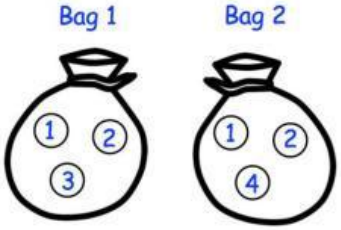
PROBABILITY : SAMPLE SPACES

Two bags, 1 and 2, each contain three counters that are equal size.



In bag 1, the counters are labelled 1, 2 and 3. In bag 2, the counters are labelled 1, 2 and 4. A counter is drawn at random from bag 1 and a counter is drawn at random from bag 2. The two numbers are added together to give a score.

a) Find the probability of scoring a 4 _____

b) Find the probability of less than 5 _____

Two fair six sided dice are rolled. The numbers on the two dice are multiplied together to give a score.



a) Find the probability of score of 12 _____

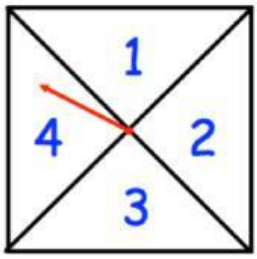
b) Find the probability of a score of 10 or more _____

A fair dice is numbered from 1 to 6. The dice is rolled twice.

Work out the probability that the number obtained on the first roll is more than double the score on the second roll.

LIVEWORKSHEETS

Jordan is playing a game with a fair four sectioned spinner and a fair coin.





He spins the spinner and flips the coin. If the coin lands on heads, his score is one more than the number on the spinner. If the coin lands on tails, his score is the number on the spinner doubled. Write down the probability that Jordan gets a score of

a) 4 .....

b) 5 or more .....

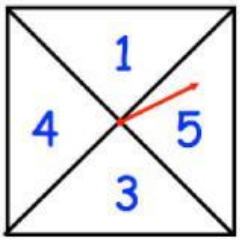
c) a prime number .....

Two fair spinners are spun.

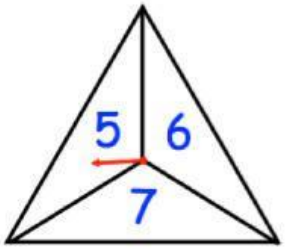
Spinner 1 has four equal sections labelled 1, 3, 4 and 5.

Spinner 2 has three equal sections labelled 5, 6 and 7.

Each spinner is spun once. The numbers are added together to get a score.



Spinner 1



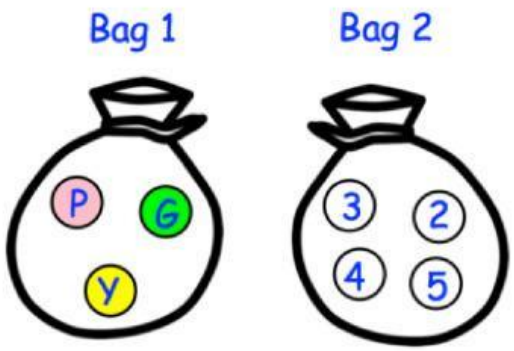
Spinner 2

Find the probability of scoring a 8 .....

Find the probability of scoring an odd number .....

LIVEWORKSHEETS

Two bags, 1 and 2, each contain counters that are equal size.



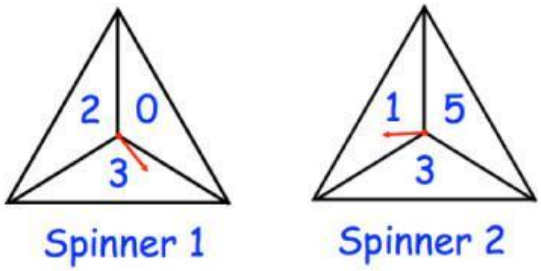
Bag 1 contains a pink counter, green counter and yellow counter. Bag 2 contains counters labelled 2, 3, 4 and 5. A counter is drawn at random from bag 1 and a counter is drawn at random from bag 2.

If the counter from bag 1 is pink, the number on the counter from bag 2 is doubled. If the counter from bag 1 is green, one is added to the number on the counter from bag 2

If the counter from Bag 1 is yellow, the number on the counter from bag 2 stays the same.

Find the probability of scoring a multiple of 3 _____

Phil uses two fair spinner in a game.



He spins both spinners. His score is the two numbers multiplied together.

Phil says the probability that he gets an even score is ½

Explain why Phil is incorrect.

LIVEWORKSHEETS

Two fair six-sided dice are rolled. The score is difference between the numbers on each dice.

Find the probability of scoring a 2 .....

Find the probability of scoring a number less than 3 ……

James has organised a game to raise money for charity at a local fair. He rolls a fair six sided dice and flips a fair coin.





If the coin lands on heads, the number on the dice is squared. If the coin lands on tails, the number on the dice is cubed.

Each person pays 50p to play.

If they score above 30, they win $1.

The game is played 450 times.

How much money does James raise for charity?

LIVEWORKSHEETS