COMPUTER SCIENCE
Unplugged

COMPUTER SCIENCE Unplugged

The Computer Science Unplugged project is a collection of activities, tricks and games like this one, which demonstrate Computer Science principles without using computers.

For more information about this activity, and lots more free activities, ideas, events and videos, visit

csunplugged.org

Here's a magic trick from Computer Science Unplugged.

You'll need 36 cards (playing cards are fine). Get a volunteer to lay out 25 cards in a 5 × 5 square, with a random mixture of sides showing. Casually add another row and column, "just to make it a bit harder" (you actually choose the extra cards so that the number of face-up cards in each row and column is an even number).

While you cover your eyes, get the volunteer to flip over one card. Uncover your eyes, and identify which one has been flipped (the row and column containing the changed card will now have an odd number of faces showing, making it easy to find with a bit of practice).

The addition of the extra card is a technique called *parity checking*.