15-Scratch

This needs pencils and number cards – no faces - or use numbered counters, or just have people choose their favourite digits.

- draw three cards
- see how many of the numbers 1 – 15 you can reach, using each of your values no more than once
- scratch out each number as you get it
- you may use +, −, ×, ÷
- no doubling up (like 35)
- once you have found as many as you can, see if someone else can find more with your numbers

EXAMPLE : with 1, 2, 4 we get

~~1~~ ~~2~~ ~~3~~ ~~4~~ ~~5~~ ~~6~~ ~~7~~ ~~8~~ ~~9~~ ~~10~~ 11 ~~12~~ 13 14 15

since 3 = 4-1, 5 = 4+1, 6 = 4+2, 7 = 1+2+4,
8 = 2x4, 9 = 2x4+1, 10 = (4+1)x2, 12 = (2+1)x4

Can you get 11, 13, 14, or 15?

24-Scratch

- same rules as for 15-Scratch, but you draw four cards and try to reach the numbers 1 – 24

Scratch list for 15-Scratch

your numbers	
	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

Scratch list for 15-Scratch

your numbers	
	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

Scratch list for 24-Scratch

your numbers												
	1	2	3	4	5	6	7	8	9	10	11	12
	13	14	15	16	17	18	19	20	21	22	23	24
	1	2	3	4	5	6	7	8	9	10	11	12
	13	14	15	16	17	18	19	20	21	22	23	24
	1	2	3	4	5	6	7	8	9	10	11	12
	13	14	15	16	17	18	19	20	21	22	23	24
	1	2	3	4	5	6	7	8	9	10	11	12
	13	14	15	16	17	18	19	20	21	22	23	24

Scratch list for 24-Scratch

your numbers												
	1	2	3	4	5	6	7	8	9	10	11	12
	13	14	15	16	17	18	19	20	21	22	23	24
	1	2	3	4	5	6	7	8	9	10	11	12
	13	14	15	16	17	18	19	20	21	22	23	24
	1	2	3	4	5	6	7	8	9	10	11	12
	13	14	15	16	17	18	19	20	21	22	23	24
	1	2	3	4	5	6	7	8	9	10	11	12
	13	14	15	16	17	18	19	20	21	22	23	24