

- 1 The probability that a biased dice will land on a 6 is 0.3
The dice is going to be rolled 200 times.
Work out an estimate for the number of times the dice will land on 6.

(2 marks)

- 2 The probability that a sunflower seed will germinate is 0.9
Alan is going to plant 50 sunflower seeds.
Work out an estimate for the number of seeds that will germinate.

(2 marks)

- 3 The probability that Frank scores a penalty is 0.86
Frank is going to take 50 penalties.
Work out an estimate for the number of times Frank will score.

(2 marks)

- 4 The probability that Matt scores a penalty is 0.96
Matt is going to take 25 penalties.
Work out an estimate for the number of times Matt will score.

(2 marks)

- 5 In a bag there are only red counters, blue counters and white counters
A counter is taken at random from the bag.

The table shows the probability of the counter being red and blue.

Colour	Red	Blue	White
Probability	0.5	0.3	

Complete the table to show the probability that counter will be white.

(2 marks)

- 6 In a box there are only black pens, blue pens and green pens
A pen is taken at random from the box.
The table shows the probability of the pen being black and blue.

Colour	Black	Blue	Green
Probability	0.64	0.24	

Complete the table to show the probability that pen will be green.

(2 marks)

- 7 A biased spinner can land on red, blue, yellow and green.
The table shows the probabilities that the spinner will land on red,
blue and yellow.

Colour	Red	Blue	Yellow	Green
Probability	0.25	0.34	0.22	

Complete the table to show the probability that spinner will land on green.

(2 marks)

- 8 In a bag there are only red counters, blue counters and white counters
number of red counters : number of blue counters : number of white counters = 5 : 4 : 3

A counter is taken at random from the bag.

Colour	Red	Blue	White
Probability			

Complete the table to show the probabilities of the counter being red,
blue or white.

(2 marks)

- 9 In a bag there are only black counters, white counters and red counters. A counter is taken at random from the bag.

The table shows the probability of taking a black counter and a white counter.

Colour	Black	White	Red
Probability	$\frac{3}{10}$	$\frac{3}{5}$	

Complete the table to show the probabilities of the counter being red.
(2 marks)

- 10 A biased spinner can land on red, blue, yellow and green. The table shows the probabilities that the spinner will land on red and yellow.

Colour	Red	Blue	Yellow	Green
Probability	0.18		0.26	

The probability of landing on blue is the same as the probability of landing on green.

Complete the table to show the probabilities of spinner landing on blue and green.
(2 marks)

- 11 A biased spinner can land on red, blue, yellow and green. The table shows the probabilities that the spinner will land on red, blue and yellow.

Colour	Red	Blue	Yellow	Green
Probability	0.3	0.25	0.15	

- (a) Complete the table. (2)

Kelly is going to spin the spinner 60 times.

- (b) Work out an estimate for the number of times the spinner will land on red. (2)

(4 marks)

- 12 In a bag there are only red counters, blue counters and white counters. A counter is taken at random from the bag. The table shows the probability of getting a red counter.

Colour	Red	Blue	White
Probability	0.2		

The probability of getting a blue counter is the same as the probability of getting a white counter.

- (a) Complete the table. (2)

There are 18 red counters in the bag.

- (b) Work out the total number of counters in the bag. (2)

(4 marks)

- 13 A biased spinner can land on 1, 2, 3 or 4.
The table shows the probabilities that the spinner will land on 2 and 4.

Number	1	2	3	4
Probability		0.32		0.17

The probability that the spinner will land on 1 is **twice** the probability that the spinner will Land on 3.

- (a) Complete the table. (2)

Johnny is going to spin the spinner 200 times.

- (b) Work out an estimate for the number of times the spinner will land on 2. (2)

(4 marks)

- 14 The table shows the probabilities that a biased dice will land on 1, on 2, on 3, on 5 and on 6.

Number	1	2	3	4	5	6
Probability	0.14	0.2	0.08		0.13	0.21

The dice is rolled 200 times.

Work out an estimate for the number of times the dice will land on 2 or on 4.

(3 marks)

- 15 In a box there are only red pens, blue pens, black pens and green pens.
A pen is taken at random from the box.

The table shows the probabilities that the pen will be red or will be green

Colour	Red	Blue	Black	Green
Probability	0.42			0.14

The probability that the pen will be black is three times the probability that the pen will be blue.

There are 28 green pens in the box.

Work out the number of black pens in the box.

(4 marks)

- 16 In a bag there are only red counters, blue counters, green counters and yellow counters.
A counter is taken at random from the bag.

The table shows the probabilities that the counter will be green or will be yellow.

Colour	Red	Blue	Green	Yellow
Probability			0.35	0.20

The probability that the counter will be red is twice the probability that the counter will be blue.

There are 21 green counters in the bag.

Work out the number of red counters in the bag.

(4 marks)