

**By the end of Year 2, most children should be able to...**

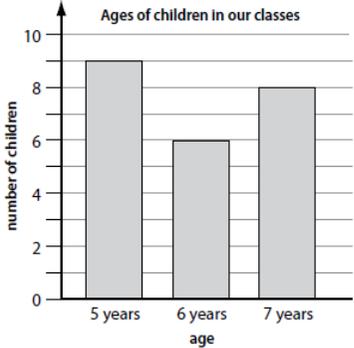
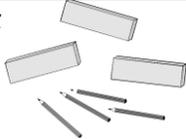
- Count up to 100 objects by grouping them and counting in tens, fives or twos; explain what each digit in a two-digit number represents, including numbers where 0 is a place holder; partition two-digit numbers in different ways, including into multiples of 10 and 1
- Partition 2 and some 3 digit numbers in different ways and use this to help solve problems.
- Derive and recall all addition and subtraction facts for each number to at least 10, all pairs with totals to 20 and all pairs of multiples of 10 with totals up to 100
- Add or subtract mentally a one-digit number or a multiple of 10 to or from any two digit number; use practical and informal written methods to add and subtract two-digit numbers
- Derive and recall facts for the 2,3 5 and 10 multiplication tables.
- Use the symbols +, -, x, ÷ and = to record and interpret number sentences involving all four operations; calculate the value of an unknown in a number sentence
- (e.g  $\square \div 2 = 6$ ,  $30 - \square = 24$ )
- To use an Empty numerline (ENL) to add and subtract two and three digit numbers
- Find one half, one quarter, and three quarters of shapes and a set of objects.
- Visualise common 2-D shapes and 3-D solids; identify shapes from pictures of them in different positions and orientations; sort, make and describe shapes referring to their properties
- Use units of time (seconds, minutes, hours, days) and know the relationships between them; read the time to the quarter hour; identify time intervals, including those that cross the hour
- Use lists, tables and diagrams to sort objects; explain choices using appropriate language, including 'not'



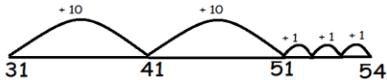
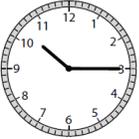
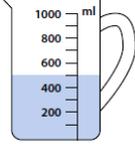
# Maths Targets

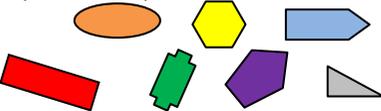
## Year Two

**A booklet for Parents**

<i>I can statements</i>	Examples of questions I can answer	<i>I can statements</i>	Examples of questions I can answer								
<i>I can read information from tables and graphs and use this to answer questions</i>	<p>Class 2 made a graph.</p> <p>How many children are five years old?</p> <p>What is the total number of children in the class?</p>  <table border="1" data-bbox="421 403 775 751"> <caption>Ages of children in our classes</caption> <thead> <tr> <th>Age</th> <th>Number of children</th> </tr> </thead> <tbody> <tr> <td>5 years</td> <td>9</td> </tr> <tr> <td>6 years</td> <td>6</td> </tr> <tr> <td>7 years</td> <td>8</td> </tr> </tbody> </table>	Age	Number of children	5 years	9	6 years	6	7 years	8	<p><i>I can count forwards and backwards in equal steps and describe any patterns in the sequence</i></p> <p><i>I can explain how to put a set of two-digit numbers in order</i></p>	<p>Here are some numbers in a sequence: ..., 7, 9, 11, 13...</p> <p>Will the following numbers also be in the sequence: 3, 16, 21, 58? Explain how you know.</p> <p>Write the missing numbers in this sequence.</p> <p>53 48 43 38 <input type="text"/> <input type="text"/> 23 18</p> <p>Explain how you identified them.</p> <p>If you write these numbers in order, smallest first, which number comes third? 37, 13, 73, 33, 3</p> <p>Write the same digit in each box to make the number sentence true: <input type="text"/>1 &gt; 6<input type="text"/></p> <p>Now do the same for this number sentence: <input type="text"/>1 &lt; 6<input type="text"/></p>
Age	Number of children										
5 years	9										
6 years	6										
7 years	8										
<i>I can suggest what information to collect and how to do it in order to solve a problem</i>	<p>The school cook wants to find a new meal that children would like to eat.</p> <p>How could you help her to choose a meal to cook that would be popular?</p>	<p><i>I can partition numbers to 100</i></p> <p><i>I can round any two-digit number to the nearest 10 and explain how I did it</i></p>	<p>There are 10 pencils in each box and four more pencils. How many pencils are there altogether?</p>  <p>Write a number in the box to make the statement true: <math>10 + 15 = \square + 5</math></p> <p>Paul wants to round 26 to the nearest 10. He is not sure whether the answer is 20 or 30. What would you say to help him decide?</p> <p>Place these numbers on the number line: 53, 66, 58.</p>  <p>Explain how this helps you round each number to the nearest 10</p>								

<p><b><i>I can use mathematical words to explain how I solve addition and subtraction problems</i></b></p>	<p>Read this problem then explain how you would work it out:</p> <p>Demi has a 20p coin and a 10p coin. How much more money does she need to buy a comic that costs 50p? Write a number sentence to show your answer.</p> <p>Explain how to find the missing number: <math>\square - 8 = 25</math></p>	<p><b><i>I can sort objects and explain how I sorted them</i></b></p>	<p>Choose your own headings to sort a set of 0 to 9 cards. Explain how you sorted them.</p> <p>Look at this Carroll diagram. Where should 15 go?</p> <table border="1" data-bbox="1637 336 1995 576"> <thead> <tr> <th></th> <th>1-digit numbers</th> <th>not 1-digit numbers</th> </tr> </thead> <tbody> <tr> <th>even</th> <td>2, 4, 6, 8</td> <td>106, 10, 36, 78, 12</td> </tr> <tr> <th>not even</th> <td>3, 5, 7, 1, 9</td> <td>11, 93</td> </tr> </tbody> </table>		1-digit numbers	not 1-digit numbers	even	2, 4, 6, 8	106, 10, 36, 78, 12	not even	3, 5, 7, 1, 9	11, 93
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<p><b><i>I can explain how I know whether to use addition or subtraction to solve a problem</i></b></p>	<p>Say whether you would use addition or subtraction to solve each of these problems and explain how you know:</p> <p>Jude is five years older than Mark. Mark is seven years old. How old is Jude?</p> <p>There are some yellow and some orange flowers in a vase. There are 14 flowers altogether. Six are yellow. How many are orange?</p>	<p><b><i>I can organise information into lists and tables</i></b></p>	<p>Write the numbers from 1-30 into a table to show which are multiples of 5. What do you notice?</p>									
<p><b><i>I can record how I solve addition and subtraction problems</i></b></p>	<p>Use equipment, drawings or jottings to solve this problem:</p> <p>Samir is running a 50-metre potato race. He drops his potato after 18 metres. How much further does he have to go?</p>	<p><b><i>I can create a pictogram or block graph to show information</i></b></p>	<p>Find out how many girls and how many boys are in your class. Show this information in a table and in a pictogram.</p> <div style="display: flex; justify-content: space-around; align-items: flex-start;"> <div data-bbox="1570 954 1805 1161"> </div> <div data-bbox="1839 1145 1872 1169"> <p>or</p> </div> <div data-bbox="1906 963 2085 1150"> </div> </div>									
<p><b><i>I can solve subtraction problems by taking away or by counting on</i></b></p>	<p>Explain your method for each of these problems:</p> <p>Jason took 40p to the school fete. He has spent 15p. How much money does he have left?</p> <p>Peter is 12 and Casey is nine. How much older is Peter than Casey?</p>											

<p><b><i>I can solve problems by measuring</i></b></p>	<p>If I programme my floor turtle to go forward three metres is there enough room in the classroom? How could you measure to find out?</p>	<p><b><i>I can use an Empty numberline to add and subtract two digit numbers</i></b></p>	<p>To develop the use of the empty numberline for adding and subtracting two digit numbers. To practise counting in 10's and 1's forwards and backwards</p> <p><math>31 + 23 =</math></p> 
<p><b><i>I can use clocks and time lines to tell the time and order events</i></b></p>	 <p>What time does this clock show?</p> <p>Draw a clock showing the time half an hour later.</p> <p>Show your school day on this time line.</p> <p>When do you leave home, have breaks, go back home, etc.?</p>	<p><b><i>I can add or subtract a one-digit number to or from a two-digit number</i></b></p>	<p>Connor drew this number line. What calculation did he work out?</p>  <p>Draw your own number line to show how you would work out <math>37 + 8</math>.</p>
<p><b><i>I can read a scale to take a measurement</i></b></p>	<p>How long is this line? Now draw a line 2 cm longer than this one.</p>  <p>How much water is in this measuring jug?</p>	<p><b><i>I can add or subtract a multiple of 10 to or from a two-digit number</i></b></p> <p><b><i>I can subtract by counting back or by finding the difference</i></b></p>	<p>What number is 30 less than 64? Explain your method.</p> <p>What is the missing number in the number sentence below? How do you know?</p> <p><math>57 + \square = 97</math></p> <p>Work out these two calculations: <math>32 - 5</math> and <math>32 - 29</math></p> <p>Explain how you did each subtraction. Did you choose the same method? If not, why not?</p>
<p><b><i>I can make a sensible estimate for a measurement</i></b></p>	<p>Find an object in the classroom that you think is about 10 cm long.</p> <p>About how heavy do you think your pencil case is?</p>	<p><b><i>I can add and subtract two digit numbers choosing an efficient method. To consistently show how to work out maths questions.</i></b></p>	<p>What number is 27 more than 45? What number is 19 more than 45? Explain how you worked out these two calculations</p> <p><math>72 - 5</math>   <math>72 - 68</math>   <math>70 - 3</math>   <math>82 - 15</math>   <math>32 - 28</math>   <math>70 - 66</math>   Did you use the same method for each calculation?</p>

<p><b><i>I can choose how to solve a problem and explain my method</i></b></p>	<p>Megan and Jack are growing beans. Megan's plant is 25 cm tall. Jack's is 38 cm tall. How much taller is Jack's plant than Megan's? Explain how you worked this out. Jess has saved 62p. She spends 5p. How much money does she have left?</p>	<p><b><i>I can recognise and name common 2-D and 3-D shapes</i></b></p>	<p>Identify the shapes that are pentagons. Explain how you know.</p> 
<p><b><i>I can say the subtraction that matches an addition sentence and the other way round</i></b></p>	<p>Place the numbers 6, 15 and 9 into these number sentences: <math>\square + \square = \square</math>; <math>\square - \square = \square</math> Find as many addition and subtraction sentences as you can that use these numbers: 26, 18, 8, 10, 16, 34</p>	<p><b><i>I can describe shapes, using mathematical words</i></b></p>	<p>Pick up and look carefully at these three shapes.</p>  <p>Do they all have straight edges and flat faces? What else is the same about them? What is different? Look at this picture. Don't let your partner see it. Using the names of shapes, tell your partner how to draw it.</p> 
<p><b><i>I can record my working for an addition or subtraction problem</i></b></p>	<p>Work out the difference between the number of boys in your class and the number of girls. Record how you solved the problem so that someone else could understand what you did.</p>	<p><b><i>I can choose a suitable unit of measure</i></b></p>	<p>Suggest sensible units you might use to measure: the height of your table; how much water is in a cup; the weight of my reading book; how long it takes me to wash my hands.</p>
<p><b><i>I can find half or quarter of a shape or a group of objects</i></b></p>	<p>Make lines on a circular paper plate to form quarters. Place 12 counters onto the plate so that there are the same number of counters on each quarter. Explain how you did this.</p>	<p><b><i>I can choose a sensible measuring instrument</i></b></p>	<p>Choose a piece of equipment to help you measure: the weight of your shoe; how long the classroom is; how long this lesson lasts; how much water a cup holds.</p> 

