

## 2Calculate Numeracy Lesson Y4

<b>NS ref</b>	Looking at area of rectangles and simple shapes.								
<b>Year Group</b>	4	<b>Number in class</b>							
<b>Time for lesson</b>	1hr	<b>No. of computers</b>	1						
<p><b>Preparation 5-10 mins</b>            Use times table square on program 2Calculate cover up answers.            Have 5 area activities on program 2Calculate set up.</p>									
<p><b>Resources</b>            Desk or laptop            Computer program 2Calculate</p>									
<p><b>Learning objectives</b></p> <ul style="list-style-type: none"> <li>• To be able to measure and calculate the area of rectangles and simple shapes.</li> <li>• By counting squares.</li> <li>• Starting to use standard units(cm<sup>3</sup>)</li> </ul>									
<p><b>Technical Vocabulary</b></p> <table style="width: 100%; border: none;"> <tr> <td style="width: 33%;">area</td> <td style="width: 33%;">square</td> <td style="width: 33%;">Square centimetre (cm<sup>2</sup>)</td> </tr> <tr> <td>rectangle</td> <td></td> <td></td> </tr> </table>				area	square	Square centimetre (cm <sup>2</sup> )	rectangle		
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rectangle									
<p><b>Mental Maths ( 10 mins )</b>  <b>Warming up activity:</b> In order to get used to the program 2Calculate and what it can do. Teacher brings up the times table square and goes over how it works, then covers an area in ? marks the teacher then clicks on a covered square and the children have to tell her what they think the correct answer is. The timer can be set so the children can try and beat the clock.            Can also use the same principle on the number squares as well.</p>									
<p><b>Main activity</b>  <b>15 mins</b>            Look at shapes on screen, how many squares make up the shapes? The amount of space the shapes take up is called the area.            Look at rectangles C and D which is bigger?            Show area file number 2, which shows more rectangles, if these were made of chocolate which would they prefer? They can't count the squares so how could they work out the area? Colour the rectangles a different colour so the squares can be seen and counted.            Write the number of squares for length and width and show how they can be multiplied to work out the area covered. This is using square centimetres as a standard unit of measurement, show how this is written.            Return to fist page for them to work out the area of each shape in cm<sup>2</sup>.  <b>15 mins</b>            Show the shapes on page 4 on the screen and ask the children to draw the shapes on squared paper and work out the area first by counting the squares then have a go by multiplying the length by the width.            Discuss the answers as a class on the screen.  <b>10mins</b>            Ask children to make different shapes that have an area of 24cm<sup>2</sup>.</p>									
<p><b>Plenary ( 10 mins )</b>            Put some of the shapes with an area of 24cm<sup>2</sup> on the screen and discuss the variety.            If time look at file 5 and the half squares, how could the children work out the area of these shapes? What strategies could they use?</p>									