

## Math Magic Trick - Instructions

Cut out the cards with the help of an adult.
Place all 6 cards face-up in a pile and put the "Pick a Number Between 1 and 30" card on top. The order of the other 5 number cards does not matter.

Show the "Pick a Number Between 1 and 30" card and ask a volunteer to pick a number between 1 and 30 . Be sure that the volunteer does not tell you what it is.

Show the volunteer the first number card in the pile and ask, "Is your number on this card?" Be sure that the volunteer looks carefully before responding.

- If the volunteer says "yes," make a mental note of the number in the top lefthand corner of that card (it's either 1, 2, 4, 8, or 16).
- If the volunteer says "no," just continue.

Show the volunteer the next number card in the pile and do the same as you did before.

Repeat until you have asked the volunteer for all 5 number cards.
You should have kept a mental note of the top left hand corner numbers for all of the cards to which the volunteer responded "yes." Add those numbers together.

- TIP: Keep a running total in your head as you move through the cards instead of waiting until the end to add them. It's much easier to remember a running total than to remember a bunch of different numbers.
The sum that you just calculated is the volunteer's secret number!
Now's the fun part - blow the volunteer away by sharing what his/her secret number is!

