

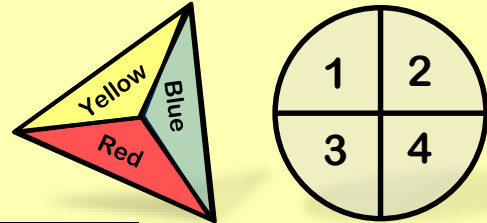
Sample Space Diagrams

ANSWERS



- 1) Jamie has two fair spinners.
One has three equal sections coloured red, blue and yellow.
The other has four equal sections numbered 1, 2, 3 and 4.
Jamie spins both spinners.

Complete the sample space diagram.



Colour	B	B	B	B	Y	Y	Y	Y	R	R	R	R
Number	1	2	3	4	1	2	3	4	1	2	3	4

- 2) A red dice and a blue dice are thrown together and the total of the two scores is found.

The red dice is numbered 1 to 6.

The blue dice is numbered 1, 2, 3, 3, 5, 8.

- Complete the sample space diagram.
- Which are the most likely scores? **6, 7**
- Which scores are least likely?
2, 12, 13, 14
- Find the probability that the total score is less than 9. **$\frac{25}{36}$**

		Red Dice					
		1	2	3	4	5	6
Blue Dice	1	2	3	4	5	6	7
	2	3	4	5	6	7	8
	3	4	5	6	7	8	9
	3	4	5	6	7	8	9
	5	6	7	8	9	10	11
	8	9	10	11	12	13	14

- 4) A fair dice and a coin are thrown together.
Using a sample space diagram:
- Work out how many possible outcomes there are. **12**
 - Work out the probability of getting an even number and a tails. **$\frac{3}{12}$**

- 5) The royal cards of clubs and the royal cards of diamonds are randomly put into two piles.
A card is taken from each pile, work out the probability that:
- Both cards will be a Queen. **$\frac{1}{9}$**
 - At least one card will be a Jack. **$\frac{5}{9}$**