

**Sample Spaces – www.m4ths.com**

(1) Two fair 6 sided dice are rolled. The two numbers rolled are added together.

(a) Complete the table below

		Dice 2					
		1	2	3	4	5	6
Dice 1	1						
	2						
	3						
	4						
	5						
	6						

- (a) Write down the modal score.  
 (b) Find the probability of scoring a total of 4.  
 (c) Find the probability of scoring more than 8.

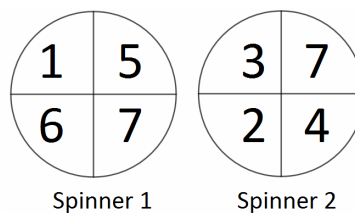
(2) Two fair 6 sided dice are rolled. The two numbers rolled are multiplied.

(a) Complete the table below

		Dice 2					
		1	2	3	4	5	6
Dice 1	1						
	2						
	3						
	4						
	5						
	6						

- (a) Write down the lowest score.  
 (b) Find the probability of scoring a total of 12.  
 (c) Find the probability of scoring less than 10.  
 (d) Find the probability of rolling a square number.

(3) Two Spinners are shown below



The spinners are each spun once and the scores added together.

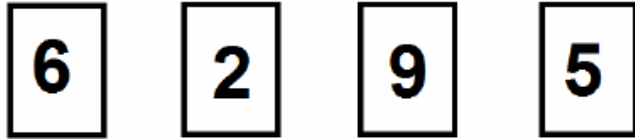
(a) Complete the sample space below.

		Spinner 2			
Spinner 1	3				
	1				

- (b) Find the probability of scoring a total of 8.  
 (c) What is the range of possible scores?  
 (d) What is the modal score?

(4) Two sets of cards are shown below.

**Set 1**



**Set 2**



A card is picked from each set and the numbers added together.

(a) Use the template below to create a sample space.

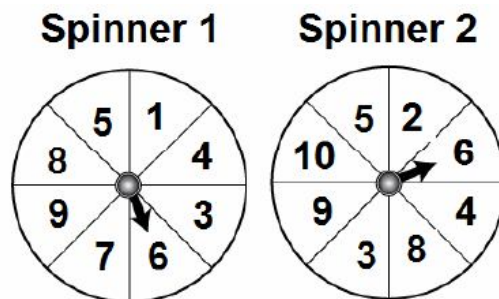

- (b) Write down the highest score.
- (c) What is the probability of scoring a total of 11?
- (d) How many of the scores are prime numbers?
- (e) Explain why you can't get a score less than 0.

(5) Two spinners are spun and the score on each spinner is added together. The sample space below shows some information.

		Spinner 2				
		3	4	7	8	
Spinner 1	1	3		7	8	9
	3	5	6	9	10	11
	5	7	8	9	11	13
	6	8		10		14
	7	9	10		13	15
			12		15	

- (a) Complete the sample space.
- (b) Find the maximum possible score.
- (c) Find the probability of scoring a total of 14.

(6) Two spinners are shown below.



Each spinner is spun once and the scores are multiplied.

- (a) Draw a sample a space to show this information.
- (b) Find the modal score.
- (c) Find the range of scores.
- (d) Find the probability of scoring a total of at least 10.
- (e) How many of the scores are even numbers?