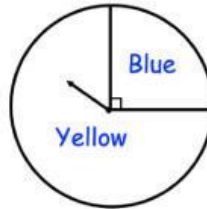


PROBABILITY

The diagram shows a fair spinner.



- a) Which colour is the arrow most likely to land on ?
- b) Which point on the scale with an arrow to show the probability of landing on green ?

Which word from the box best describes the likelihood of each of these events

Impossible Unlikely Even Likely Certain

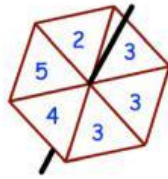
- a) A new born baby is a girl
- b) You thrown an ordinary dice and get a two.

Impossible Unlikely Even Likely Certain

Use a word from the box which best describes the probability of each of the following events

- (a) You roll a 10 on an ordinary six sided dice.
- (b) You roll a number greater than 1 on an ordinary six sided dice

Amir makes a fair spinner with six sectors.



Impossible Unlikely Evens Likely Certain

Use a word from the box which best describes the probability of each of the following events

- (a) The spinner will land on 6
- (b) The spinner will land on 3
- (c) The spinner will land on 2
- (d) The spinner will land on a number greater than 1

A fair six-sided dice is thrown. Find the probability of :

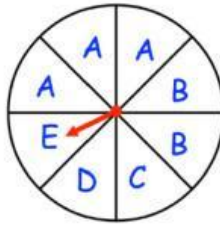


A number less than 7 is thrown.

A “6” is thrown.

An odd number is thrown

A fair spinner has eight equal sections. The sections are labelled A, B, C, D and E as shown below.



The arrow is spun.

(a) Which is the most likely letter that the arrow will land on?

(b) What is the probability that the arrow lands on a B?

(c) What is the probability that the arrow lands on an A?

The following cards are placed in a box.



A card is selected at random. Find the probability that the number on the card is

(a) 3

(b) an odd number

A bag contains 10 discs. Each disc is labelled with a different number from 1 to 10. A disc is chosen from the bag at random. Write down the probability that the chosen disc is

(a) the number 3

(b) a number less than four

(c) a square number

(d) a prime number

Sean has a box of pens. The box contains 6 blue pens, 8 black pens and 3 red pens.

(a) What is the probability that he will pick a blue pen?

(b) What is the probability that he will pick a green pen?

Some more blue pens are added to the box. The probability of selecting a blue pen is now $\frac{1}{2}$

(c) How many blue pens were added to the box?

Mia has five numbered cards.



One of these cards is chosen at random. Mia says: The probability of an odd number is $\frac{3}{5}$!

The probability of a 7 is $\frac{3}{5}$

The range of the numbers is 10

The probability of a 2 is 0. Fill in three numbers that could be on Mia's cards

A bag contains 400 coloured counters. The counters are either yellow, brown or green. There are 92 yellow counters in the bag. The probability that a brown counter is chosen from the bag is 0.13 Calculate the number of green counters in the bag.

Each boy at a school plays one of four sports. The table shows the probability a student chosen at random plays rugby, football, hockey or cricket.

Sport	Rugby	Football	Hockey	Cricket
Probability	0.4	0.2	0.1	

A student is chosen at random.

(a) Work out the probability that the student plays cricket.

There are 600 boys at the school

(b) Work out the number of boys who play rugby

Dennis has a bag of counters. The counters are red, green, white and pink. There are 200 counters in the bag. The probability of a pink counter is 0.15 The probability of a green counter is 0.25 The probability of a red counter is twice the probability of a white counter. Calculate the number of red counters in the bag.

Susan has some beads in a bag. 5 of the beads are orange. 3 of the beads are purple. The rest of the beads are pink. Susan takes a bead from the bag at random. The probability that she takes a pink bead is $\frac{3}{5}$ How many pink beads are in the bag before Susan takes a bead?

Mrs Jenkins is organising a charity raffle. She sells 300 tickets for £3 each. The probability that someone wins a prize is 0.2 Each prize cost £8 The profit is donated to charity. Work out how much money Mrs Jenkins donates to charity