Binary Trick Cards

Cut out each group of numbers to make 5 rectangular cards:

1	3	5	7
9	11	13	15
17	19	21	23
25	27	29	31

2	3	6	7
10	11	14	15
18	19	22	23
26	27	30	31

4	5	6	7
12	13	14	15
20	21	22	23
28	29	30	31

8	9	10	11
12	13	14	15
24	25	26	27
28	29	30	31

16	17	18	19
20	21	22	23
24	25	26	27
28	29	30	31

Magic Squares

The earliest known magic square was invented in China over 3,000 years ago.
In ancient times, people ascribed all sorts of magical powers to them.

4	9	2
3	5	7
8	1	6

No matter which way you add the numbers: down, across or even on the diagonal, the sum is always 15.

Magic Square from the Yuan Dynasty (1206-1368). Currently housed at the Shaanxi History Museum in Xi'an.
Courtesy of wikimediacommons.com

Melencolia 1

An even more remarkable square appeared in an engraving by Albrecht Dürer - *Melencolia I* in 1514

16	17	18	19
20	21	22	23
24	25	26	27
28	29	30	31

All the rows and diagonals add up to 34. The four corners add up to 34. The four center numbers add up to 34. The two numbers in the middle of the top row and the two numbers in the middle of the bottom row add up to 34. There are many more combinations to be found...