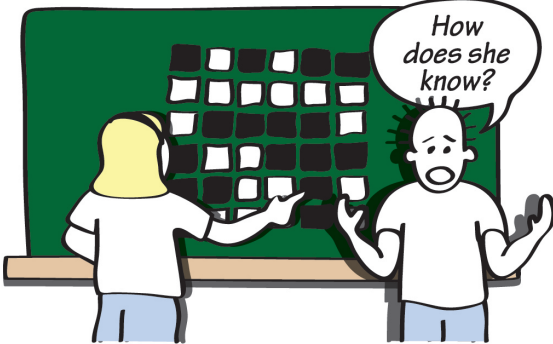
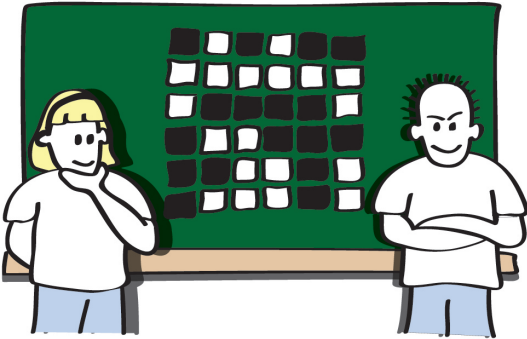
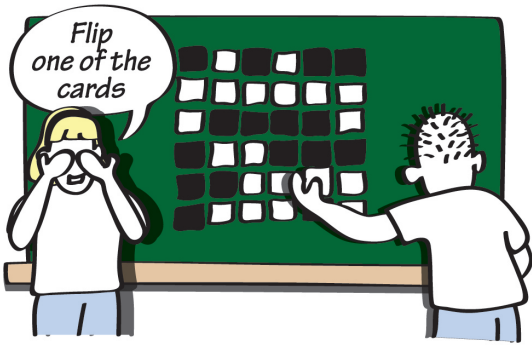


YOU CAN DO THIS MAGIC TRICK!



COMPUTER SCIENCE
Unplugged

You can do this magic trick from Computer Science Unplugged!

You'll need 36 cards (playing cards are fine). Get a volunteer to lay out 25 of the cards in a 5 x 5 square, with a random mix of cards "face-up." Then, you add another row and column — "just to make it a little harder." This is the key to the trick: make sure to position the added cards so that the number of face-up cards in each row and column is an EVEN number.

While you cover your eyes, ask the volunteer to flip over one card. Uncover your eyes, and identify which card has been flipped. (The row and column containing the changed card will both now have an ODD number of face-up cards, which is how you'll know which card has changed).

This trick illustrates a form of error detection called parity checking.



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