



# What I Can Do in Mathematics




# What I Can Do My Own Mathematics

Name:.....

My Mental Mathematics		
My I can statements	Examples of questions I can answer	My working and answers
<i>I can use mental calculation strategies for addition, subtraction, multiplication and division.</i>	What number is 199 more than 428? What is the difference between 1999 and 4003? One orange costs 15p. How much would five oranges cost? 4 pineapples cost £3.40. Calculate the cost of 1 pineapple.	
<i>I can use mental methods for calculations that involve decimals.</i>	Multiply nought point seven by nine. Subtract one point nine from two point seven. Find the total of 0.2, 0.4 and 0.6. What is half of three point six?	
<i>I can record my working for mental methods that involve several steps.</i>	A bottle holds 1 litre of lemonade. Rachel fills 5 glasses with lemonade. She puts 150 millilitres in each glass. How much lemonade is left in the bottle?	
<i>I can choose when to use mental methods, when to use written methods and when to use a calculator.</i>	Would you use a mental, written or calculator method to solve each of these? Explain your choice. $23.5 \times \square = 176.25$ How many cartons of juice costing 30p each can I buy with £2? What is the total cost if I buy food costing £3.86 and £8.57?	

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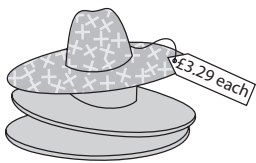
Name:.....

My Understanding of Numbers		
My I can statements	Examples of questions I can answer	My working and answers
<i>I understand what each digit in a large number or a decimal number is worth and can explain how I know.</i>	What is the value of the 3 in the number 235 107? Suggest a number between 3.4 and 3.5 How many tenths could be made altogether from 8.4?	
<i>I can find a missing number in a decimal sequence</i>	Find the missing number on this number line: 	
<i>I can explain how I order a set of decimal numbers.</i>	Put the correct symbol, < or >, in each box: 3.03 <input type="text"/> 3.3      0.37 <input type="text"/> 0.327 Order these numbers: 0.27 0.207 0.027 2.07 2.7	
<i>I can round the numbers in a calculation to find an approximate answer.</i>	What is 3 528 rounded to the nearest ten/hundred/thousand? I buy 6 books that cost £4.99 each. How much will I pay to the nearest pound? How do you know?	
<i>I can describe each step I do to complete a decimal calculation or problem.</i>	Explain how you know which two of these numbers total 0.12: 0.1 0.5 0.05 0.7 0.07 0.2 Explain how you find the missing number: 11.07 + <input type="text"/> = 18.45	
<i>I can multiply or divide a number by 10/100/1000 and explain how I know the answer.</i>	How many hundreds are there in 2400? Write what the missing digits could be: <input type="text"/> <input type="text"/> <input type="text"/> ÷ 10 = 3 <input type="text"/>	
<i>I can use number facts to give some linked decimal facts.</i>	7 x 8 = 56 What is 0.07 x 8? Give some other decimal facts that are linked to this multiplication fact. What number multiplied by 8 equals 4.8?	

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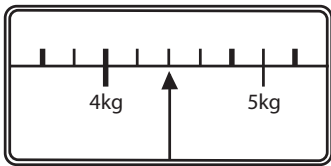
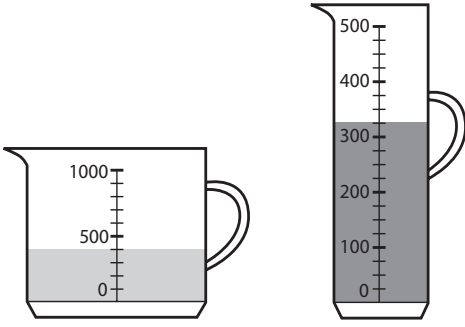
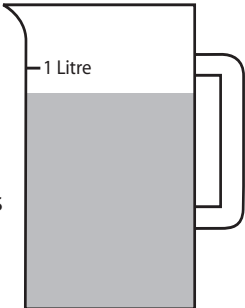
Name:.....

My Problem Solving using Money and Time																																																			
My I can statements	Examples of questions I can answer	My working and answers																																																	
<i>I can solve problems that involve time, recording my calculation methods clearly.</i>	<p>These are the start and finish times on a video recorder:  <b>START 14:45 FINISH 17:25</b></p> <p>For how long was the video recording?</p>																																																		
<i>I can read a timetable or calendar in order to solve a problem.</i>	<p style="text-align: center;"><b>August 1998</b></p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th>Sun</th> <th>Mon</th> <th>Tues</th> <th>Wed</th> <th>Thur</th> <th>Fri</th> <th>Sat</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>1</td> </tr> <tr> <td>2</td> <td>3</td> <td>4</td> <td>5</td> <td>6</td> <td>7</td> <td>8</td> </tr> <tr> <td>9</td> <td>10</td> <td>11</td> <td>12</td> <td>13</td> <td>14</td> <td>15</td> </tr> <tr> <td>16</td> <td>17</td> <td>18</td> <td>19</td> <td>20</td> <td>21</td> <td>22</td> </tr> <tr> <td>23</td> <td>24</td> <td>25</td> <td>26</td> <td>27</td> <td>28</td> <td>29</td> </tr> <tr> <td>30</td> <td>31</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table> <p>Simon's birthday is on August 20th. In 1998 he had a party on the Sunday after his birthday.            What was the date of his party?</p> <p>Tina's birthday is on September 9th.            On what day of the week was her birthday in 1998?</p>	Sun	Mon	Tues	Wed	Thur	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	31						
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<i>I can solve problems that involve money, recording my working for each step.</i>	<p>A packet of crisps costs 32p. Josh buys 3 packets.            How much change does he get from £1?</p> <div style="display: flex; align-items: center;">  <div style="margin-left: 20px;"> <p>Ryan buys sunglasses for £4.69 and a sun hat.            How much change does he get from £10?</p> </div> </div>																																																		
<i>I can use a calculator effectively to solve money problems.</i>	<p>How much change will I get from £10 if I buy groceries costing £2.29, £1.42, 76p and £3.83?</p> <p>A pencil costs 48p. Jake works out the cost of five pencils by entering <b>48 x 5</b> into a calculator.            The calculator display says 2.4            What answer should Jake give?</p>																																																		

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My Skills in Reading Scales		
My I can statements	Examples of questions I can answer	My working and answers
<p><i>I can work out the size of each interval on a scale and check using counting.</i></p>	<p>What is one interval worth on this scale? How do you know?</p>  <p>This scale shows the weight of Fred's cat. How much does Fred's cat weigh?</p>	
<p><i>I can work out the value of any marked point on a scale.</i></p>	<p>Which jug contains more water, A or B? How much more does it contain? Explain how you worked it out.</p>  <p>Jug A                      Jug B</p>	
<p><i>I can estimate the value of a point that falls between two marks on a scale.</i></p>	<p>Sophie poured some water out of a litre jug. Look how much is left in the jug. Estimate how many millilitres of water are left.</p> 	
<p><i>I can read a scale to solve problems involving length, weight and capacity.</i></p>	<p>Use one apple to work out approximately how many apples you would get in a 1kg bag.</p>	

# What I Can Do

## My Own Mathematics

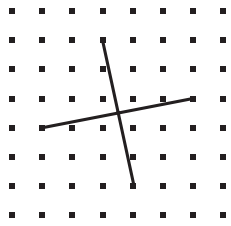
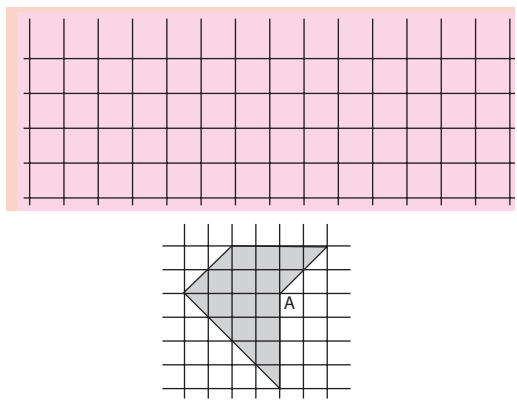
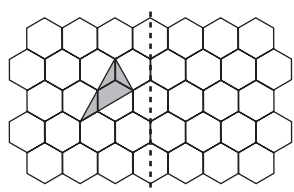
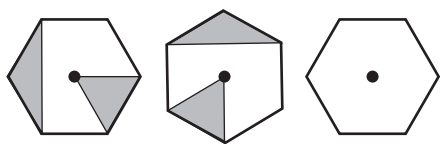
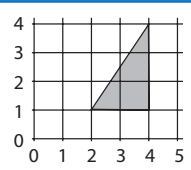
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My Problem Solving using Tables and Graphs																									
My I can statements	Examples of questions I can answer	My working and answers																							
<p><i>I can find the information in a table/graph to answer a question</i></p>	<table border="1"> <thead> <tr> <th colspan="2"></th> <th>Hull</th> <th>York</th> <th>Leeds</th> </tr> </thead> <tbody> <tr> <th rowspan="2">Adult</th> <td>single</td> <td>£12.50</td> <td>£15.60</td> <td>£10.25</td> </tr> <tr> <td>return</td> <td>£23.75</td> <td>£28.50</td> <td>£19.30</td> </tr> <tr> <th rowspan="2">Child</th> <td>single</td> <td>£8.50</td> <td>£10.80</td> <td>£8.25</td> </tr> <tr> <td>return</td> <td>£14.90</td> <td>£17.90</td> <td>£14.75</td> </tr> </tbody> </table> <p>The table shows the cost of coach tickets to different cities. What is the total cost for a return journey to York for one adult and two children?</p>			Hull	York	Leeds	Adult	single	£12.50	£15.60	£10.25	return	£23.75	£28.50	£19.30	Child	single	£8.50	£10.80	£8.25	return	£14.90	£17.90	£14.75	
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<p><i>I can read data accurately from a graph.</i></p>	<p>Here are some children's long jump results. Sue jumped 212 cm. Draw Sue's long jump result on the graph.</p> <table border="1"> <caption>Long jump results</caption> <thead> <tr> <th>Child</th> <th>Result (cm)</th> </tr> </thead> <tbody> <tr> <td>Raj</td> <td>165</td> </tr> <tr> <td>Tom</td> <td>130</td> </tr> <tr> <td>Sam</td> <td>175</td> </tr> <tr> <td>Jan</td> <td>110</td> </tr> <tr> <td>Sue</td> <td>212</td> </tr> </tbody> </table>	Child	Result (cm)	Raj	165	Tom	130	Sam	175	Jan	110	Sue	212												
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<p><i>I can work out what calculations I need to do to answer questions using data.</i></p>	<p>Use the graph above to estimate how much further Sam jumped than Jan.</p>																								

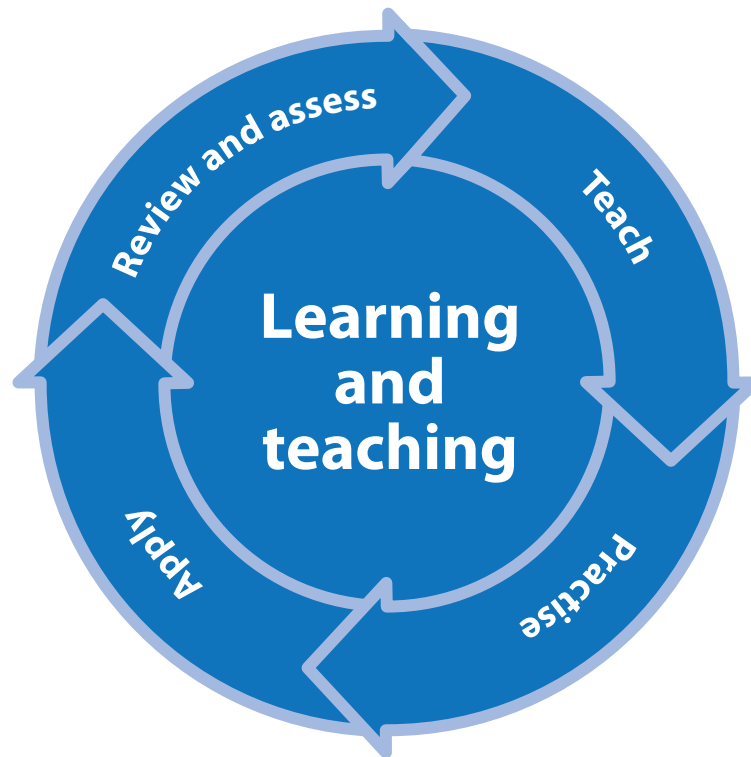
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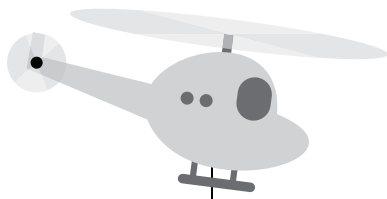
## My Own Mathematics

Name:.....

My Understanding of Shape		
My I can statements	Examples of questions I can answer	My working and answers
<i>I can name shapes and describe their properties using mathematical language.</i>	Imagine a triangular prism. How many faces does it have?  This diagram shows the diagonals of a quadrilateral. What is its name?	
<i>I can draw or make shapes accurately.</i>	On squared paper, draw a pentagon that has three right angles.     Draw two straight lines from point A to divide the shape into a square and two triangles.	
<i>I can explain how I have sorted a set of shapes.</i>	<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="border: 1px solid black; padding: 5px; background-color: #d9e1f2;">My shape has exactly two equal sides.</div> <div style="border: 1px solid black; padding: 5px; background-color: #fff2cc;">My shape has exactly two parallel sides.</div> </div> Can you show or draw me a polygon that fits both of these criteria? What do you look for?	
<i>I can reflect a shape accurately in a given mirror line.</i>	This grid is made of hexagons. Draw the reflection of the shaded shape on the grid.	
<i>I can rotate a shape about a vertex or its centre.</i>	This pattern is made by turning a shape clockwise through 90° each time. Draw the two missing triangles on the last shape.	
<i>I can describe where a shape will be after translation.</i>	This triangle is translated two squares to the left and one square down. Give the co-ordinates of its vertices in the new position.	

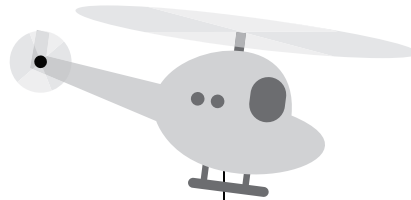
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