



## TWENTY-ONE CARD TRICK

The props: Twenty-one cards

The magic: You can magically deal your friend's card right out of the deck.



1. Deal 21 cards face-down, left to right, into three equal piles.



2. Tell a friend, "Please point to one of the piles."

Then pick up that pile and fan it, with the cards facing your friend.

Tell your friend, "Now think about one of these cards, but don't tell me which one. Remember and keep thinking about your card."



3. Stack the piles on top of each other, and secretly make sure the one holding your friend's card is in the middle (don't make a big deal about it.)

4. Tell your friend, "Concentrate on your card,"

as you deal the cards face down into three piles again.

5. Now tell your friend, "Try to guess which pile your card's in."

Pick up that pile and fan the cards toward them, without looking at the cards yourself. Keep checking until they find the right pile.

Then stack the three piles with that pile in the middle again.



6. Deal the cards into three piles again, and tell your friend,

"This time, I'll guess which pile has your card. Keep thinking about your card."

Pick the middle pile (you'll be right almost half of the time), and show them the cards in that pile. It's okay if it's not in the middle pile—just keep going until you find the right pile.

7. Tell your friend, "Now, it's time to find your card."

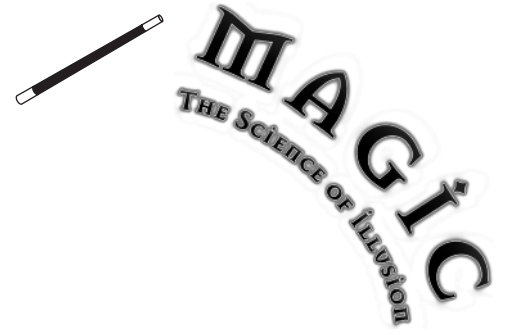
Take the pile with their card in your hand.

As you say the words, "This is your card," deal one card as you say each word, with the first three face down, and the fourth card (their card) faceup.



Look on the next page to find out why this trick works!





## THE SCIENCE BEHIND THE MAGIC

### Why does the Twenty-One Card Trick work no matter which card they pick?



This magic trick works because you put limits on where your friend's card can go. Always putting their pile in the middle of the deck shifts their card to the middle—the fourth card—of one of the piles.



For example, let's say you've dealt the cards into three piles, and your friend chooses the ace of spades. The seven-card pile holding that ace is put in the middle of the deck. You deal the cards into new piles. Now the ace has to be in one of the following places: the fourth or fifth card of the first pile; the third, fourth or fifth card of the middle pile, or the fourth or fifth card of the last pile.



You'll have your friend guess which pile their card's in. Then, you'll put the pile with their card in the middle and deal again. This time, the ace of spades will be the fourth card—the middle card—of the first, middle or last pile. More than 40% of the time, it'll be in the middle pile, so that's a good pile for you to guess.



Once your friend tells you which of the three piles has their card, you know exactly where it is. As you tell them, "This is your card," you'll deal out four cards, turning the fourth card—their card—faceup.



Real magicians learn their tricks by heart, so practice this trick to improve your performance.

