MAGIC AGE CARDS

This works for all ages from 1 to 60. Have a volunteer take <u>every</u> card that has his/her age anywhere on it, then give those cards to you. You then amaze the volunteer by telling his or her age. All you have to do is add the numbers in the top left corner of the cards you are given.

If you don't want to use ages, as perhaps you already know the person's age, ask him/her to think of a number from 1 to 60. It's a good idea to have that person whisper the number to someone else in your audience. They have to be sure they get every card with the number on it, or your magic will fail.

It helps everyone keep track if you copy each type of card on a different colour (see alternative format)

Notice that the numbers in the top left of each card are powers of 2. You can have an interesting discussion about representing numbers in different bases with students who enjoy thinking about the structure of numbers. Which numbers could we reach if we had a card starting with 64 in the top left? What would that card look like? What if anything would have to happen with the other cards?

16	21	26	31	52	57
17	22	27	48	53	58
18	23	28	49	54	59
19	24	29	50	55	60
20	25	30	51	56	

2	11	22	31	42	51
3	14	23	34	43	54
6	15	26	35	46	55
7	18	27	38	47	58
10	19	30	39	50	59

8	13	26	31	44	57
9	14	27	40	45	58
10	15	28	41	46	59
11	24	29	42	47	60
12	25	30	43	56	

1	11	21	31	41	51
3	13	23	33	43	53
5	15	25	35	45	55
7	17	27	37	47	57
9	19	29	39	49	59

32	37	42	47	52	57
33	38	43	48	53	58
34	39	44	49	54	59
35	40	45	50	55	60
36	41	46	51	56	

4	13	22	31	44	53
5	14	23	36	45	54
6	15	28	37	46	55
7	20	29	38	47	60
12	21	30	39	52	