

Year 1

Maths Overview



ST. MARY'S
ACADEMY TRUST



Year 1 Overview

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	Week 13	Week 14	Week 15
Autumn	Number: Place Value			Number: Addition and Subtraction			Geometry: Shape	Number: Place Value		Number: Addition & Subtraction		Measures: Money		Opportunity to consolidate, revisit and reinforce	
Spring	Number: Fractions		Measures: Time	Number: Place Value	Number: Addition and Subtraction		Number: Multiplication and Division		Measures: Length & height						
Summer	Number: Place Value		Number: Four operations (addition, subtraction, multiplication & divisions)			Measures: Money	Measures: Time	Measures: Weight/mass & Volume and capacity			Geometry: Shape Position & direction		Opportunity to consolidate, revisit and reinforce		

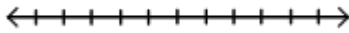





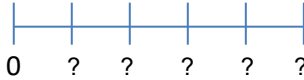
Please note: The length of each unit has been given as a guide only. Use professional judgement to either extend or shorten units in line with the needs of pupils. The 'spare' weeks at the end of each term have been planned in to allow for this flexibility or give the opportunity to consolidate, revisit and reinforce.
Where units revisit objectives, use assessment data to inform planning.







AUTUMN TERM														
Wk 1	Wk 2	Wk 3	Wk 4	Wk 5	Wk 6	Wk 7	Wk 8	Wk 9	Wk 10	Wk 11	Wk 12	Wk 13	Wk 14	Wk 15
<u>Number: Place Value</u> Count to 100 in numerals Count to and across 100 forwards , beginning with 0 or 1, or from any given number. Count to and across 100 backwards , beginning with 0 or 1, or from any given number. Read numbers to 100 in numerals Write numbers to 100 in numerals Identify and represent numbers using objects (concrete) Identify and represent numbers using pictorial representations including the number line Use the language of: equal to, more than, less than (fewer), most, least. Identify one more and one less than any given number.			<u>Number: Addition & subtraction</u> Read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs. Represent and use number bonds and related subtraction facts (within 20) Add one-digit and two-digit numbers to 20, including 0. Subtract one-digit and two-digit numbers to 20, including 0. Solve one step addition problems, using concrete objects and pictorial representations. Solve one step subtraction problems, using concrete objects and pictorial representations.			Geometry: Shape Recognise and name common 2D shapes e.g. rectangles, circles, triangles Recognise and name 3D shapes, e.g. cuboids, pyramids and spheres.	<u>Number: Place Value</u> Count to 100 in numerals Count to and across 100 forwards , beginning with 0 or 1, or from any given number. Count to and across 100 backwards , beginning with 0 or 1, or from any given number. Read numbers to 100 in numerals Write numbers to 100 in numerals Read numbers from 1 to 2 written in words. Write numbers from 1 to 20 in words. Identify and represent numbers using objects (concrete) Identify and represent numbers using pictorial representations including the number line Use the language of: equal to, more than, less than (fewer), most, least. Identify one more and one less than any given number. Count to 100 in multiples of ten Count to 100 in multiples of five Count to 100 in multiples of two		<u>Number: Addition & subtraction</u> Read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs. Represent and use number bonds and related subtraction facts (within 20) Add one-digit and two-digit numbers to 20, including 0. Subtract one-digit and two-digit numbers to 20, including 0. Solve one step addition problems, using concrete objects and pictorial representations. Solve missing number problems: addition Solve one step subtraction problems, using concrete objects and pictorial representations. Solve missing number problems: subtraction	<u>Measures: Money</u> Recognise and know the value of different denominations of coins and notes. Solve one step addition problems, using concrete objects and pictorial representations <i>(Number: Addition & subtraction)</i> Solve one step subtraction problems, using concrete objects and pictorial representations <i>(Number: Addition & subtraction)</i>	Opportunity to consolidate, revisit and reinforce			

SPRING TERM									
Wk 1	Wk 2	Wk 3	Wk 4	Wk 5	Wk 6	Wk 7	Wk 8	Wk 9	Wk 10
<u>Number: Fractions</u> Recognise and name a half as one of two equal parts of an object or shape. Find a half as one of two equal parts of an object or shape. Recognise and name a half as one of two equal parts of a quantity. Find a half as one of two equal parts of a quantity. Recognise and name a quarter as one of four equal parts of an object or shape. Find a quarter as one of four equal parts of an object or shape. Recognise and name a quarter as one of four equal parts of a quantity. Find a quarter as one of four equal parts of a quantity.		<u>Measures: Time</u> Measure and begin to record time (hours, minutes, seconds) Sequence events in chronological order using language [for example, before and after, next, first, today, yesterday, tomorrow, morning, afternoon and evening]. Recognise and use language relating to dates, including days of the week, months & years Tell the time to the hour Tell the time to half past the hour Draw hands on a clock face to show times on the hour Draw hands on a clock face to show times half past the hour Compare, describe and solve practical problems for time	<u>Number: Place Value</u> Count to 100 in numerals Count to and across 100 forwards, beginning with 0 or 1, or from any given number. Count to and across 100 backwards, beginning with 0 or 1, or from any given number. Read numbers to 100 in numerals Write numbers to 100 in numerals Read numbers from 1 to 2 written in words. Write numbers from 1 to 20 in words. Identify and represent numbers using objects (concrete) Identify and represent numbers using pictorial representations including the number line Use the language of: equal to, more than, less than (fewer), most, least. Identify one more and one less than any given number. Count to 100 in multiples of ten Count to 100 in multiples of five Count to 100 in multiples of two	<u>Number: Addition & subtraction</u> Read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs. Represent and use number bonds and related subtraction facts (within 20) Add one-digit and two-digit numbers to 20, including 0. Subtract one-digit and two-digit numbers to 20, including 0. Solve one step addition problems, using concrete objects and pictorial representations. Solve missing number problems: addition Solve one step subtraction problems, using concrete objects and pictorial representations. Solve missing number problems: subtraction	<u>Number: Multiplication & division</u> Count to 100 in multiples of ten (Number: Place value) Count to 100 in multiples of five (Number: Place value) Count to 100 in multiples of two (Number: Place value) Solve one-step multiplication problems, by calculating the answer using concrete, pictorial representations and arrays with support Solve one-step division problems, by calculating the answer using concrete, pictorial representations and arrays with support	<u>Measures: Length & height</u> Compare, describe and solve practical problems for lengths and heights [for example, long/short, longer/ shorter, tall/short, double/half]. Measure and begin to record lengths and heights.			

SUMMER TERM													
Wk 1	Wk 2	Wk 3	Wk 4	Wk 5	Wk 6	Wk 7	Wk 8	Wk 9	Wk 10	Wk 11	Wk 12	Wk 13	Wk 14
<u>Number: Place Value</u> Count to and across 100 forwards , beginning with 0 or 1, or from any given number. Count to and across 100 backwards , beginning with 0 or 1, or from any given number. Read numbers from 1 to 20 written in words. Write numbers from 1 to 20 in words. Identify and represent numbers using objects (concrete) Identify and represent numbers using pictorial representations including the number line Use the language of: equal to, more than, less than (fewer), most, least. Identify one more and one less than any given number. Count to 100 in multiples of ten Count to 100 in multiples of five Count to 100 in multiples of two	<u>Number: Four Operations</u> Represent and use number bonds and related subtraction facts (within 20) Add one-digit and two-digit numbers to 20, including 0. Subtract one-digit and two-digit numbers to 20, including 0. Solve one step addition problems, using concrete objects and pictorial representations. Solve missing number problems: addition Solve one step subtraction problems, using concrete objects and pictorial representations. Solve missing number problems: subtraction Solve one-step multiplication problems, by calculating the answer using concrete, pictorial representations and arrays with support Solve one-step division problems, by calculating the answer using concrete, pictorial representations and arrays with support			<u>Measures: Money</u> Recognise and know the value of different denominations of coins and notes. Solve one step addition problems, using concrete objects and pictorial representations <i>(Number: Addition & subtraction)</i> Solve one step subtraction problems, using concrete objects and pictorial representations <i>(Number: Addition & subtraction)</i>		<u>Measures: Time</u> Measure and begin to record time (hours, minutes, seconds) Recognise and use language relating to dates, including days of the week, months & years Tell the time to the hour Tell the time to half past the hour Draw hands on a clock face to show times on the hour Draw hands on a clock face to show times half past the hour Compare, describe and solve practical problems for time		<u>Measures: Weight/mass & volume and capacity</u> Compare, describe and solve practical problems for mass/weight [for example, heavy/light, heavier than, lighter than] Compare, describe and solve practical problems for capacity and volume [for example, full/empty, more than, less than, half, half full, quarter] Measure and begin to record mass/weight Measure and begin to record capacity and volume		<u>Geometry: Shape, position & direction</u> Recognise and name common 2D shapes e.g. rectangles, circles, triangles Recognise and name 3D shapes, e.g. cuboids, pyramids and spheres. Describe position, including top, middle, bottom, above, below, left, right, between. Describe direction and movement, including whole, half, quarter and three-quarter turn.		Opportunity to consolidate, revisit and reinforce	


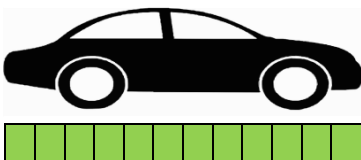
Place Value

National Curriculum Statement	All students		
	Fluency	Reasoning	Problem Solving
<p>Identify and represent numbers using objects (concrete)</p> <p>Identify and represent numbers using pictorial representations including the number line</p> <p>Use the language of: equal to, more than, less than (fewer), most, least.</p>	<ul style="list-style-type: none"> Using Base 10, show me a number: <ol style="list-style-type: none"> More than 5 Less than 8 Equal to $3 + 1$ Using 10 counters, show me the most counters you can. Show me the least counters you can. Show me more than 7 counters. Point to the number 9 on the number line. Count on from 3 to 7; say each number as you count on. 	<ul style="list-style-type: none"> Using a set of objects, look at the set. Are there more of one type than another? How can we find out? Sam says '7 is less than 8 but is more than 5'. Is he right? Explain your answer. Put numbers up to 10 in the boxes to make the number sentences complete. <p>  is more than 4 but less than  . </p> <p> $7 + 1$ is equal to , more than , and less than  . </p> 	<ul style="list-style-type: none"> There are 3 tubs, a red one, a green one and a blue one. They have 10 cubes between them. The blue tub has one more cube in it than the red tub. The red tub has three fewer cubes than the green tub. How many cubes are in each tub? Jan has put 3 number cards in a bag. She picks the number 8 and says 'this is the biggest'. Then she picks the number 4 and says 'This is the smallest'. What number could be on the 3rd card? Ted is guessing what numbers could be on a number line. He knows the first number is 0 and the last number is equal to or below 10. What could the other numbers be? 


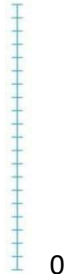
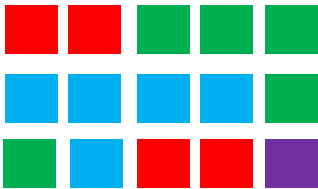
	National Curriculum Statement	All students		
		Fluency	Reasoning	Problem Solving
Place Value	Identify one more and one less than any given number	<ul style="list-style-type: none"> Fill in the missing numbers. <p>9   Is 1 less than</p> <p>2   Is 1 more than</p> <ul style="list-style-type: none"> How many fingers if I put one down?  I roll the number that is one more. What number do I roll?  	<ul style="list-style-type: none"> What comes next? $6+1=7$ $7+1=8$ $8+1=9$ True or False? 1 more than 7 is the same as 1 less than 9. Convince me. Harry says '1 more is the same as adding 1 and 1 less is the same as taking away.' Is he right? Prove it. 	<ul style="list-style-type: none"> A number line has been cut up. Can you find the missing numbers? __, 5, __ __, __, 8 __, 3, __, 5, __ Dan says 'I am one year older than my sister. My sister is one year older than my brother. My brother is 7. How old am I? Roll a dice. If your number is even, write down the number one more than your number. If your number is odd, write down the number one less. How many numbers can you get?

	National Curriculum Statement	All students														
		Fluency	Reasoning	Problem Solving												
Place Value	<p>Count to and across 100, forwards beginning with 0 or 1, or any given number.</p> <p>Count to and across 100, backwards beginning with 0 or 1, or any given number.</p>	<ul style="list-style-type: none">Finish the sequence 8, 9, 10, 11, 12, <u> </u>, <u> </u>, <u> </u>, <u> </u> 50, 49, 48 , , , <u> </u>Fill in the missing numbers <table><tr><td>31</td><td></td><td>33</td><td></td><td></td><td>36</td></tr><tr><td>19</td><td></td><td></td><td>16</td><td></td><td></td></tr></table>Count to twenty starting at 1. Count to 100 starting at 80.	31		33			36	19			16			<ul style="list-style-type: none">I am going to count to 20. I start at 8. Will I say 11? Convince me.Spot the mistake: 99, 98, 96, 95, 94 What is wrong with this sequence of numbers?I count backwards from 20, how many steps does it take me to get to 7?	<ul style="list-style-type: none">Count to 50 one by one. You need to listen to each other and try not to say a number at the same time as somebody else. Every time only one person says a number you win a point. How many points can you win?Walk round the classroom, count your steps as you go. When you get to 20 count backwards. Did we all get the same number?
	31		33			36										
19			16													

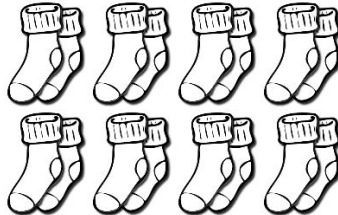

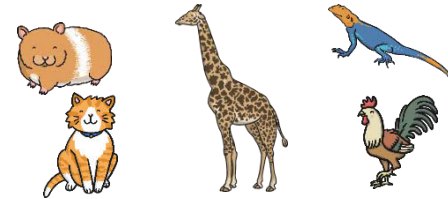
Place Value




















National Curriculum Statement	All students																																																														
	Fluency	Reasoning	Problem Solving																																																												
Read numbers from 1 to 20 written in words. Write numbers from 1 to 20 written in words.	<ul style="list-style-type: none">Match the numbers to the words. <div><div>seventeen</div><div>twenty</div><div>fifteen</div><div>twelve</div><div>15</div><div>12</div><div>17</div><div>20</div></div>Count the stars and write the answer in numbers and words. <div><div></div><div>There are _____</div><div>Stars. _____</div></div>Using counters or base 10, show me: 17, 15, 11, 20	<ul style="list-style-type: none">True or False? The car is eleven cubes long. <div></div>Dan says 'I can make all the numbers from eleven to twenty using the numbers 1-9'. Do you agree? Explain your reasoning.Spot the mistake: Circle the odd one out and explain what has gone wrong 11, 12, 13, 14, 51, 16, 17	<ul style="list-style-type: none">Match each number to a sentence that describes it. A number bigger than 10. An even number. A number smaller than 15. <div><div>16</div><div>17</div><div>fourteen</div></div>Can you find the numbers in the wordsearch? <table><tr><td>s</td><td>e</td><td>v</td><td>e</td><td>n</td><td>t</td><td>e</td><td>e</td><td>n</td></tr><tr><td>t</td><td>h</td><td>r</td><td>e</td><td>e</td><td>w</td><td>l</td><td>e</td><td>i</td></tr><tr><td>f</td><td>o</td><td>u</td><td>r</td><td>t</td><td>e</td><td>e</td><td>n</td><td>n</td></tr><tr><td>e</td><td>i</td><td>g</td><td>h</td><td>t</td><td>n</td><td>v</td><td>o</td><td>e</td></tr><tr><td>e</td><td>n</td><td>s</td><td>i</td><td>x</td><td>t</td><td>e</td><td>e</td><td>n</td></tr><tr><td>t</td><td>h</td><td>i</td><td>r</td><td>t</td><td>y</td><td>n</td><td>t</td><td>o</td></tr></table>Play a game of bingo. The bingo card has numbers from 1-20 in words. The teacher then shows a number in numerals and the children must find that number in words on their grid. <table><tr><td>thirteen</td><td>eight</td><td>eleven</td></tr><tr><td>twenty</td><td>sixteen</td><td>twelve</td></tr></table>	s	e	v	e	n	t	e	e	n	t	h	r	e	e	w	l	e	i	f	o	u	r	t	e	e	n	n	e	i	g	h	t	n	v	o	e	e	n	s	i	x	t	e	e	n	t	h	i	r	t	y	n	t	o	thirteen	eight	eleven	twenty	sixteen	twelve
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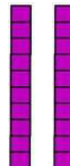
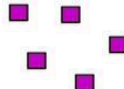
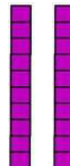
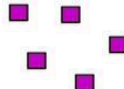
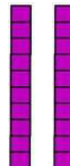
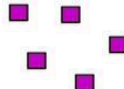

National Curriculum Statement	All students		
	Fluency	Reasoning	Problem Solving
<p>Identify and represent numbers using objects (concrete)</p> <p>Identify and represent numbers using pictorial representations including the number line</p> <p>Use the language of: equal to, more than, less than (fewer), most, least.</p>	<ul style="list-style-type: none"> Using Base 10, show me a number: <ol style="list-style-type: none"> More than 12 Less than 20 Equal to $10 + 10$ Look at the baskets of apples. Which has the most? Which has the least?  <ul style="list-style-type: none"> Point to where 15 would be on the number track. Count from 11 to 18. Point to each number on the line as you count. 	<ul style="list-style-type: none"> Fill the gaps: <div> <div></div> is more than 15 but less than 20. <div></div> is less than eighteen but more than twelve. </div> <p>What numbers could go in the boxes? Explain your answer.</p> Look at the cubes, are there more of one colour than another? Which colour has the most? If I added two more red cubes which would have the most? Has it changed? Why?  <ul style="list-style-type: none"> Tim says '13 is more than twelve but less than eleven'. Is he correct? Prove it. 	<ul style="list-style-type: none"> Sarah has three bags of sweets. She says 'Bag A has the most sweets and Bag C has the least.' If Bag A has 12 and C has 17, how many might be in bag B? Put a number line from 1-20 on the IWB. One child chooses a number. Other children then have 5 guesses to work out what their number is by asking, Is it greater than... is it less than.... Is it more than...etc. There are three buckets, a red, blue and purple one. 20 balls are shared between the three buckets. There are 3 more balls in the red than the blue. There is one less in the purple than the red. All the buckets have more than 4 balls in them? How many balls are in each bucket? Use cubes to help you solve the problem.

Place Value

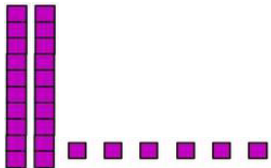
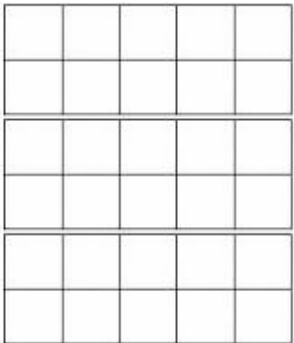
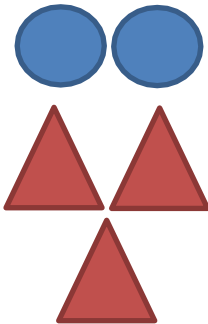
Place Value	National Curriculum Statement	All students								
		Fluency	Reasoning	Problem Solving						
	<p>Count to 100 in multiples of ten</p> <p>Count to 100 in multiples of five</p> <p>Count to 100 in multiples of two</p>	<ul style="list-style-type: none">Continue the pattern: 2, 4, 6, 8, , , _Fill in the missing numbers. <table border="1"><tr><td>6</td><td></td><td>10</td><td></td><td></td><td>16</td></tr></table>How many socks are there altogether? 	6		10			16	<ul style="list-style-type: none">True or False? I start at 2 and count in twos. I will say the number 9.I am going to count on in twos from 3. Will I say an even number? Prove it.I am going to count back in twos from 20. How many steps will it take me to reach 0? Convince me.	<ul style="list-style-type: none">There are 2 flowers in each pot. How many flowers in 10 pots?In the story Noah's Ark, the animals went in 2 by 2. If there were 2 of every animal below, how many animals were there altogether?If there were 30 animals on the ark, how many pairs of animals were there?
6		10			16					

Place Value	National Curriculum Statement	All students																										
		Fluency	Reasoning	Problem Solving																								
	<p>Count to 100 in multiples of ten</p> <p>Count to 100 in multiples of five</p> <p>Count to 100 in multiples of two</p>	<p>•Continue the pattern:</p> <p>2, 4, 6, 8, , , _</p> <p>5, 10, 15, 20, , , _</p> <p>10, 20, 30, 40, , , _</p> <p>•Find the missing numbers: 6</p> <table><tr><td> </td><td>8</td><td> </td><td>12</td><td> </td><td>16</td></tr></table> <table><tr><td>30</td><td>25</td><td> </td><td> </td><td>10</td><td> </td></tr></table> <p>• How many gloves are there? How many fingers are there?</p> <table><tr><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td></tr></table>		8		12		16	30	25			10								<p>• True or False? I count in fives from 10. I say the number 45. Explain your answer.</p> <p>• Ben says ‘If I count in10’s from 7 I will say the number 18.’ Do you agree? Explain your answer.</p> <p>• What is wrong with this sequence of numbers?</p> <table><tr><td>20</td><td>18</td><td>16</td><td>13</td><td>12</td><td>10</td></tr></table> <p>Explain your answer.</p>	20	18	16	13	12	10	<p>• Jenny has made 2 biscuits. She has 20 jelly tots and 8 chocolate buttons to decorate them. She says ‘I want to use jelly tots in multiples of 5 and chocolate buttons in multiples of 2.’ How many ways could she decorate her biscuits? (They can be different)</p> <p>• Zig and Zag are aliens. Zig eats multiples of 2. Zag eats multiples of 5. Which numbers would they eat? Are there any numbers they would both eat?</p> <p>2, 5, 8, 10, 15, 20</p> <p>• Gringlygoos are monsters who have eyes that are multiples of 2 and fingers that are multiples of 5. Which monster below is a Gringlygoo?</p> <div></div>
	8		12		16																							
30	25			10																								
																												
																												
20	18	16	13	12	10																							



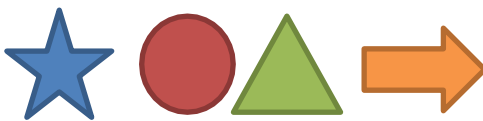
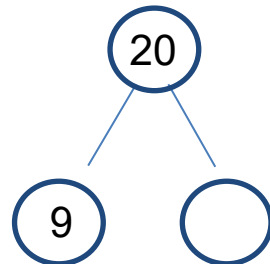
Place Value

National Curriculum Statement	All students						
	Fluency	Reasoning	Problem Solving				
<p>Count to and across 100, forwards beginning with 0 or 1, or any given number.</p> <p>Count to and across 100, backwards beginning with 0 or 1, or any given number.</p>	<ul style="list-style-type: none">Complete the missing numbers: 31 ____ ____ 28 27 19 ____ 21 22 23 40 ____ 38 ____ 36 In pairs, take turns to say 3 consecutive numbers starting from any point. Record who says a multiple of 10. e.g. start from 28 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39 40 Can you do the same counting backwards? 85, 84, 83, 82, 81, 80, 79, 78, 77, 76, 75, 74,How many bricks are there altogether?	<ul style="list-style-type: none">Kate says, “I have 7 tens and 8 ones. My number must be 708.” Explain the mistake Kate has made.True or false? I am counting forwards to 40 from 25. I will say 30. Convince me.Spot and explain the mistake. 46, 47, 48, 49, 60	<ul style="list-style-type: none">My friend and I created the same number using base 10. My number is below. How much did we have altogether? <table><tr><th>Tens</th><th>Ones</th></tr><tr><td></td><td></td></tr></table> <ul style="list-style-type: none">Simon had 3 numbers in his bag. He gave three clues about them. Work out what each number could be:<ul style="list-style-type: none">- One number has seven less than 35.- One number has no ones.- One number more ones than it has tens.Put cards 0 - 50 face down. When you turn one over count how many jumps it takes to get to 40. Count how many jumps it takes to get to 0. Which is it closer to? Why?	Tens	Ones		
	Tens	Ones					
							
							

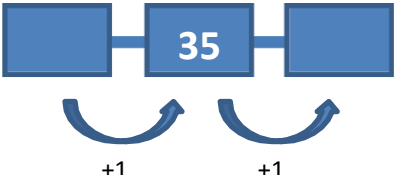

Place Value

National Curriculum Statement	All students		
	Fluency	Reasoning	Problem Solving
<p>Count to 100 in numerals</p> <p>Read numbers to 100 in numerals</p> <p>Write number to 100 in numerals</p>	<ul style="list-style-type: none"> Using base 10, show me 37. What is my number?  <ul style="list-style-type: none"> Using counters, fill the ten frames to make 68. How many would you have if it was full? How many more do you need to make it 100? 	<ul style="list-style-type: none"> True or false? I have 2 tens and 7 ones. If I take 1 ten away, I will have 17. Explain why. Odd one out! Explain why you think a number is the odd one out. How many different reasons can you find? 10, 15, 25, 36 Each circle represents 10. Each triangle represents one. Harry says the number below is 24. Is he correct? Explain why. 	<p>Create a word search for a friend including the words eighteen, forty and twenty four.</p> <p>Write or look at the numbers 1 - 100. Are there any patterns in how they are pronounced? Are there any numbers that are different? Does this make it easier or harder to remember them?</p> <p>Sam is writing all the counting numbers from 40 – 60. He stops after he has written 52. What are the last 3 numbers he has written?</p>

Place Value

National Curriculum Statement	All students						
	Fluency	Reasoning	Problem Solving				
<p>Identify and represent numbers using objects (concrete)</p> <p>Identify and represent numbers using pictorial representations including the number line</p>	<ul style="list-style-type: none">Using Base 10, show me:<ul style="list-style-type: none">a) 38b) a number smaller than 25c) a number with 1 ten and 6 ones in itHow many ways can you represent 17 using drawings?Treasure hunt activity! Can you find all the things on your sheet? <table><tr><td>11 pencils</td><td>27 stickers</td></tr><tr><td>19 leaves</td><td>15 balls</td></tr></table>	11 pencils	27 stickers	19 leaves	15 balls	<ul style="list-style-type: none">Blue counters are worth 5. Can you make 35 using blue counters?Can you create a story, including drawings, for the number sentence below? $17 + 9 =$Jamie had some teddy bears. He said if I had another equal set of teddy bears I would have 20. Is he right? Explain why. 	<ul style="list-style-type: none">Look at the picture below. List all the mathematical vocabulary, numbers and calculations you can create from this.  <ul style="list-style-type: none">Stars are worth 5. Circles are worth 1. Triangles are worth 2. Arrows are worth 10. How many ways can you represent 20? Will there be more ways for 40? How do you know?  <ul style="list-style-type: none">Look at the part-whole model. Make all the part-whole models you can from these facts you have been given. 
11 pencils	27 stickers						
19 leaves	15 balls						

Place Value

National Curriculum Statement	All students		
	Fluency	Reasoning	Problem Solving
Identify one more and one less than any given number	<ul style="list-style-type: none"> Complete the more and less boxes below:  Fill in the missing gaps: One more than 29 is <input type="text"/> <input type="text"/> is one less than 13 <input type="text"/> = 1 less than 45 Here is a ten frame  Can you make 1 more and 1 less than this number? 	<ul style="list-style-type: none"> Anna thinks 1 more than 14 is 24. Can you explain her mistake? True or false? 1 more than 10 is the same as 1 less than 30. Calvin is finding 1 more and 1 less of a number. Here are some numbers he has found: 21,22,23 34,35,36 17,18,19 Calvin says, "No matter what number I pick the tens will stay the same. It is only the ones that change." Is he right? Explain why. 	<ul style="list-style-type: none"> Sarah has £1 more than Katie. Brian has £1 less than Katie. Sarah has £22. How much money do Katie and Brian have? A bag is full of digit cards from 1 - 40. Michelle pulls out a card and says "The difference between the digits is 1." What card could she have pulled out? Is this the only option? In pairs, take it in turns to build a tower. Your partner needs to make 2 towers. The first will be 1 more than the original; the second will be 1 less.

Place value	National Curriculum Statement	All Students																																																																																																																																																																																																										
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	<p>Count to and across 100, forwards beginning with 0 or 1, or any given number.</p> <p>Count to and across 100, backwards beginning with 0 or 1, or any given number.</p>	<ul style="list-style-type: none">Here is a hundred square.<table><tr><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td><td>10</td></tr><tr><td>11</td><td>12</td><td>13</td><td>14</td><td>15</td><td>16</td><td>17</td><td>18</td><td>19</td><td>20</td></tr><tr><td>21</td><td>22</td><td>23</td><td>24</td><td>25</td><td>26</td><td>27</td><td>28</td><td>29</td><td>30</td></tr><tr><td>31</td><td>32</td><td>33</td><td>34</td><td>35</td><td>36</td><td>37</td><td>38</td><td>39</td><td>40</td></tr><tr><td>41</td><td>42</td><td>43</td><td>44</td><td>45</td><td>46</td><td>47</td><td>48</td><td>49</td><td>50</td></tr><tr><td>51</td><td>52</td><td>53</td><td>54</td><td>55</td><td>56</td><td>57</td><td>58</td><td>59</td><td>60</td></tr><tr><td>61</td><td>62</td><td>63</td><td>64</td><td>65</td><td>66</td><td>67</td><td>68</td><td>69</td><td>70</td></tr><tr><td>71</td><td>72</td><td>73</td><td>74</td><td>75</td><td>76</td><td>77</td><td>78</td><td>79</td><td>80</td></tr><tr><td>81</td><td>82</td><td>83</td><td>84</td><td>85</td><td>86</td><td>87</td><td>88</td><td>89</td><td>90</td></tr><tr><td>91</td><td>92</td><td>93</td><td>94</td><td>95</td><td>96</td><td>97</td><td>98</td><td>99</td><td>100</td></tr></table> <p>Count forwards from 42..... Count backwards from 80..... Count forwards from 30, when you get to 50, count back to 40.</p> <ul style="list-style-type: none">Here is a 100 base ten block.<table><tr><td colspan="100"></td></tr></table> <p>What number would come next? Use base 10 to help count forward over 100. When you reach 120, count back to 80.</p>	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100																																																																																																					<ul style="list-style-type: none">I am going to count on from the number 58, will I say 56? Can you explain why?I am going to count backwards from 30, how many steps will it take me to reach 10?Sarah is counting from 70 backwards to 65. She says the numbers 70, 69, 68, 67, 65. Can you explain the mistake she has made?	<ul style="list-style-type: none">Can you work out what number I started counting from using the clues? Is there more than one option? <p>I say 10 2 digit numbers and finish on the number 34.</p> <p>I count backwards 13 numbers and finish on 90.</p> <p>I count backwards from a 2 digit number and say 7 numbers which have 7 digits altogether.</p> <ul style="list-style-type: none">Sam starts counting at the number 50. He says 6 odd numbers and 5 even numbers. What number could he finish on?
1	2	3	4	5	6	7	8	9	10																																																																																																																																																																																																			
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Place value

Identify and represent numbers using objects (concrete)

Identify and represent numbers using pictorial representations including the number line

Use the language of: equal to, more than, less than (fewer), most, least.

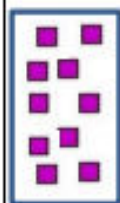
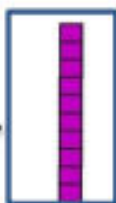
- Write the numbers from least to most.

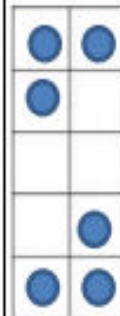

71	5	18	19	40
----	---	----	----	----

- Write 35 in the correct place in the number grid.

22	23	24	25	26
27	28			

- Use **more than**, **less than** or **equal to** to fill the gaps below.


 is 


 is 

- Look at the numbers below.

56	65
----	----

What is the same about these numbers?

What's different?

- Always, sometimes, never**

A number with 9 ones is bigger than a number with 6 ones.

- Can you move 3 counters so all the ten frames are equal?

●	●	●	●	●

●	●	●	●	●
●	●	●		

●	●	●	●	●
●				

●	●	●	●	●
●	●	●		

- Use the number cards to make the following numbers:

3	4	5	6	7
---	---	---	---	---

- Use 2 of the number cards to make a number more than 60.
- Use 2 of the number cards to make a number less than 40.
- What is the smallest 2 digit number you can make?
- What is the largest 2 digit number you can make?
- How do you know this is the largest number?

- There are 3 buckets of balls, red balls, green balls and blue balls.

The red balls are equal to the blue balls. There are 2 more green balls than blue balls. There are 20 balls altogether.

How many of each colour are there?

Use cubes to help you solve the problem.

Place value

Count to 100 in numerals

Read numbers to 100 in numerals

Write number to 100 in numerals

- Count the balls.
How many are there?
Can you write this number in numerals and words?



- Show me 35 cubes. How could you group them?

- Complete

29		31	32	
----	--	----	----	--

- Jasmine is writing fifty two.

She writes

502

Is she right?

Tell me why.

- Which number will be in the bold square on the grid?

25	26		
29		31	

Explain how you know.

- Use the digit cards to below to make as many different **one** and **two** digit numbers as you can.



Write all the numbers in words.

- Match the numbers in words to the numerals.

forty three

57

thirty four

61

fifty seven

43

sixty one

16

Fill in any missing boxes.

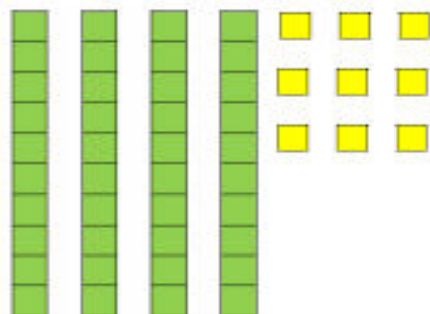
- Can you find nine numbers in words in the wordsearch?

f i f t y s i x b t t e
g b n p f l a m t y h r
h j i b o t y u w q i s
c f n t r u d f e l r d
s y e w t n n i n e t y
e t t n y g h j t s y a
v u y v s i w a y k n g
e e t w e n t y f e i h
n d h p v n k e i v n b
t c r a e r u r v o e y
y k e b n a n o e p s o
c u e i g h t y o n e p

Place value

Identify one more or one less than any given number

- Here is a number. Make one more and one less than the number, write your answer in digits and words.



- Fill in the boxes.

45 $\xrightarrow{\text{is 1 less than}}$

39 $\xrightarrow{\text{is 1 less than}}$

50 $\xrightarrow{\text{is 1 more than}}$

- Sam thinks of a number. One more than his number is 8. What is his number?
Claire thinks of a number. One less than her number is 6. What is her number?

- Fill in the boxes:

$\xrightarrow{\text{is 1 less than}}$

$\xrightarrow{\text{is 1 more than}}$

- Tamsin and her little sister Beth have the same birthday as each other. Tamsin is going to be 7. Beth is going to be one year younger.

Tamsin says 'I need one less candle for my birthday cake than you.'

Is she correct?

Draw the amount of candles Tamsin and Beth should have on the cakes below.



Tamsin



Beth

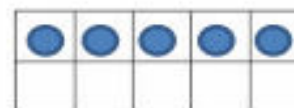
- Harry is 52. He is 1 year older than Kate who is 1 year younger than Sally. How old is Sally?

- Here are Dan, Millie and Saqib's ten frames.

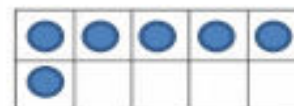
Can you move two of the counters so Millie has 1 more than Dan and Saqib has 1 less than Millie?



Dan



Millie







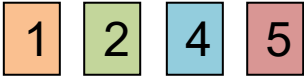


Saqib

Complete the sentences to describe the new ten frames.

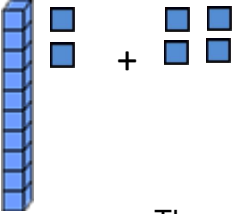

Millie has _____ Saqib.
Dan has _____ Saqib.
Millie has _____.


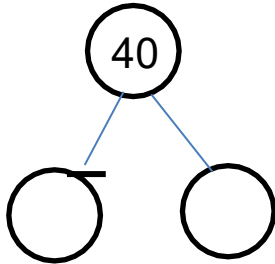
Addition and Subtraction



National Curriculum Statement	All students		
	Fluency	Reasoning	Problem Solving
<p>Read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs.</p>	<ul style="list-style-type: none"> There are 5 people upstairs on the bus, there are 4 people downstairs. How many altogether? Write a number sentence to show this.  <ul style="list-style-type: none"> Ben has 5 buns. He eats 2. How many are left? Write this in a number sentence.  <ul style="list-style-type: none"> Rob has 5 more cubes than Tom. Tom has 11 cubes. How many cubes does Rob have? Write a number sentence to show this. 	<ul style="list-style-type: none"> Write the missing symbols in these number sentences. +, - and = <p>7  2  9</p> <p>8  4  4</p> <ul style="list-style-type: none"> If you know this, $6 + 3 = 9$. What other facts do you know? Which four number sentences link these 3 numbers? <p>3 4 7</p>	<ul style="list-style-type: none"> Tom is bowling, which pins must he knock down to score 7? How many ways can you do it?  <p>Choose from these number cards to make the following numbers. 5, 6, 7, 8, 9, 10</p> <p>You can use 2 or 3 number cards. Write your answers in full number sentences.</p> <ul style="list-style-type: none"> Three birds each lay an odd number of eggs. They have 9 eggs altogether. Can you think of more than one way to do it? Use cubes to help you solve the problem. Write your answer in a number sentence.

Addition and Subtraction




National Curriculum Statement	All students																																																																		
	Fluency	Reasoning	Problem Solving																																																																
Represent and use number bonds and related subtraction facts within 20.	<ul style="list-style-type: none">Fill in the missing numbers: <div><div>■</div> + 11 = 20 18 + <div><div>■</div></div> = 20 20 - <div><div>■</div></div> = 12</div>Fill in the missing bonds: <div><div><div></div><div></div></div><div><div></div><div></div></div></div> <p>Can you make a diagram linking 17 and 20? What would the missing bond be?</p> <ul style="list-style-type: none">Use the bar model to write 4 number sentences. 2 additions and 2 subtractions. <div><div><div></div><div></div></div><div><div></div><div></div></div></div>	<ul style="list-style-type: none">Fill in the missing numbers. 11 + <div><div>■</div></div> = 20 20 - <div><div>■</div></div> = 11 <p>Can you make two more number sentences using the same three numbers?</p> <ul style="list-style-type: none">Continue the pattern 10 + 5=15 9 + 6 =15 Can you make a similar pattern for 20?Using the pattern above, could you make a pattern using subtractions?	<ul style="list-style-type: none">I have 20p to spend, choose 2 toys that you can buy for exactly 20p. How many pairs can you find? <div><div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div></div>Find the number bonds to 20 in the wordsearch. They must have a + sign in between the numbers.<table><tr><td>1</td><td>+</td><td>19</td><td>6</td><td>+</td><td>6</td><td>2</td><td>14</td></tr><tr><td>2</td><td>16</td><td>+</td><td>4</td><td>0</td><td>5</td><td>+</td><td>1</td></tr><tr><td>+</td><td>10</td><td>+</td><td>10</td><td>+</td><td>6</td><td>3</td><td>+</td></tr><tr><td>3</td><td>13</td><td>+</td><td>7</td><td>20</td><td>2</td><td>+</td><td>18</td></tr><tr><td>15</td><td>+</td><td>18</td><td>3</td><td>+</td><td>17</td><td>6</td><td>8</td></tr><tr><td>+</td><td>5</td><td>+</td><td>3</td><td>2</td><td>+</td><td>20</td><td>12</td></tr><tr><td>5</td><td>+</td><td>2</td><td>8</td><td>+</td><td>3</td><td>+</td><td>+</td></tr><tr><td>5</td><td>+</td><td>19</td><td>+</td><td>1</td><td>4</td><td>0</td><td>8</td></tr></table>How many ways can you make 20? <div><div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div></div>	1	+	19	6	+	6	2	14	2	16	+	4	0	5	+	1	+	10	+	10	+	6	3	+	3	13	+	7	20	2	+	18	15	+	18	3	+	17	6	8	+	5	+	3	2	+	20	12	5	+	2	8	+	3	+	+	5	+	19	+	1	4	0	8
	1	+	19	6	+	6	2	14																																																											
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	National Curriculum Statement	All students		
		Fluency	Reasoning	Problem Solving
Addition and Subtraction	<p>Add one digit and two digit numbers to 20, including zero.</p> <p>Subtract one digit and two digit numbers to 20, including zero.</p>	<ul style="list-style-type: none"> Calculate: $12 + 5 =$ $18 - 6 =$ $13 - _ = 13$ $- 4 = 5$ Solve the addition:  <ul style="list-style-type: none"> There are 18 people on the bus, 7 get off at the bus stop. How many people are still on the bus?  	<ul style="list-style-type: none"> What do you notice? $20 - 12 = 8$ $20 - 8 = 12$ Can you make up some other number sentences like this using three numbers? I'm thinking of a number, I have subtracted 5 and the answer is 8. What number was I thinking of? Explain how you know. I'm thinking of a number. I have added 11 and the answer is 17. What was my number? Show me how you worked it out. 	<ul style="list-style-type: none"> Write a pair of numbers that add to 17. Can you find another pair? Find all pairs of numbers that add to 17. Prove that you have found them all. Fill in the blanks so each row and column adds up to 15. Can you use 4 different numbers? How many ways can you do it? <div data-bbox="1845 660 1995 836"> </div> <ul style="list-style-type: none"> Complete the diagram. Can you extend it? <div data-bbox="1621 976 1899 1112"> </div>






	National Curriculum Statement	All students		
		Fluency	Reasoning	Problem Solving
Addition and Subtraction	<p>Add one digit and two digit numbers to 20, including zero.</p> <p>Subtract one digit and two digit numbers to 20, including zero.</p>	<ul style="list-style-type: none"> Fill in the missing gaps: $20 - \square = 10$ $\square + 13 = 20$ $\square = 15 - 7$  Alan baked 16 cookies. He gave 14 of them away. How many are left? 	<ul style="list-style-type: none"> Clare is working out $20 - 17 =$. She begins building both numbers with base 10. Explain why she doesn't need to do this. Martin is subtracting single digits from 20. He says, "The lowest answer I can get is 11." Do you agree? Explain why. Explain why $20 - 20 = 0$ 	<ul style="list-style-type: none"> Look at the digit cards below. <div data-bbox="1509 349 1816 651"> <div>0</div> <div>1</div> <div>2</div> <div>3</div> </div> <p>How many calculations and answers can you make? How do you know you have found them all?</p> Roll three dice and add the numbers to get an answer. Use a ten frame to help if needed. What are the highest and lowest possible answers? How do you know? How many part-whole models can you make where the whole number is 40? Can you have 3 parts? <div data-bbox="1639 1043 1912 1307">  </div>

	National Curriculum Statement	All students											
		Fluency	Reasoning	Problem Solving									
Addition and Subtraction	Read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs.	<ul style="list-style-type: none">If the ladybird lost 5 spots how many would it have left? Write a number sentence to show your working? Tom has 10 stickers, he gets 7 more. Can you write a number sentence to show how many stickers Tom has altogether?Together, Sam and Matt have 15 sweets. Sam has 8 sweets. How many does Matt have? Write a number sentence to show your working.	<ul style="list-style-type: none">Can you make 4 number sentences using 14, 5 and 19? $13 + 5 = 18$ Can you make three other number sentences using the same three numbers?Write the missing symbols in the following number sentences. <table><tr><td>17</td><td>3</td><td>20</td></tr><tr><td>20</td><td>5</td><td>15</td></tr><tr><td>16</td><td>20</td><td>4</td></tr></table>	17	3	20	20	5	15	16	20	4	<ul style="list-style-type: none">Write a number sentence below that these objects could show: Roll a 1-6 die twice. Add the two numbers together. Write down your number sentence. Roll the die again and take this number away from your answer. Can you write your subtraction in a number sentence?Using the numbers 1, 3 and 4, how many numbers up to 8 can you make? Write down your addition and subtraction sentences.
		17	3	20									
20	5	15											
16	20	4											

Addition and Subtraction

National Curriculum Statement	All students								
	Fluency	Reasoning	Problem Solving						
Read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs.	<ul style="list-style-type: none">What word could be used in the calculation below? 33 12 = 21There were 15 people in the cinema and 23 people joined them. Can you write a calculation to show this?Use the cards below to create a mathematical statement.	<ul style="list-style-type: none">A year one class have been using the equals sign. Their teacher presents them with the following calculation: $17 + 3 = 30 - 10$ They are confused why the teacher has put 30 after the equals sign and not 20. Can you explain this to them?The following numbers are given to 2 children. 14, 6, 20 Harjas says, "I will use an addition sign for this calculation." Kaemon says, "This will need a subtraction sign." Who is right? Explain why.	<ul style="list-style-type: none">Look at the picture below. How many calculations can you create from it? Two numbers added together make 8. The difference between them is 2. What are the two numbers? Here are two dice.  If you add the numbers on the top of the dice together it makes 5. We can write this as $1 + 4 = 5$ Use two dice and add the numbers on the top. How many totals can you make? Write them as addition sentences.						
	<table><tr><td>17</td><td>9</td><td>6</td></tr><tr><td>14</td><td>-</td><td>5</td></tr><tr><td>+</td><td>11</td><td>=</td></tr></table>		17	9	6	14	-	5	+
17	9	6							
14	-	5							
+	11	=							

Addition and Subtraction

National Curriculum Statement	All students		
	Fluency	Reasoning	Problem Solving
<p>Solve one step problems that involve addition and subtraction, using concrete objects and pictorial representations and missing number problems.</p>	<ul style="list-style-type: none"> A farmer has 35 sheep. He sells 8 of them to his farmer friend. How many does he have left? Each animal gets one bag of food in the morning and one at night. How many bags of food are used in a day?  <ul style="list-style-type: none"> A man counts 38 red and blue cars in an hour. 9 of the cars are red. How many blue cars does he count? 	<ul style="list-style-type: none"> There are 7 flowers in a vase and Kelsey is holding 8 in her hand. She wants to know the total number of flowers but doesn't know whether to add or subtract. Can you explain what she needs to do? I have 4 more sweets than Olivia. How many sweets must I give Olivia so that we have the same number of sweets? Explain how you know. 	<ul style="list-style-type: none"> Phil is using ten frames to solve $9 + 3$. He moves one over to make $10 + 2$. He says, "This is the best way to do this sum." Do you agree? What other ways can you make 12? Justify which is the best way.  <ul style="list-style-type: none"> Keeley says she has at least 10 more sweets than Stacey does. What are all the possible amounts of sweets Keeley and Stacey could have from the pile of sweets below? 

Money

Recognise and know the value of different denominations of coins and notes.

- Write the value of the coins.



= pence



= pence



= pence

- Fill in the blanks.
One has been done for you.

One



=



One



=



- True or False?**

All coins are round.

Explain your answer.

- Find the odd one out.**

20p, 2p, 5p, 30p

- Always, sometimes, never**

Money in notes is worth more than money in coins.

- Tom pays exactly 10 pounds for a maths book.

- If he uses one note to pay, the value of the note is ____.
- If he uses two notes to pay, the value of each note is ____.
- If he uses one note and three coins to pay, the values of the note and coins are ____.

- Tamsin has 3 coins in a bag.
One is silver, one is gold and one is copper.
The copper coin is the biggest.
The silver coin has the most sides.
The gold coin is round.



What coins could Tamsin have?

- Emily has two silver coins. How much money might she have?

Solve one step addition problems, using concrete objects and pictorial representations.

Solve missing number problems: addition

Solve one step subtraction problems, using concrete objects and pictorial representations.

Solve missing number problems: subtraction

- Jenny gives 10p to her brother, she has 7p left. How much money did she have to start with?

Fill in your answer in the number sentence below.

$$\boxed{} - 10\text{p} = 7\text{p}$$

- Here are some items.



Sam buys one train and one yoyo.

How much does he spend altogether?

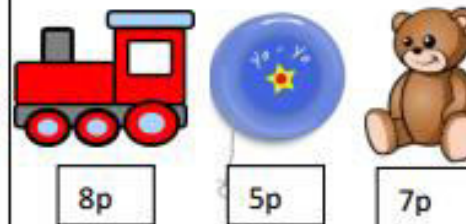
- Tom buys one teddy. How much change will he get from a ten pence coin?



- Convince me that two 5p coins is worth the same as five 2p coins.



- Ella has 15p. Which two items could she buy?

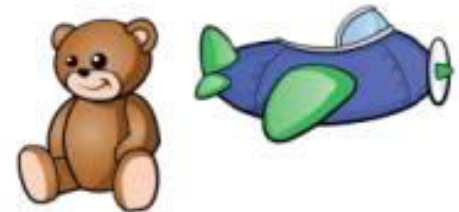


Ella says 'I can buy three toys with 15p.'

Do you agree?

Convince me.

- Maryam buys these two items for 16p.



She pays with this coin.



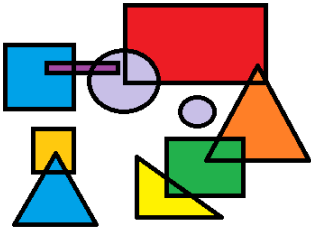
How much change does she get?
Which coins might she be given?

- George has four coins. He has 12p altogether. Which coins does he have?














































































- Using two different coins each time, how many different totals can you make?



Geometry: Shape

National Curriculum Statement	All students		
	Fluency	Reasoning	Problem Solving
<p>Recognise and name common 2D shapes</p> <p>Recognise and name common 3D shapes</p>	<ul style="list-style-type: none"> Use a feely bag, put your hand in the bag, can you find the triangle? Can you find the circle? Can you feel the rectangle and the square? Sort a range of 3D objects (boxes, balls, cans) into groups. Use their shape names to describe the groups you have put them into.  <ul style="list-style-type: none"> On a set of 3D shapes, can you see some 2D shapes? What are the shapes you can see called? 	<ul style="list-style-type: none"> What is the same about a square and rectangle? What is different? Triangle, Square, Circle- which is the odd one out? Explain your answer. Give children a variety of 3D shapes. Ask them 'what's the same and what's different about these shapes?' 	<ul style="list-style-type: none"> Can you name all the shapes you can see? How many of each shape are there? How are the shapes different, how are they the same? Children can make their own shape picture and describe them to others.

Geometry: Shape

National Curriculum Statement	All students																																													
	Fluency	Reasoning	Problem Solving																																											
<p>Describe position, including top, middle, bottom, above, below, left, right, between</p> <p>Describe direction and movement, including whole, half, quarter and three quarter turns</p>	<table border="1"><tr><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td></tr></table> <p>Identify the position of each item. Top, Middle or Bottom? Above or Below?</p> <p>The blue square is in the ____ row.</p> <p>The purple circle is ____ the green square.</p> <p>The black square is in the ____ row ____ the blue triangle.</p>										<table border="1"><tr><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td></tr></table> <p>Sarah chooses a shape from the grid. You can ask her 4 questions to work out which shape she is thinking of. She can only answer ‘Yes’ or ‘No’.</p> <p>Which 4 questions would you ask?</p> <p>Can you explain why?</p> <p>Could you ask a different set of questions?</p> <ul style="list-style-type: none">Decide whether the statements are true or false. Explain your answers. <table border="1"><thead><tr><th>Picture</th><th>Statement</th><th>T or F?</th></tr></thead><tbody><tr><td></td><td>Quarter turn</td><td></td></tr><tr><td></td><td>Half turn</td><td></td></tr><tr><td></td><td>Three quarter turn</td><td></td></tr><tr><td></td><td>Three quarter turn</td><td></td></tr><tr><td></td><td>Quarter turn</td><td></td></tr><tr><td></td><td>Half turn</td><td></td></tr></tbody></table>										Picture	Statement	T or F?		Quarter turn			Half turn			Three quarter turn			Three quarter turn			Quarter turn			Half turn		<ul style="list-style-type: none">Use these clues to colour the four squares. Blue is above green. Red is below yellow. Yellow is to the left of blue. <table border="1"><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table> <ul style="list-style-type: none">Bill built a tower using four different coloured cubes. The red cube was below the green cube. The blue cube was above the yellow cube which was above the green cube. Which cube is on top?Five blocks have been labelled A, B, C, D and E. A is immediately to the right of B. C is to the right of D. B is in between E and D. E is immediately to the left of B. Where is D? <div></div>				
																																														
																																														
																																														
																																														
																																														
																																														
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Measures: Time

National Curriculum Statement

Recognise and use language relating to dates, including days of the week, weeks, months and years.

Fluency




- Fill in the missing blanks:
On _____, I visited the seaside all day.
On _____, we did P.E. at school.
- Can you write down the month and year you were born?
- Here are the days of the week mixed up. Can you put them in the correct order?

Thursday
Tuesday
Saturday
Monday
Friday
Sunday
Wednesday

All students

Reasoning

- Match the picture to the month you think it is showing. Explain why you have made that choice:

	June
	September
	January

- Hannah is describing a month. She says, "I don't like this month because it's always cold and it's darker outside for longer. Sometimes it snows." What month do you think this is? Convince me!
- Look at the calendar below. Kirsty wants to go to the cinema one weekend. List the days she could possibly go. Explain why.

APRIL 2016						
Sun	Mon	Tue	Wed	Thu	Fri	Sat
						1 2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

Problem Solving

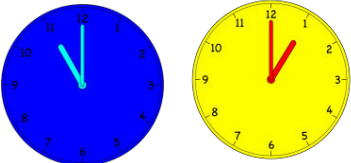
- Below is a list of activities Jonathan did. Can you explain to him which he should spend a day, week and year on and why?

A holiday to Spain
A trip to the zoo
Learning in Year 1

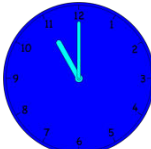


- Robbie is describing different things he did on different days. Can you write a day next to each activity and explain why you chose that day.

Robbie's activity	Day	Reason
At the weekend I like to play football at the park.		
I went to a party for my friend's birthday.		
I learnt how to write a story in English.		

Measures: Time

	National Curriculum Statement	All students		
		Fluency	Reasoning	Problem Solving
	<p>Compare, describe and solve practical problems for time [for example, quicker, slower, earlier, later]</p> <p>Measure and begin to record time (hours, minutes, seconds)</p>	<ul style="list-style-type: none"> Using a stop watch, can you see who can do 10 stars jumps the quickest? Take it in turns to time each other. James took 35 seconds to read a page in a book. A class spent 4 minutes looking at a page in a book. Who was the slowest? Peter is eating his lunch at half past 12. Jane is eating her lunch half an hour later. Tick the clock which shows when Jane eats her lunch. 	<ul style="list-style-type: none"> Holly arrives at school at 8 o'clock. Megan arrives at 9 minutes past 8. Holly says, "I arrived earlier." Do you agree? Explain why. Sarah explains to her class that she woke up for school at 6 o'clock. Her friend said, "I'm confused because I have my tea at that time." <p>Why is Sarah's friend confused?</p> <ul style="list-style-type: none"> True or False? <p>The big hand moves around the clock more quickly than the small hand.</p> <p>Explain your answer.</p>	<ul style="list-style-type: none"> On Saturday, I play football for 15 minutes. On Sunday, I play for longer. Can you write an amount of time I could have played for? Explain how you know it is correct. Mick, Seb and Annie all walk to a football match. Mick takes 8 minutes to walk there. Seb is 3 minutes slower than Mick. Annie is 5 minutes faster than Seb. Who arrives at the football match first? How do you know?

Measures: Time

National Curriculum Statement	All students		
	Fluency	Reasoning	Problem Solving
Measures: Time	<ul style="list-style-type: none">Put the following statements in the correct time order.<div><div>Next week I am going to the seaside</div><div>Yesterday I walked my dog</div><div>Tomorrow I will have pizza</div><div>Today I am going shopping</div></div>Fill in the missing blanks for instructions on how to do work. Use next, first and after that.<div><div>_____I open my book</div><div>_____I write the date</div><div>_____I do my work</div></div>Fill in the gaps in the sentence using before and after.<div><div>I have my bath_____I go to bed.</div><div>I go to school_____I have had my breakfast.</div></div>	<ul style="list-style-type: none">Look at the clocks below. Can you put them in order and explain why you have chosen that order?<div><div></div><div></div><div></div></div>True or false?<div><div>We go to bed before we brush our teeth?</div><div>Explain why.</div></div>	<ul style="list-style-type: none">Use pictures of different activities e.g. waking up, eating dinner, working at school.<div><div>Can you order them in a sensible way and explain why you have done this?</div><div>Make sure you use at least three of the words below</div><div><div><div>before</div><div>after</div><div>next</div><div>first</div></div></div></div>Can you write a diary entry for your day at school yesterday? Include at least 3 prompt words e.g. first, next...

Measurement

Compare, describe and solve practical problems for capacity and volume (e.g. full/empty, more than, less than, half, quarter)

- Which is heavier? Use a balance to help you investigate the items below.

- A ruler and a shoe.
- A pencil and a book
- An apple and a bottle of water
- A carrot and a banana

- Draw lines to match the pictures to the correct words.



Empty



Full



Half full

Use the words more or less to complete the sentence.



has _____ than



- Always, sometimes, never.**

The tallest glass holds the most water.

- Hassan says, 'A bigger object is always heavier than a smaller object.'

Do you agree?

Convince me.

- Use balancing scales as shown below.



Place 4 cubes on one side and 2 cubes on the other, which is heavier?

___ cubes are heavier than ___ cubes.

Can you balance the scales?
How many more cubes do you need to add on or take away?

- Tilly, Ben and Junaid are describing their glasses of water.

Tilly

My glass has more water than Ben's glass.

My glass is half full.

Ben

Junaid

My glass has less water than Tilly's.

Can you fill in how much water could be in each of the children's glasses?



Tilly



Ben



Junaid

Could you label the glasses using the vocabulary full, empty, half full or quarter full?

Measurement

Measure and begin to record mass/weight

Measure and begin to record capacity and volume

- Choose four objects from around the classroom.
Which is heaviest? Which is the lightest?
What could you use to find out?
Can you find two objects that weigh the same?

- Choose five different containers.
How could you find out which container holds the most water?

Fill up the containers using a cup.
How many cups of water do you need to use to fill each container?

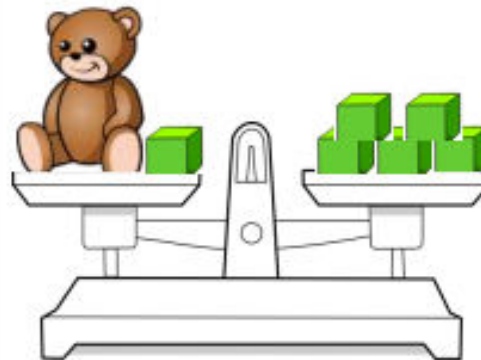
- Follow the recipe below to make pancakes.

1 large free-range egg
1 cup of self-raising flour
1 cup of milk



Use the same cup for the flour and the milk.
How could we make more pancakes?
How could we make less?

- Look at the balance scales.



How many cubes does the teddy bear weigh the same as?

- Look at the balance scales.

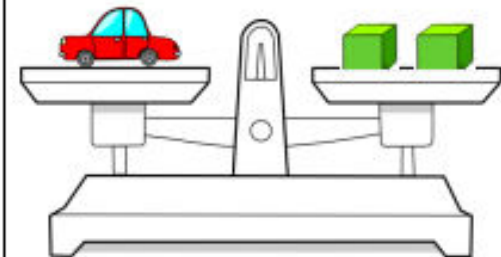
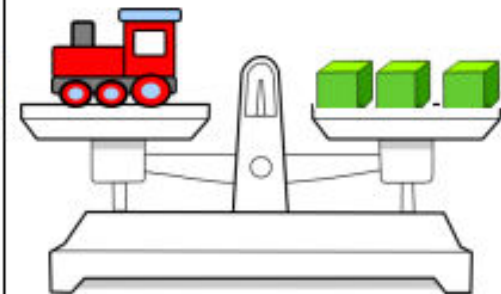


Which is heavier, the doll or the car?

If you added another car to the scales, what might happen?




- Look at the balance scales below.

Which of the statements is true?


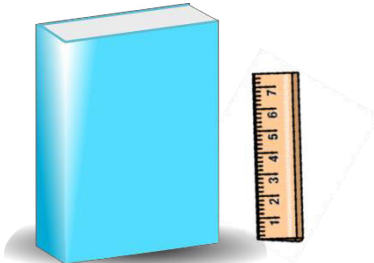


- The train is heavier than the car.
- The car is heavier than the train.
- The train is lighter than the car.
- The car is lighter than the train.
- The car and the train weight the same amount.



Measures

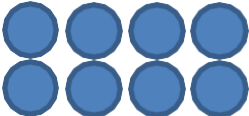
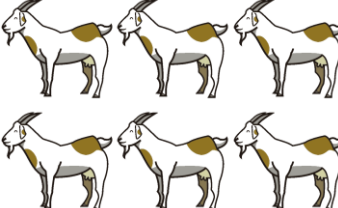
National Curriculum Statement	All students								
	Fluency	Reasoning	Problem Solving						
<div>Compare, describe and solve practical problems for lengths and heights [for example, long/short, longer/shorter, tall/short, double/half].</div>	<div><ul style="list-style-type: none">Complete the sentences based on the picture below using the flashcards.<div><table><tr><td>tall</td><td>shortest</td><td>tallest</td></tr><tr><td>taller</td><td>short</td><td>shorter</td></tr></table><div></div><p>The black tower is tall. _____ than the red tower.</p><p>The blue tower is _____. It is shorter than the red tower.</p><p>The black tower is the _____. The blue tower is the _____.</p><ul style="list-style-type: none">Circle the longest line.<div><div></div><div></div><div></div></div><ul style="list-style-type: none">Sam makes a tower of 4. Ryan makes a tower of 8. Ryan's tower is _____ Sam's tower.</div></div>	tall	shortest	tallest	taller	short	shorter	<div><ul style="list-style-type: none">Rick eats half a Mars bar and says, "My chocolate bar is longer now I have eaten some of it." Do you agree? Explain why.Pick two objects. Before you measure them, can you guess which is longer? How do you know?Which piece of string is longer? Explain your thinking.<div></div></div>	<div><ul style="list-style-type: none">Look at the picture below. How many ways can you compare the different objects? Make a list.<div></div><ul style="list-style-type: none">Pick up your book. Find 5 items in the room that are shorter than it and 5 items that are longer. Record them in sentences.Helen has a mystery object. She says, "It is shorter than my work table. It is taller than my exercise book." What could Helen's object be?</div>
	tall	shortest	tallest						
taller	short	shorter							

Measures


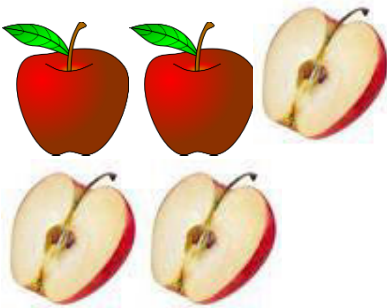
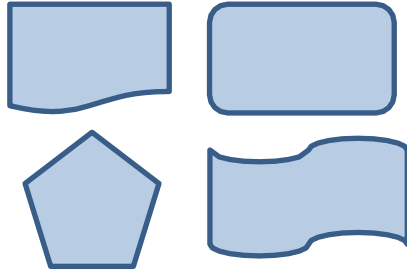

National Curriculum Statement	All students		
	Fluency	Reasoning	Problem Solving
<p>Measure and begin to record lengths and heights.</p>	<ul style="list-style-type: none"> Find an object: <ol style="list-style-type: none"> Longer than 10cm Shorter than 7cm Double the length of your pencil Estimate the length of your exercise book then measure it. Were you close? Use a ruler to measure how long these lines are. 	<ul style="list-style-type: none"> Sal wants to measure the length of his house. He suggests using his feet to do this. Do you think this is the best way? Explain why. I measure a pencil at 9cm. My friend measures another at 7cm. Without looking at a ruler, which is bigger? How do you know? True or false? Everything is measured in cm. Prove it. 	<ul style="list-style-type: none"> Here is a ruler. Here is a book longer than the ruler. Find the length of the book.  <ul style="list-style-type: none"> Gather 6 objects from around the classroom. Estimate the length first then measure them. Work out the difference between your estimate and the actual measurement.

Multiplication and Division



National Curriculum Statement	All students																											
	Fluency	Reasoning	Problem Solving																									
<div>Count to 100 in multiples of 10</div> <div>Count to 100 in multiples of 5</div> <div>Count to 100 in multiples of 2</div>	<ul style="list-style-type: none">What are the first 5 multiples of 10?Work out 6×5Find the missing number: <div>$2 \times \text{[]} = 18$</div><div>$\text{[]} \times 5 = 35$</div><div>$90 = 10 \times \text{[]}$</div>	<ul style="list-style-type: none">Amrit is counting in twos. She says the number 11. Explain the mistake she has made.Balraj says it's easy to know if a number is a multiple of 5. Can you explain why?Danielle says, "I know 50 is in the ten times table so I know it is also in the five times table." Is she correct? Explain why.	<ul style="list-style-type: none">Are there any numbers in the 2 times table that are also in the 5 and 10 times table? Have you found them all? Have you used a strategy to find them all?Which is quicker: counting to 30 in 2s or 5s? Would counting to 30 in 10s be quicker or slower?A rabbit is hopping to a carrot. It starts on 5 and finishes on 40. The rabbit only hops on squares 5 more than the last number it landed on. Can you find a path for the rabbit to get to the carrot? <div><div></div><table><tr><td>5</td><td>10</td><td>25</td><td>30</td><td>35</td></tr><tr><td>10</td><td>15</td><td>20</td><td>35</td><td>40</td></tr><tr><td>15</td><td>20</td><td>25</td><td>30</td><td>35</td></tr><tr><td>10</td><td>15</td><td>20</td><td>35</td><td>40</td></tr><tr><td>5</td><td>10</td><td>25</td><td>30</td><td>35</td></tr></table><div></div></div>	5	10	25	30	35	10	15	20	35	40	15	20	25	30	35	10	15	20	35	40	5	10	25	30	35
5	10	25	30	35																								
10	15	20	35	40																								
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5	10	25	30	35																								

	National Curriculum Statement	All students		
		Fluency	Reasoning	Problem Solving
Multiplication and Division	<p>Solve one step problems involving multiplication, by calculating the answer using concrete objects, pictorial representations and arrays with support</p> <p>Solve one step problems involving division, by calculating the answer using concrete objects, pictorial representations and arrays with support</p>	<ul style="list-style-type: none"> Use counters: <ol style="list-style-type: none"> to double 3 to halve 8 Harry has 5 friends. Each friend gives him 3 sweets. How many sweets does he have altogether? Kayleigh has 30 flowers to share between 3 vases equally. How many flowers can be put in each vase? 	<ul style="list-style-type: none"> Saskia says, "You can double any number but you can only halve some numbers." Can you prove this using counters or explain it to me? Here is an array. <div style="text-align: center;">  </div> <p>Mandy says, "I can find four facts from this." Do you agree? Convince me!</p> True or false? $2 + 2 + 2 + 2 + 2 =$ 2×5 Explain why. 	<ul style="list-style-type: none"> 6 goats have twins. How many goats are born? <div style="text-align: center;">  </div> How many multiplication and division facts can you make using 12 cubes? Dan has 15 sweets to give to his friends. How many friends can he give his sweets to so they have the same amount and he has none left over? Can he do this in more than one way?

Fractions

	National Curriculum Statement	All students		
		Fluency	Reasoning	Problem Solving
	<p>Recognise and name a half as one of two equal parts of an object or shape</p> <p>Find a half as one of two equal parts of an object or shape</p> <p>Recognise and name a half as one of two equal parts of a quantity</p> <p>Find a half as one of two equal parts of a quantity</p>	<ul style="list-style-type: none"> Shade half of each object.  Find $\frac{1}{2}$ of 8 How many halves of the apples below have been eaten?  	<ul style="list-style-type: none"> Arvind has a shape that is split into 4 equal parts. He shades in 2 parts and says "I have shaded half of my shape." Do you agree? Explain why. True or false? I use the 2 times table to find a half of an amount. Convince me! Matthew is finding halves. He says, "It is hard to find half of an odd number." Do you agree? Explain why. 	<ul style="list-style-type: none"> Can you split each of these shapes into two equal halves? Explain why for each shape.  Here is a tower made from cubes.  Which tower is showing double this tower? Explain why using the word 'half'. <ul style="list-style-type: none"> A tower of 7 cubes. A tower of 8 cubes. A tower of 6 cubes.

Fractions

National Curriculum Statement	All students										
	Fluency	Reasoning	Problem Solving								
<p>Recognise and name a quarter as one of four equal parts of an object or shape</p> <p>Find a quarter as one of four equal parts of an object or shape</p> <p>Recognise and name a quarter as one of four equal parts of a quantity</p> <p>Find a quarter as one of four equal parts of a quantity</p>	<ul style="list-style-type: none">Shade a quarter of each shape.<div></div>Find<ul style="list-style-type: none">$\frac{1}{4}$ of 12 =$\frac{1}{4}$ of 16 =How many quarters are in 2 whole apples?	<ul style="list-style-type: none">Sophie has split a square into 2 equal parts. She says, “I can also find one quarter of this square.” Do you agree? Explain why.True or false? If I can find half of an amount, this helps me to find a quarter of an amount.Sometimes, always, never. 4 quarters are always made up of 4 equal parts.	<ul style="list-style-type: none">Draw a circle, a rectangle and a square. Each shape represents one whole. Can you make these into quarters? Are they equal?Use a bag of skittles to start with different whole numbers. How many different quarter amounts can you find? Record them in a table.<table><tr><td>Whole number</td><td>$\frac{1}{4}$</td></tr><tr><td></td><td></td></tr><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table>In a fruit bowl, – $\frac{1}{4}$ of the fruit are apples, $\frac{1}{4}$ are oranges and there are 4 bananas, 3 pears and 3 plums.<div></div><p>How many apples are there? Are there more or less oranges?</p>	Whole number	$\frac{1}{4}$						
Whole number	$\frac{1}{4}$										

Four Operations

Represent and use number bonds and related subtraction facts to 20, including 0.

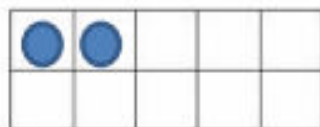
- Fill in the boxes:

$$12 + \square = 20 \quad 20 - \square = 3$$

$$15 + \square = 20 \quad 20 - \square = 9$$

$$\square + 14 = 20 \quad 20 - 0 = \square$$

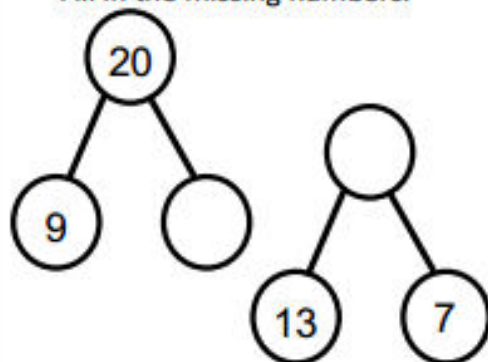
- Look at the ten frames below. Can you write four number sentences to describe them?



- Place three more counters on the ten frames.

Can you write four new number sentences?

- Fill in the missing numbers.



- Ted says 'If I know $13 + 7 = 20$, I can work out $20 - 7$ really easily.'

Is Ted right?

Find the answer and explain how you know.

- Georgia is using base 10 to add to 20.

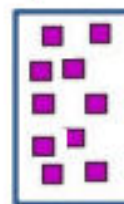
She starts with this.



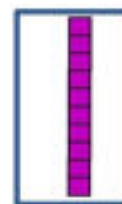
Sophie and Max show her what they think she should add to her base 10 to make 20.

Who is correct?

Explain how you know.

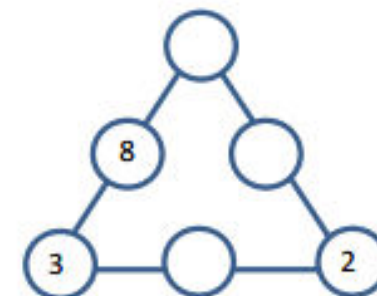
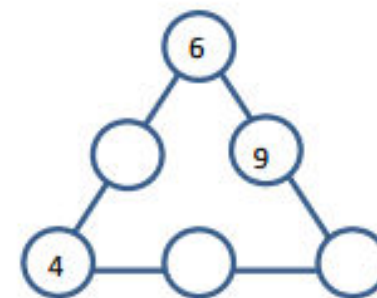


Sophie



Max

- Fill in the  so the sum of the numbers on each line is 20



- Here is a magic square. Each row and column adds up to 20. Fill in the missing numbers.

12		5
	7	
		4

Four operations

Add one-digit and two-digit numbers to 20, including 0.

Subtract one-digit and two-digit numbers to 20, including 0.

- Use Base 10 to complete the number sentences.

$$5 + 12 =$$

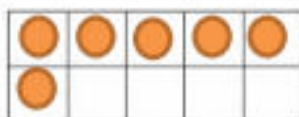
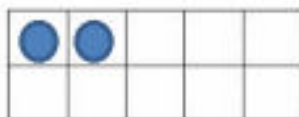
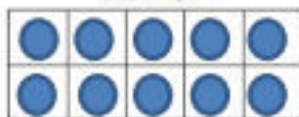
$$12 - 5 =$$

$$7 + \underline{\quad} = 19$$

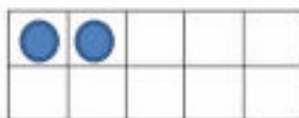
$$13 - \underline{\quad} = 8$$

- Use the ten frames to complete the number sentences.

$$12 + 6 =$$



$$12 - 6 =$$



- Fill in the missing numbers.

$$\square + 5 = 12 + 6$$

$$7 + 11 = 20 - \square$$

$$6 + 5 = \square + 11$$

- Always, sometimes, never.

Two one digit odd numbers add up to make an even number.

Eg $3 + 5 = 8$

- Sam says 'When you add 0 to a number, the number doesn't change.'

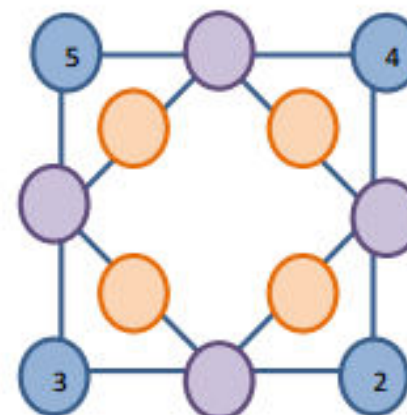
Do you agree?

Use Base 10, a ten frame or a number line to help you explain.

- Here is a number puzzle.

The numbers in the blue circles add together to make the number in the purple circle between them.

The numbers in the purple circles add together to make the number in the orange circle between them.



Can you fill in the purple and orange circles?

- Sita and Kim have 15 sweets between them. Here are Kim's sweets.



How many sweets does Sita have?

Four operations

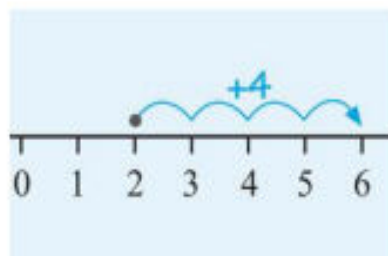
Read, write and interpret mathematical statements involving addition (+) subtraction (-) and equals (=) signs.

- Fill the boxes using +, - or =

$$6 \square 3 \square 9$$

$$6 \square 3 \square 3$$

- Look at the diagram and write a number sentence to describe it.



- Hannah has 12 balloons. Six of them pop. How many balloons does Hannah have left?



Write your answer as a full number sentence.

- Use <, > or = to fill the box.

$$15 + 2 \square 15 - 2$$

$$19 - 5 \square 11 + 3$$

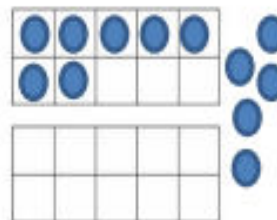
$$17 - 4 \square 17 - 3$$

$$2 + 16 \square 12 + 6$$

- How many number sentences could you write to describe the number line below?



- Jasmine is using a ten frame to find the answer to a question. What could the question be?



- Here are some number cards.



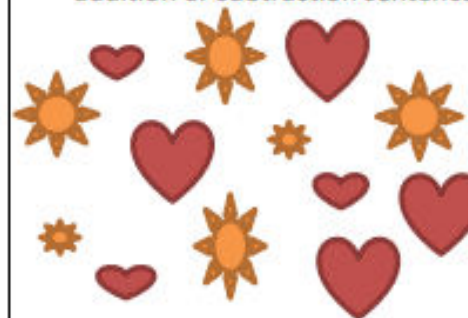
Use six of the number cards to fill the boxes below.

You can only use each card once.

$$\square + \square = \square + \square = \square + \square$$

Can you fill the boxes in more than one way?

- Look at the picture and write addition or subtraction sentences.



- By size
- By shape

Four operations

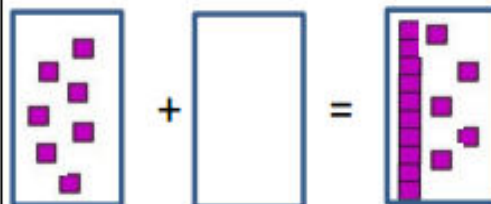
Solve one step addition problems, using concrete objects and pictorial representations.

Solve missing number problems: addition

Solve one step subtraction problems, using concrete objects and pictorial representations.

Solve missing number problems: subtraction

- Use Base 10 to help you find the missing number.



- David has 6 cubes. George has 3 more cubes than David. How many cubes do they have altogether? Use the ten frames to help you find your answer.



- 6  are in a tree.
Another 5  arrive.
How many  are in the tree now?

- Do you need to use addition or subtraction to solve the one step problems? Explain how you know and solve each one.

12 sweets are in a bag. Gina eats 5 of them. How many are left?

There are 5 people on a bus. 4 more people get on. How many are there now?

There are 8 people sitting at one table and 5 people sitting at another. How many people are there altogether?

Sally has 15 grapes. She eats 7 of them. How many grapes does she have left?

- Jenny is solving a word problem. She has written the number sentence $13 + 5 = 18$. What could the word problem be?

- Find the total.

$$\square + \square = 10$$

$$\bigcirc + \bigcirc = 12$$

$$\square + \bigcirc =$$

- Here are some number cards.



Hassan and Sally use the cards to make numbers between 10 and 20.

Hassan makes the biggest number possible.
Sally makes the smallest number possible.

What is the difference between their numbers?

Four operations

Count to 100 in
multiples of 10

Count to 100 in
multiples of 5

Count to 100 in
multiples of 2

- Draw the next three pictures for each pattern and write the numbers under each picture.



5 10 15



2 4 6



10 20 30

- Convince me that the number 10 can be in more than one sequence of multiples.

- Hassan is counting in 5's.

He says

'I will never say a number that ends in 1'

Is he correct?

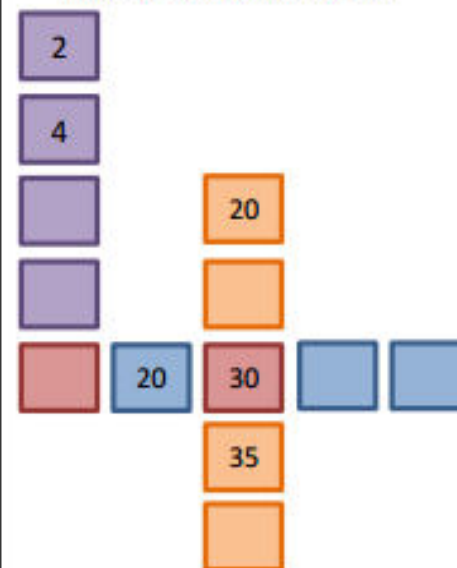
Explain your answer.

- Always, sometimes, never**

Multiples of 5 are odd numbers.

Multiples of 2 are even numbers.

- Fill in the missing numbers.




- Fill in the sentences below.
One has been done for you.

 = 5

   3 fives make 15

     _____

    _____

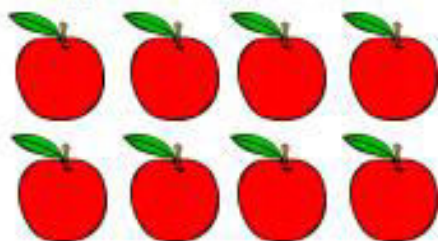
If the  = 2, what would your sentences be?

Four operations

Solve one step problems involving multiplication, by calculating the answer using concrete objects, pictorial representations and arrays with support

Solve one step problems involving division, by calculating the answer using concrete objects, pictorial representations and arrays with support

- Emily has 8 apples. She shares them with her friend. How many apples do they get each?



- Hamza buys 4 bags of sweets with 5 sweets in each bag. How many sweets does he have altogether?



- Sally goes on holiday and eats 2 ice creams every day. She eats 10 ice creams altogether, how many days was she on holiday for?

- Saira wants to share the toys below with her sister. How many toys will they get each? Can they share them equally? Explain why.

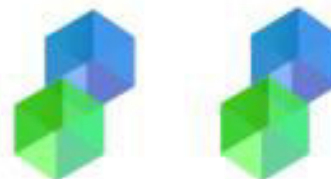


- Always, sometimes, never**

Groups of two objects make an even number.

Eg 2 groups of 2 makes 4

Use cubes to prove your answer.



- Jasmine has 20 biscuits. She wants to divide them into equal groups. How many different ways could Jasmine divide her biscuits?



What is the smallest number of equal groups she can make?

What is the largest number of equal groups she can make?

- Five friends each have an odd number of grapes. They have more than 20 but less than 30 altogether. How many grapes do they each? Use cubes or pictures to help you solve the problem.