

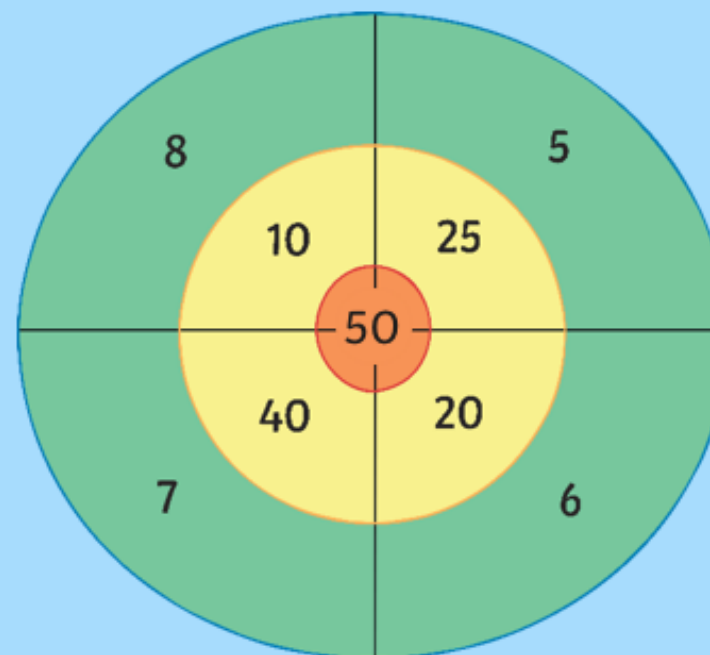
Starter

What is the highest total you could score with three darts?

What is the lowest total you could score With three darts?

How many ways can you find to score 100?

How many different ways can you find to make a score with a '3' in the ones column?





**Summer week 9 Lesson 5 – 26.06.20**

**LO: To solve problems involving 2-way tables**

**Success Criteria:**

- |  |
|--|
| 1. Read the question carefully   |
| 2. Decide which section of the chart the question is about e.g. Baseball |
| 3. Look at that section to check your answer                             |
| 4. Decide whether it is true or false.                                   |

**Model**

What is your favorite sport to watch on television?			
	Football	Basketball	Baseball
Males	40	22	15
Females	12	16	45
Total	52	38	60

**True or false**

60 people said their favourite sport on TV was Baseball?

**True - the total number of females plus males = 60 - 15 + 45 = 60**

There were 22 males who liked football?

**False - there were 40**

Mild/  
Steppingstone  
activity



## Can you pair the right information with the right two-way table?

1. Number of Boys and Girls in a maths class				2. Number of Boys and Girls in a maths class				3. Number of Boys and Girls in a maths class							
		Year 7	Year 8	Year 9			Year 7	Year 8	Year 9			Year 7	Year 8	Year 9	
<b>Boys</b>	14	15	18	<b>Boys</b>	11	18	7	<b>Boys</b>	11	0	14	<b>Boys</b>	11	0	14
<b>Girls</b>	16	13	10	<b>Girls</b>	22	14	20	<b>Girls</b>	15	15	9	<b>Girls</b>	15	15	9
This teacher has a class with exactly twice as many girls than boys.				This teachers has 64 pupils in total in their Key Stage 3 classes.				One of the classes contained 32 pupils in total.							
This teacher has a class that only contains girls.				There are 10 girls in this teachers Year 9 class.				In total, there are more boys than girls in these classes.							

## Spicy/ Red Hot - Complete these tables

JustMaths

**TABLE A**

Students studying a Science				
	Chemistry	Biology	Physics	Total
Boys	18			
Girls				
Total		21	19	47
			33	80

**TABLE B**

Students studying a Language				
	German	French	Polish	Total
Girls			9	34
Boys	15	25	18	60
Total				

**TABLE C**

Students studying a D&T subject				
	Art	Food	Textiles	Total
Boys	11		15	32
Girls		18		
Total	33			100





**TABLE D**

Students studying an "English" subject				
	Language	Literature	Media	Total
Girls				
Boys		78	20	120
Total	60		22	
			42	238

**TABLE E**

Students studying Maths				
	Applied Maths	Statistics	More maths	Total
Girls			20	
Boys		39		167
Total	120		48	282

Now solve these problems

<p><b>How many mistakes?</b></p> <p>Four teachers have completed some two-way tables. One of the teachers has made 4 errors, one has made no errors and two have made 1 error. Can you work out the number of errors made by each teacher?</p>	
 <p>The ICT teacher said</p> <ul style="list-style-type: none"> <li>- The number of boys who study Textiles is larger than the number of boys who study Physics</li> <li>- More boys study English Language than girls who study Art</li> <li>- The number of boys who study Food is the same as the number of girls who study Biology</li> <li>- More boys study Polish than boys study Food</li> </ul>	 <p>The music teacher said:</p> <ul style="list-style-type: none"> <li>- More girls take a D&amp;T subject than a Science subject</li> <li>- The number of students studying French is 2 more than the number studying Food</li> <li>- More boys study English literature than "More maths"</li> <li>- The number of boys studying "More maths" and girls studying Textiles is the same</li> </ul>
 <p>The Art teacher said</p> <ul style="list-style-type: none"> <li>- More girls study a D&amp;T subject than boys study an English subject</li> <li>- 3 more girls study a maths subject than boys who study an English subject</li> <li>- There are 2 more students doing Applied maths than girls studying Art</li> <li>- The most popular subject is German</li> </ul>	 <p>The English teacher said</p> <ul style="list-style-type: none"> <li>- The most popular individual subject is English Literature</li> <li>- The total for food <i>and</i> textiles is more than twice the total for Art</li> <li>- More boys study Applied maths than all the students studying D&amp;T subjects</li> <li>- 43 more students study English Language than German.</li> </ul>