numbers bridging 1 e.g. 0.7 + 0.7 Near doubles •160 + 170 is double 150 and add 10 then add 20, or double 160 and add 10, or double 170 and subtract 10 380 + 380 is double 400 and subtract 20 twice 		
Year 1 examples	<u>Working at</u> Complete: 3 + ? = 10 10 - ? = 3 13 + ? = 20 20 - ? = 13 ? + 5 = 10 10 - 5 = ? 15 + ? = 20 20 - ? = 15 ? + ? = 10 10 - ? = ? 16 + ? = 20 20 - ? = 16 What do you notice? <i>Children may 'know' number pairs totalling ten but are they able to use them to support other calculations? For example, when probed to say, 'If you know 3 + 7 = 10, what else do you know?' They should reply with answers, such as 13 + 7 = 20 or 4 + 7 = 11</i>			<u>Greater depth</u> If you know one fact, what other facts do you know? Complete: 5 3+2 10 -5		
Year 2 examples	What do you notice about each set of calculations? What's the same and what's different about the three sets of calculations? 10 - 9 = 20 -19 = 100- 90=			<u>Greater depth</u> 35 + ? = 100 25 + ? = 100 45 + ? = 100		

	$10 - 8 =$ $20 - 18 =$ $100 - 80 =$ $10 - 7 =$ $20 - 17 =$ $100 - 70 =$ $10 - 6 =$ $20 - 16 =$ $100 - 60 =$	<p>What do you notice about the ones digits in these number sentences ?</p> <p>Can you explain why each ones digit is a 5 ?</p>				
Year 3 example	<p><u>Working at</u> Near doubles $35 + 36 =$ Double $35 + 1$</p>	<p><u>Greater depth</u> Near doubles $38 + 35 =$ Double $35 + 3$</p>				
Year 4 example	<p><u>Working at</u> Near doubles <u>$160 + 170 = 160$ and add 10,</u></p>	<p><u>Greater depth</u> Near doubles $380 + 380$ is double 400 and subtract 20 twice</p>				
Year 5 example	<p><u>Working at</u> <u>Doubles</u> <u>$1.5 + 1.5$</u></p>	<p><u>Greater depth</u> •<u>Near doubles</u> <u>$1.5 + 1.6$ is double 1.5 and add 0.1</u></p>				
Mental +/-	<ul style="list-style-type: none"> •Add and subtract one-digit and two-digit numbers to 20, including zero •Understand the effect of adding and subtracting 0 •Show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot •<u>To be able to partition bridging through multiples of 10</u> <p><u>$6 + 7 = 6 + 4 + 3$</u> <u>$23 - 9 = 23 - 3 - 6$</u></p>	<ul style="list-style-type: none"> •Add and subtract numbers using concrete objects, pictorial representations, and mentally, including: TU+U, TU+T, TU+TU and U+U+U <u>To be able to partition bridging through multiples of 10</u> <p><u>$6 + 7 = 6 + 4 + 3$</u> <u>$23 - 9 = 23 - 3 - 6$</u> <u>$15 + 7 = 15 + 5 + 2$</u></p> <ul style="list-style-type: none"> •<u>To be able to count on 2 to 70 then 3 to 73</u> e.g. <u>$73 - 68$</u> 	<ul style="list-style-type: none"> •Add and subtract numbers mentally, including: HTU+U, HTU+T and HTU+H $570 + 300$ count on in hundreds from 300 $960 - 500$ count back in hundreds from 960 or count on in hundreds from 500 <u>To be able to partition using multiples of 10 and 100</u> <p><u>$55 + 37 = 55 + 30 + 7 = 85 + 7$</u> <u>$43 + 28 + 51 = 40 + 20 + 50 + 3 + 8 + 1$</u></p> <ul style="list-style-type: none"> •<u>To be able to partition bridging</u> 	<ul style="list-style-type: none"> •Add and subtract numbers mentally including bridging 1000's •<u>To be able to partition using multiples of 10 and 100</u> <p><u>$540 + 280 = 540 + 200 + 80$</u> <u>$276 - 153 = 276 - 100 - 50 - 3$</u></p> <ul style="list-style-type: none"> •<u>To be able to partition bridging through multiples of 10 and through 1 when adding decimals</u> <p><u>$57 + 14 = 57 + 3 + 11$ or $57 + 13 + 1$</u></p>	<ul style="list-style-type: none"> •Add and subtract numbers mentally with increasingly large numbers •<u>To be able to mentally add and subtract tenths, and one-digit whole numbers and tenths using partitioning</u> <p><u>$0.8 + 0.35 = 0.8 + 0.2 + 0.15$</u></p>	<ul style="list-style-type: none"> •Perform mental calculations, including with mixed operations and large numbers

	<u>$15 + 7 = 15 + 5 + 2$</u>	<u>$86 - 30$ count back in tens from 86 or count on in tens from 30</u> <ul style="list-style-type: none"> To be able to partition using multiples of 10 $30 + 47 = 30 + 40 + 7$ $78 - 40 = 70 - 40 + 8$ $25 + 14 = 20 + 5 + 10$ $+ 4$ $= 20 + 10 + 5 + 4$ $23 + 45 = 40 + 5 + 20$ $+ 3$ $= 40 + 20 + 5 + 3$ $68 - 32 = 60 + 8 - 30$ $- 2$ $= 60 - 30 + 8 - 2$ <u>Partitioning using compensating</u> $34 + 9 = 34 + 10 - 1$ $52 + 21 = 52 + 20 + 1$ $70 - 9 = 70 - 10 + 1$ $53 + 11 = 53 + 10 + 1$	<u>through multiples of 10</u> $49 + 32 = 49 + 1 + 31$ <ul style="list-style-type: none"> Partitioning using compensating $84 - 19 = 84 - 20 + 1$	<u>$3.8 + 2.6 = 3.8 + 0.2 + 2.4$</u> $5.6 + 3.5 = 5.6 + 0.4 + 3.1$ $296 + 134 = 296 + 4 + 130$ <ul style="list-style-type: none"> Partitioning using compensating $38 + 69 = 38 + 70 - 1$ $53 + 29 = 53 + 30 - 1$ $64 - 19 = 64 - 20 + 1$ $138 + 69 = 138 + 70 - 1$		
Year 1 examples	<u>Working at</u> $0 + 5 = 5$ $1 + = 5$ $2 + = 5$ $3 + = 5$ $4 + = 5$ $5 + = 5$ Now do the same for rows of 6 counters, 7 counters, 8 counters, 9 counters and 10 counters. <i>Children should be able to recall all number bonds to and within 10. Exposing the</i>		<u>Greater depth</u> I'm thinking of a number. I've subtracted 5 and the answer is 7. What number was I thinking of? Explain how you know. I'm thinking of a number. I've added 8 and the answer is 19. What number was I thinking of? Explain how you know. I know that 7 and 3 is 10. How can I find $8 + 3$? How could you work it out? If you add together six 0s the answer is 6.' Do you agree?			

	<p><i>structure of the mathematics supports this process. They should then apply this to number bonds to 20, so if $5+3 = 8$, $15 +3 = 18$</i></p> <p>'If you add 0 to a number, the number stays the same.' Do you agree? Explain your reasoning</p>	<p>Explain your reasoning.</p>				
<p>Year 2 example</p>	<p><u>Working at</u> What do I need to add to or subtract from each of these numbers to total 60? 40, 44, 66, 69, 76, 86, 99, 89, 79.</p>	<p><u>Greater depth</u> I think of a number and I add 2. The answer is 17. What was my number? I think of a number and I subtract 5. The answer is 24. What was my number?</p>				
<p>Year 3 example</p>	<p><u>Working at</u> Write the four number facts that this bar model shows.</p> <table border="1" data-bbox="488 715 842 791"> <tr> <td colspan="2" style="text-align: center;">540</td> </tr> <tr> <td style="text-align: center;">300</td> <td style="text-align: center;">240</td> </tr> </table>	540		300	240	<p><u>Greater depth</u> Flo and Jim are answering a problem: Danny has read 62 pages of the class book, Jack has read 43. How many more pages has Danny read than Jack? Flo does the calculation $62 + 43$. Jim does the calculation $62-43$. Who is correct? Explain how you know. <i>Pupils might demonstrate using a bar model to explain their reasoning.</i></p>
540						
300	240					
<p>Year 4 example</p>	<p><u>Working at</u> Decide on a mental or written strategy for each of these calculations and perform them with fluency. $64 + 36$ $640 + 360$ $64 + 79 + 36$ $378 + 562$ $876 + 921$ $999 + 999$ $1447 + 2362$ $1999 + 874$</p>	<p><u>Greater depth</u> Write three calculations where you would use mental calculation strategies and three where you apply a column method. Explain the decision you made for each calculation.</p>				

<p>Year 5 example</p>	<p>Write four number facts that this bar diagram shows.</p> <table border="1" data-bbox="488 134 1249 209"> <tr> <td colspan="2" style="text-align: center;">9.5</td> </tr> <tr> <td style="width: 50%;">3.8</td> <td style="width: 50%;">5.7</td> </tr> </table>			9.5		3.8	5.7	<p>Use this number sentence to write down three more pairs of decimal numbers that sum to 3: $1.6 + 1.4 = 3$</p>		
9.5										
3.8	5.7									
<p>Year 6 example</p>	<p>Calculate $36 \cdot 2 + 19 \cdot 8$ with a formal written column method with a mental method, explaining your reasoning.</p> <p>Compare $31 + 9 \times 7$ and $(31 + 9) \times 7$ What's the same? What's different?</p>			<p>Jasmine and Kamal have been asked to work out $5748 + 893$ and $5748 - 893$. Jasmine says, '893 is 7 less than 900, and 900 is 100 less than 1000, so I can work out the addition by adding on 1000 and then taking away 100 and then taking away 7.' What answer does Jasmine get, and is she correct? Kamal says, '893 is 7 less than 900, and 900 is 100 less than 1000, so I can work out the subtraction by taking away 1000 and then taking away 100 and then taking away 7.' What answer does Kamal get, and is he correct? If you disagree with either Jasmine or Kamal, can you correct their reasoning?</p> <p>Write different number sentences using the digits 2, 3, 5 and 8 before the equals sign, using: one operation two operations but no brackets two operations and brackets.</p>						
<p>Apparatus and informal written methods +/-</p>	<ul style="list-style-type: none"> •Use objects to combine two parts to make a whole or subtract •Children to represent the cubes 	<ul style="list-style-type: none"> •Use a number line to count on/ back •Represent addition/ subtraction using the part, part 	<ul style="list-style-type: none"> •Represent addition and subtraction using the part, part whole model and the bar model •Draw a number line to show adding and subtracting a single 							

Reay strategy progression (in order)

<p>using dots and crosses</p> <ul style="list-style-type: none"> •Use part part whole model to show addition/ subtraction •Use a number line or Numicon to count on •Represent addition in a bar model which encourages children to count on rather than count all •<u>Regrouping to make 10</u> Using ten frames and counters/ Numicon e.g. $6 + 5 = 6 + 4 + 1$ or e.g. $14 - 5 = 14 - 4 = 10 - 1$ •Children to draw the ten frame and counters/ cubes •Children to use base 10 to add a single digit to a two digit number and develop their understanding of place value 	<p>whole model and the bar model</p> <ul style="list-style-type: none"> •Draw a number line to show adding and subtracting a single digit to a two digit number bridging tens e.g. $46 + 7 = 46 + 4 + 3$ and $54 - 6 = 54 - 4 = 50 - 2 = 48$ •Use a 100 grid to add/subtract a two digit number to a two digit number first adding/subtracting tens and then ones •Add two, two digit numbers using base ten, representing the base ten pictorially e.g. lines for tens and dots/ crosses for ones, then by partitioning into tens and ones to add •Partition two digit numbers to subtract e.g. $56 - 24 = 50 - 20 = 30$, $6 - 4 = 2$ 	<p>digit to a two digit number bridging tens e.g. $46 + 7 = 46 + 4 + 3$</p> <p>Partition a single digit number to add without using a number line</p> <ul style="list-style-type: none"> •Draw a number line and count in ten 's and then multiples of 10 to add a two digit number to a two digit number and to subtract a two digit number by 'counting on ' to find the difference •Partition 3 digit numbers to add using base ten and recording pictorially before recording as number sentences •Use base ten to introduce the column method and carrying a ten over, children to represent this pictorially •Use the formal method to add 2 and 3 			
---	--	---	--	--	--



	<ul style="list-style-type: none"> •Children to represent this pictorially 	<ul style="list-style-type: none"> •Draw a number line to subtract a two digit number from a two digit number bridging the tens e.g. $54 - 26$ •Draw a number line and count in tens to add a two digit number to a two digit number •Use base ten to introduce the column method and carrying a ten over, children to represent this pictorially 	<p>digit numbers including carrying</p> <ul style="list-style-type: none"> •Use base ten to introduce the column method for subtraction and borrowing a ten , children to represent this pictorially •Use the formal written method to subtract 2, 2 digit numbers including borrowing 			
<p>Written +/-</p>		<ul style="list-style-type: none"> •Add two digit numbers using the column method supported pictorially and with base 10 	<ul style="list-style-type: none"> •Add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction 	<ul style="list-style-type: none"> •Add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate 	<ul style="list-style-type: none"> •Add and subtract whole numbers with more than 4 digits, including using formal written methods •Use formal methods to add and subtract decimal numbers, up to 2 decimal places 	<ul style="list-style-type: none"> •Use formal methods to add and subtract 5 digit numbers and beyond in different contexts such as money and measures •Use formal methods to add and subtract decimal numbers, up to 3 decimal places

<h2>Year 3 example</h2>	<p>Sam has completed these calculations, but he is incorrect. Explain the errors he has made.</p> $\begin{array}{r} 325 \\ + 247 \\ \hline 581 \end{array}$ $\begin{array}{r} 355 \\ - 247 \\ \hline 112 \end{array}$			<p><u>Greater depth</u></p> <p>There are six 3-digit addition calculations shown below.</p> $\begin{array}{r} 124 \\ + 233 \\ \hline \end{array}$ $\begin{array}{r} 579 \\ + 221 \\ \hline \end{array}$ $\begin{array}{r} 644 \\ + 172 \\ \hline \end{array}$ $\begin{array}{r} 791 \\ + 163 \\ \hline \end{array}$ $\begin{array}{r} 366 \\ + 277 \\ \hline \end{array}$ $\begin{array}{r} 567 \\ + 233 \\ \hline \end{array}$ <p>Which calculations have no carry digits? Which calculations have a carrying digit only once? Which calculations have a carrying digit twice? Which calculation has the largest answer? Which calculation has the smallest answer? <i>Check that children are looking at the numbers involved, rather than doing the calculations.</i></p>		
<h2>Money</h2>	<ul style="list-style-type: none"> •Recognise and know the value of different denominations of coins and notes up to 50p •Find different combinations of coins that equal the 	<ul style="list-style-type: none"> •Recognise and use symbols for pounds (£) and pence (p); combine amounts to make a particular value •Find different combinations of coins that equal the 	<ul style="list-style-type: none"> •Add and subtract amounts of money to give change, using both £ and p in practical contexts •To be able to find change using mental 	<ul style="list-style-type: none"> •estimate, compare and calculate different measures, including money in pounds and pence • Add and subtract amounts of money to find 		

	<p>same amounts of money</p> <ul style="list-style-type: none"> •solve simple problems in a practical context including giving change to 20p and beyond 	<p>same amounts of money</p> <ul style="list-style-type: none"> •Solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change to £1 and beyond 	<p>methods and column subtraction</p>	<p>totals and give change selecting the most efficient method to complete the calculation</p>		
<p>Year 1 examples</p>	<p><u>Working at</u></p> <p>Show 19p using only 2p, 5p and 10p coins. Find three different ways to do it.</p> <p>Ali buys 3 bags of apples. Each bag has 4 apples in it. How many apples does he buy?</p>			<p><u>Greater depth</u></p> <p>Using only 2p, 5p and 10p coins, can you show 20p? In how many different ways can you do this? Are you sure you have got them all? Explain how you know.</p> <p>Lollies cost 5p each. A pack of 3 lollies costs 13p. How much money do you save when you buy a pack of 3 lollies instead of 3 single lollies?</p>		
<p>Year 2 examples</p>	<p><u>Working at</u></p> <p>Grace uses a £1 coin to buy a can of drink which costs 80p. She is given three coins in change. What coins could she have been given?</p>			<p><u>Greater depth</u></p> <p>Grace uses a £2 coin to buy a can of drink which costs 85p. She is given four coins in change. Find all the possible combinations of coins she could have been given.</p>		

<p>Year 3 examples</p>	<p><u>Working</u></p> <p>£2.60 + = £5.00</p> <p>If I buy a sandwich for £2.20 and a drink for 90p, how much change do I get from £5?</p> <p>Ellie buys 2 pencils. She pays with a £2 coin and gets 70p change.</p> <p>How much did each pencil cost?</p>	<p><u>Greater depth</u></p> <p>Sophie and Ravi have saved some money. Altogether they have saved £35. Sophie has saved £4 more than Ravi. How much have they each saved? Sam and Tom share this money equally. Divide the coins into two equal groups. Could three friends share the money equally? Explain your reasoning.</p> <p>20p, 20p, 20p, 50p, 10p, 5p 5p</p>
<p>Year 4 examples</p>	<p><u>Working at</u></p> <p>Which would you rather have, 3 × 50p coins or 7 × 20p coins? Explain your reasoning.</p> <p>.</p>	<p><u>Great depth</u></p> <p>Sid and Sam share some money. Sid gets twice as much as Sam. Tick the coins which Sid might take</p> <p>50p, 20p, 20p, 10p, 10p, 5p, 5p,</p> <p>Is there more than one way of sharing the coins?</p>
<p>Year 5</p>	<p>Mo has £1,000 to spend. He buys a TV and a games console. Does Mo have enough money left to buy the phone? Show your workings.</p> <p>TV - £349</p> <p>Phone -£479</p> <p>Games console - £199</p>	

<h2>Year 6</h2>	<p>A shop sells boxes of chocolates. One box costs £3.99. A second box costs £2.60 . A third box costs £6.45 . What is the difference in price between the most and least expensive boxes? The shop also sells packets of sweets. One packet costs £1.39 . Ramesh has a £10 note and he wants to buy the chocolates costing £2.60 . How many packets of sweets can he also buy?</p>			<p>A shop sells boxes of chocolates costing £2.60 . The shop also sells packets of sweets. One packet costs £1.39 . Ramesh has a £10 note and he wants to buy one box of chocolates. Sara says that Ramesh can work out how many packets of sweets he can buy using the number sentence $10 - 2.60 \div 1.39$. Do you agree or disagree with Sara? If you disagree, what number sentence do you think Ramesh should use? Explain your reasoning.</p>			
<h2>Problems +/-</h2>	<ul style="list-style-type: none"> •Solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as $7 = \square - 9$ 	<ul style="list-style-type: none"> •Solve problems with addition and subtraction, using concrete, pictorial and abstract representations •Recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems. •Solve missing number problems using addition and subtraction 	<ul style="list-style-type: none"> •Estimate the answer to a calculation and use inverse operations to check answers •Solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction 	<ul style="list-style-type: none"> •Estimate and use inverse operations to check answers to a calculation •Solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why 	<ul style="list-style-type: none"> •Use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy should an answer include a decimal or fraction •Solve addition and subtraction multi-step problems in contexts including money. •Estimate. •Decide which operations to use and why- 4 digit numbers and above, use formal written methods •Solve problems using Roman Numerals and 	<ul style="list-style-type: none"> •Solve addition and subtraction multi-step problems with increasing difficulty in contexts, deciding which operations and methods to use and why • Use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy. 	

					convert between the two	
Year 1 examples	<p>Expected</p> <p>Use the first number sentence to complete the second number sentence.</p> <p>$4 + 3 = ?$ $7 - ? = 4$</p> <p>Robert has 5 more cherries than John. John has 11 cherries. How many does Robert have? Write a number sentence you would use to solve the problem.</p>	<p>Greater Depth</p> <p>Write a pair of numbers in the boxes to add to 12. $? + ? = 12$ And another pair, and another, and another. Can you find all possibilities?</p> <p>Together Sam and Tom have 19 football stickers. Tom has 8 stickers. How many stickers does Sam have? Write a number sentence you could use to solve the problem.</p>				
Year 2 examples	<p>Dan needs 80 g of sugar for his recipe. There are 45 g left in the bag. How much more does he need to get?</p> <p>The temperature was 26 degrees in the morning and 11 degrees colder in the evening. What was the temperature in the evening?</p> <p>A tub contains 24 coins. Saj takes 5 coins. Joss takes 10 coins. How many coins are left in the tub?</p>	<p>Together Jack and Sam have £12. Jack has £2 more than Sam. How much money does Sam have? <i>A bar model can be very helpful in solving these types of problems.</i></p> <p>Jack  +£2 altogether Sam and Jack = £12</p> <p>Sam </p> <p>$£12 - £2 = £10$ $£10 \div 2 = £5$ Sam has £5</p>				
Year 3 examples	<p>Teddy has worked out an addition. $175 + 135 = 300$ What subtraction could Teddy do to check he is correct?</p>	<p>Use the digit cards to make two 3-digit numbers. 3 4 5 6 7 8 Write an addition using your numbers. What is the answer to your addition? Ask a partner to check your addition. Talk about the different methods you can use.</p>				

Year 4 examples	<p>Filip is working out $607 + 395$ He rounds his numbers to the nearest 100 to estimate the answer. Complete the sentences. 607 rounded to the nearest 100 is ____ 395 rounded to the nearest 100 is ____ Filip's estimate for the answer is ____</p>	<p>Tom is estimating to work out an addition. His estimate is $3,000 + 1,000 = 4,000$ Write three possible additions Tom could be working out.</p>
Year 5 examples	<p>Eva is reading a book before bedtime. On Monday she reads 38 pages. On Tuesday she reads 6 pages more than she did on Monday. How many pages does she read on Tuesday? How many pages does she read altogether on Monday and Tuesday? There are 123 pages in the book altogether. How many pages does Eva have left to read?</p>	<p>Two numbers have a difference of 1,200 and a total of 6,484 What are the two numbers?</p>
Year 6 examples	<p>A shop sells magazines and comics. Freya buys a magazine and a comic. She pays £2.50 . Evie buys a magazine and two comics. She pays £3.90 . How much does a comic cost? How much does a magazine cost?</p>	<p>A shop sells magazines and comics. Last week Arthur bought a magazine and a comic. He can't remember exactly what he paid, but he thinks he paid £1.76 . Yesterday he bought a magazine and four comics. He paid £4.30 . Do you think he is remembering correctly when he says that he paid £1.76 last week?</p>

New vocabulary for each year group is in bold	Progression in vocabulary – Counting, number, addition and subtraction			
	Number	Place Value	Estimating	Addition and Subtraction
EYFS	Zero , number, one, two, three ... to twenty and beyond, teens numbers, eleven, twelve ... twenty, none, how many ...? count, count (up) to, count on (from, to), count back (from, to)	Digit, the same number as, as many as more, larger, bigger, greater, fewer, smaller, less fewest, smallest, least, most, biggest, largest, greatest, one more, one less, compare, order	Guess, how many ...? Estimate, nearly, close to, about the same as, just over, just under too many, too few, enough, not enough	Add, more, sum, total, altogether, double, one more, two more ... how many more to make ...? how many more is ... than ...? how much more is ...? take away, how many are

	is the same as, more, less, odd, even, few, pattern, pair	first, second, third... twentieth last, before, after, next between		left/left over? how many have gone? one less, two less, how many fewer is ... than ...? how much less is ...? difference between
Year 1	Number, numeral , one, two, three ... twenty, teens numbers, eleven, twelve ... twenty, twenty-one, twenty-two ... one hundred , none, how many ...? count, count (up) to, count on (from, to), count back (from, to) forwards, backwards, count in ones, twos, fives, tens equal to, equivalent to , is the same as, more, less ,most, least, many ,odd, even, multiple of , few, pattern, continue , pair	Ones, tens, digit, the same number as, as many as, more, larger, bigger, greater, fewer, smaller, less, fewest, smallest, least, most, biggest, largest, greatest, one more, ten more one less, ten less , equal to, compare, order, size, first, second, third... twentieth, last, before, after, next, between half-way between , above, below	Guess, how many ...? estimate nearly, roughly , close to, about the same as, just over, just under, too many, too few enough, not enough	Addition, add, more, make, sum, total, altogether, double near double , half, halve one more, two more ... ten more how many more to make ...? how many more is ... than ...? how much more is ...? Subtract, take away, how many are left/left over? how many have gone? one less, two less, ten less ... how many fewer is ... than ...? how much less is ...? difference between, equals, is the same as, number bonds/pairs/ facts, missing number, inverse
Year 2	Number, numeral, zero one, two, three ... twenty, teens numbers, eleven, twelve ... twenty, twenty-one, twenty-two ... one hundred, two hundred ... , none how many ...? count, count (up) to, count on (from, to), count back (from, to) forwards, backwards, count in ones, twos, fives, tens, threes , and so on, equal to, equivalent to, is the same as more, less most, least tally many odd, even, multiple of, sequence continue, predict , few, pattern	Ones, tens, hundreds , digit one-, two- or three-digit number place, place value stands for, represents, exchange , the same number as, as many as more, larger, bigger, greater fewer, smaller, less fewest, smallest, least, most, biggest, largest, greatest, one more, ten more, one less, ten less, equal to, compare, order, size, first, second, third ... twentieth, twenty-first, twenty-second ... last, before,	Guess, how many ...? estimate nearly, roughly ,close to, about the same as, just over, just under, exact, exactly	Addition, add, more, make, sum, total, altogether, double, near double, half, halve one more, two more ... ten more ... one hundred more , how many more to make ...? how many more is ... than ...? how much more is ...? subtract take away how many are left/left over? how many have gone? one less, two less, ten less ... one hundred less how many fewer is ... than ...? how much less is ...? difference between, equals, is the same

	pair, rule > greater than < less than	after, next, between, halfway, between, above, below		as, number bonds/pairs/facts, inverse, carry
Year 3	<p>Number, numeral, zero, one, two, three ... twenty, teens numbers, eleven, twelve ... twenty, twenty-one, twenty-two ... one hundred, two hundred ... one thousand, none how many ...? count, count (up) to, count on (from, to), count back (from, to) forwards, backwards, count in ones, twos, fives, tens, threes, fours, eights, fifties and twenty five to hundreds</p> <p>equal to, equivalent to is the same as more, less most, least tally many odd, even, multiple of, sequence, continue, predict, few, pattern, pair, rule, relationship > greater than < less than, consecutive exact, exactly, too many, too few, enough, not enough, ascending/descending order</p>	<p>Ones, tens, hundreds digit one-, two- or three-digit number place, place value stands for, represents, exchange, the same number as, as many as more, larger, bigger, greater fewer, smaller, less fewest, smallest, least most, biggest, largest, greatest one more, ten more, one hundred more, one less, ten less, one hundred less, tenths, efficient method</p>	<p>Guess how many ...? estimate nearly, roughly, close to approximate, approximately about the same as, just over, just under</p>	<p>Addition, add, more, and make, sum, total, altogether, double, near double, half, halve, one more, two more ... ten more ... one hundred more, how many more to make ...? how many more is ... than ...? how much more is ...? Subtract, take away, how many are left/left over? how many have gone? one less, two less, ten less ... one hundred less ,how many fewer is ... than ...? How much less is ...? Difference between, equals, is the same as, number bonds/pairs/facts, missing number, inverse, column addition and subtraction; carry, borrow</p>
Year 4	<p>Number, numeral, zero, one, two, three ... twenty, teens numbers, eleven, twelve ... twenty, twenty-one, twenty-two ... one hundred, two hundred ... one thousand ... ten thousand, none, how many ...? count, count (up) to, count on (from, to), count back (from, to) forwards, backwards, count in ones, twos, fives, tens, threes, fours, eights, fifties, sixes,</p>	<p>Ones ,tens, hundreds, thousands, digit one-, two- or three-, four - digit number, place, place value, stands for, represents, exchange, the same number as, as many as more, larger, bigger, greater, fewer, smaller, less fewest, smallest, least most, biggest, largest, greatest, one more, ten more, one hundred more, one thousand more, one less, ten</p>	<p>Guess ,how many, estimate nearly, roughly, close to, approximate, approximately, about the same as, just over, just under, exact, exactly, too many, too few, enough, not enough, round, nearest, round to the nearest ten, hundred, thousand, round up, round down</p>	<p>Addition, add, more, make, sum, total, altogether, double near double, half, halve, one more, two more... ten more... one hundred more...one thousand more, how many more to make ...? how many more is ... than ...? how much more is ...? Subtract, take away how many are left/left over? how many have gone? one less, two less, ten less ... one</p>

	<p>sevens, nines, elevens, twelves, twenty-fives and so on to hundreds, thousands, equal to, equivalent to, is the same as, more, less most, least, tally, many, odd, even multiple of, factor of, sequence, continue, predict, few, pattern, pair, rule, relationship, next, consecutive > greater than < less than, ascending/descending order positive, negative above /below zero, minus negative numbers, square number, Roman numeral,</p>	<p>less, one hundred less, one thousand less, equal to compare, order, size, first, second, third ... twentieth twenty-first, twenty-second ... last, before, after, next, between halfway between above, below, tenths, hundredths, efficient written method</p>		<p>hundred less, one thousand less, how many fewer is ... than ...? how much less is ...? difference, between, equals is the same as, number bonds/pairs/facts missing , Column addition and subtraction; carry, borrow</p>
Year 5	<p>Number, numeral, zero, one, two, three ... twenty, teens numbers, eleven, twelve ... twenty, twenty-one, twenty-two ... one hundred, two hundred ... one thousand ... ten thousand, hundred thousand, million, none, how many ...? count, count (up) to, count on (from, to), count back (from, to) forwards, backwards count in ones, twos, fives, tens, threes, fours, eights, fifties, sixes, sevens, nines, twenty-fives and so on to hundreds/ thousands, equal to, equivalent to, is the same as, more, less, most, least tally, many ,odd, even multiple of, factor of ,factor pair</p>	<p>Ones, tens, hundreds, digit one- , two- or three-digit number place, place value, stands for, represents, exchange, the same number as, as many as, more, larger, bigger, greater, fewer, smaller, less, fewest, smallest, least, most, biggest, largest, greatest, one more, ten more, one hundred more, one thousand more, one less, ten less, one hundred less, one thousand less, equal to, compare, order, size, first, second, third ... twentieth twenty-first, twenty-second ... last, last but one, how many have gone? one less, two less, ten less ... one hundred less</p>	<p>Guess, how many ...? estimate, nearly, roughly, close to, approximate, approximately, about the same as, just over, just under, exact, exactly too many, too few, enough, not enough, round, nearest, round to the nearest ten, hundred, thousand, ten thousand, round up, round down</p>	<p>Addition, add, more, and make, sum, total, altogether, double, near double, half, halve, one more, two more ... ten more ... one hundred more, how many more to make ...? how many more is ... than ...? how much more is ...? subtract ,take away how many are left/left over? how many have gone? one less, two less, ten less ... one hundred less, how many fewer is ... than ...? how much less is ...? difference between, equals, is the same as, number bonds/pairs/facts, missing number, inverse, Column addition and subtraction; carry, borrow</p>

	<p>sequence, continue, predict, few, pattern, pair, rule relationship, before, after, next between, halfway between, above, below next, consecutive > greater than < less than or equal to, Roman numerals integer, positive, negative above/below zero, minus, negative numbers, formula divisibility, square number prime number, ascending/descending order</p>	<p>how many fewer is ... than ...? how much less is ...? difference between, equals, is the same as, number bonds/pairs/facts, missing number, inverse, tenths, hundredths, thousandths</p>		
Year 6	<p>Number, numeral , zero, one, two, three ... twenty teens numbers, eleven, twelve ... twenty, twenty-one, twenty-two ... one hundred, two hundred ... one thousand ... ten thousand, hundred thousand, million, none, how many ...? count, count (up) to, count on (from, to), count back (from, to) forwards, backwards, count in ones, twos, fives, tens, threes, fours, eights, fifties, sixes, sevens, nines, twenty-fives and so on to hundreds/ thousands, equal to, equivalent to, is the same as more, less most, least, tally, many, odd, even ,multiple of, factor of, factor pair</p>	<p>Ones tens, hundreds, digit, one-two- or three-digit number place, place value, stands for, represents, exchange, the same number as, as many as more, larger, bigger, greater, fewer, smaller, less fewest, smallest, least most, biggest, largest, greatest, one more, ten more, one hundred more, one thousand more, one less, ten less, one hundred less, one thousand less, equal to ,compare ,order, size, first, second, third ... twentieth twenty-first, twenty-second ... last, last but one before, after next between, difference between, equals, is the same</p>	<p>Guess, how many ...? estimate, nearly, roughly, close to, approximate, approximately, about the same as, just over, just under, exact, exactly too many, too few enough, not enough round, nearest, round to the nearest ten, hundred, thousand, ten thousand, round up, round down</p>	<p>Addition, add, more, make, sum, total, altogether, double near double, half, halve one more, two more ... ten more ... one hundred more, how many more to make ...? how many more is ... than ...? how much more is ...? Subtract, take away how many are left/left over? how many have gone? one less, two less, ten less ... one hundred less, how many fewer is ... than ...? how much less is ...? Difference between, equals, is the same as, number bonds/pairs/facts missing number ,inverse, Order of operations, Column addition and subtraction; carry, borrow</p>

	sequence, continue, predict, few, pattern, pair, rule, relationship, next, consecutive > greater than < less than, halfway between, above, below, ≥ greater than or equal to, ≤ less than or equal to, Roman numerals integer, positive, negative, above/below zero, minus, negative numbers, formula, divisibility, square number, prime number, factorize, prime factor ascending/descending order, digit, total	as, number bonds/pairs/facts missing number, tenths		
--	--	--	--	--

	Vocabulary progression – Money and problem solving	
	Money	Problem solving
EYFS	Money ,coin, penny, pence, pound ,price, cost buy, sell spend, spent pay	Pattern, puzzle , what could we try next? How did you work it out? recognise ,describe, draw, compare, sort
Year 1	Money, coin, penny, pence, pound price, cost buy, sell spend, spent, pay, change, dear, costs more, cheap, costs less, cheaper, costs the same as how much ...? How many ...? total	Pattern, puzzle problem, problem solving, mental, mentally , what could we try next? How did you work it out? explain your thinking , recognise, describe, draw, compare, sort
Year 2	Money, coin, penny, pence, pound price, cost buy, bought , sell, sold spend, spent, pay change, dear, costs more, cheap, costs less, cheaper costs the same as how much ...? How many ...? total	Pattern, puzzle problem, problem solving mental, mentally what could we try next? How did you work it out? show how you ... explain your thinking
Year 3	Money, coin, penny, pence, pound, price, cost buy, bought, sell, sold spend, spent pay change, dear, costs more, cheap, costs less, cheaper costs the same as how much ...? How many ...? total	Pattern, puzzle, problem, problem-solving mental, mentally, what could we try next? How did you work it out? show how you ... explain your thinking, explain your method describe the pattern, describe the rule, investigate, recognise describe, draw, compare, sort greatest value ,

		least value mental calculation, written calculation, statement, explain your reasoning
Year 4	Money, coin, penny, pence, pound, price, cost buy, bought, sell, sold spend, spent pay change, dear, costs more, cheap, costs less, cheaper costs the same as how much ...? How many ...? total	Pattern, puzzle, problem, problem, solving mental, mentally, what could we try next? How did you work it out? explain your reasoning
Year 5	money ,coin, penny, pence, pound price, cost buy, bought, sell, sold spend, spent pay change dear, costs more cheap, costs less, cheaper costs the same as how much ...? How many ...? total discount currency	Pattern, puzzle, problem, problem solving, mental, mentally, what could we try next? How did you work it out? show how you ... explain your thinking, explain your method, describe the pattern, describe the rule, investigate, recognise, describe, draw, compare, sort greatest value, least value, mental calculation, written calculation, statement, justify, make a statement, explain your reasoning
Year 6	money ,coin, penny, pence, pound price, cost buy, bought, sell, sold spend, spent pay change dear, costs more cheap, costs less, cheaper costs the same as how much ...? How many ...? total discount currency, profit, loss	Pattern, puzzle, problem, problem solving mental, mentally what could we try next? How did you work it out? Show how you ... explain your thinking explain your method, describe the pattern, describe the rule, investigate, recognise, describe, draw, compare, sort ,greatest value, least value, mental calculation, written calculation, statement, justify, make a statement, explain your reasoning