

3 Dice

Get a child up and ask them to twist and turn the 3 dice and stack them one on top of the other any way they want. Turn away as they do this. When they tell you they have done that turn back and point out no one can see five faces of the dice – point out the five faces, four in-between the three dice and one on the bottom. But explain that you know those five faces add up to ___

You get the total by subtracting the top number from 21.

Prove you are right by slowly removing and pointing to the five faces as you get the audience to shout out the numbers on the faces as you add them.

Explain you will do it again as it's not the same answer every time. (Hope it's not the same answer again!)

Thank your helper and ask them to take their seat.

Ask if anybody knows how this works. You will get lots of guesses – some may be right.

Explain the top and bottom of a dice always add up to 7. Many people don't know this – even some adults.

“So if the top and bottom of this dice adds up to 7 and the top and bottom of another dice add up to 7 what do the top and bottom of two dice add up to?”

You will get the answer 14.

“So what do the top and bottom of 3 dice add up to?” You will get 21.

“Now that's not a great trick because every time you do it you will get the same answer – 21. So I look at the top number when I turn round and subtract it from 21. So if I turn round and see this” Show the number 2 on the top dice.

“What do the five sides we can't see add up to?” You will get lots of answers shouted out – hopefully most right!

“That's right – let's prove it” Go through as before to prove answer is correct.

Do one more example.

“Now when you turn around to look at the top number of the dice don't do this...” Squint at the top number – this usually gets a laugh! “Just casually glance at it then look at the person helping you”.

Go on to explain you can do the trick with only 2 dice by starting with 14 (7 + 7) instead of 21.