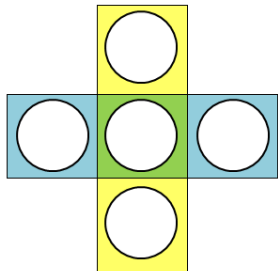
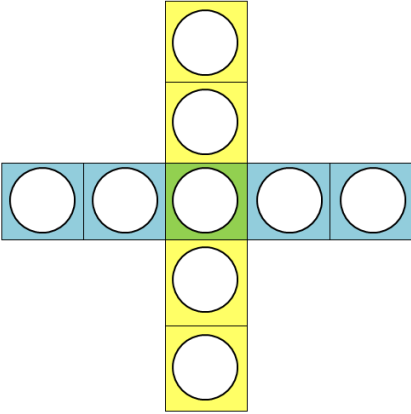
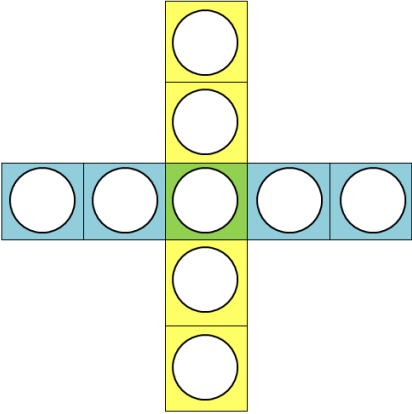


ANSWERS



Maths Focus: Mental and written addition, understanding the value of numbers and identifying a rule

Helpful Hints: Think carefully about why some positions in the 'Magic Cross' may mean that some numbers are added more than once

Level 1	Level 2	Level 3
 <p>This is a 'Magic Cross'. Timmy arranges the number 1-5 in this. He adds up the total of the vertical line (yellow) and the total of the horizontal line (blue) to get an overall total.</p> <ol style="list-style-type: none">1. What is the lowest total he can make? 162. What is the highest total he can make? 203. Can he make a total of 18? How? Yes by placing 3 in the middle4. Can you explain how the position of the numbers changes the total? The number in the middle is added twice and all other numbers are added once	 <p>This is a 'Magic Cross'. Timmy arranges the number 1-9 in this. He adds up the total of the vertical line (yellow) and the total of the horizontal line (blue) to get an overall total.</p> <ol style="list-style-type: none">1. What is the lowest total he can make? 462. What is the highest total he can make? 543. Can he make a total of 49? How? Yes by placing 4 in the middle4. Can you explain how the position of the numbers changes the total? The number in the middle is added twice and all other numbers are added once	 <p>This is a 'Magic Cross'. Timmy arranges the numbers 1, 12, 23, 34, 45, 56, 67, 78 and 89 in this. He adds up the total of the vertical line (yellow) and the total of the horizontal line (blue) to get an overall total.</p> <ol style="list-style-type: none">1. What is the lowest total he can make? 4062. What is the highest total he can make? 4943. What is the closest he can get to 430? He can get 428 by putting 23 in the middle4. Can you explain how to get the lowest number with a new set of numbers? The lowest number must go in the middle if you want the lowest total. It doesn't matter where the other numbers go