

Mathémagique

You are a magician.

You show a volunteer from the audience 3 tokens.

The three tokens each have a black side and a coloured side : red for one, green for another and blue for the last one.

The 3 tokens are laid in a line with their coloured sides showing and the black side down.

You ask your volunteer to choose one of the three colours and keep his choice secret. You make sure that you have noticed the colour of the middle token.

You are now blindfolded. You ask your volunteer to change round the positions of the colours he has not chosen. And then to turn the 3 tokens over.

You now see the black sides.

The blindfold is removed. You ask your volunteer to move the tokens around as he likes but you keep your eyes on the one which was in the middle.

You turn one token over and then you announce the colour of the token chosen by your volunteer.

How do you do it ?

