

Factors and Multiples Game

Borrowed from nrich.maths.org

This is a game for 2 players.

The first player chooses a positive even number that is less than 50, and crosses it out on the grid.

The second player chooses a number to cross out. The number must be a **factor** or **multiple** of the first number.

Players continue to take it in turns to cross out numbers, at each stage choosing a number that is a **factor or multiple** of the number just crossed out by the other player.

The first person who is unable to cross out a number loses.

How long a string can you make before you run out of options? [Email your steps to your teacher.](#)

Review

Factors: examples 8: (1, 2, 4, 8) $1 \times 8, 2 \times 4$
24: (1, 2, 3, 4, 6, 8, 12, 24) $1 \times 24, 2 \times 12, 3 \times 8, 4 \times 6,$

Multiples: examples 5: 5, 10, 15, 20, 25, ...
9: 9, 18, 27, 36, 45, ...

100-Chart

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100