

The multiplication game: 4 in a row (vertical, horizontal or diagonal)

What do you need?

- Two diagrams
  - o In the diagram the results of the multiplications times 1 – 10 (ad random)
  - o Diagrams with numbers 1 – 10 in two rows (top row for the green player; the bottom row for the yellow player)
- Self adhesive memo papers in two different colors
- The game can be played by couples or in a group of 4 (2 times a couple)
- The player with four in a row (vertical, horizontal or diagonal) wins the play.

*See situation in picture 1*

Picture 1 – starting position

8	36	81	30	70	48	2	42	54	5
56	20	3	16	27	6	10	40	36	63
12	15	45	49	2	80	12	24	24	72
40	1	64	28	35	42	4	10	56	9
10	54	14	90	5	100	18	48	8	32
21	4	25	50	9	72	60	20	45	30
24	63	7	60	18	32	36	6	35	28
6	3	15	16	70	14	6	50	18	8
48	4	28	16	25	9	45	15	72	18
20	21	24	12	42	40	35	12	30	54

	1	2	3	4	5	6	7	8	9	10
	1	2	3	4	5	6	7	8	9	10

Rules of the game

- Player 1, the green player, (is playing with [for example] the green memo papers) puts his/her paper ad random in the top row. In this case player 1 chooses the number 6.
- Player 2, the yellow player, (is playing with [for example] the yellow memo papers) puts his/her paper in the bottom row. This is not ad random, but a well considered choice! Player 2 makes the multiplication  $6 \times 4$  (6 was chosen by player 1) and puts a yellow memo paper in the main diagram in a space with the number 24.

*See situation in picture 2*

8	36	81	30	70	48	2	42	54	5
56	20	3	16	27	6	10	40	36	63
12	15	45	49	2	80	12	24	24	72
40	1	64	28	35	42	4	10	56	9
10	54	14	90	5	100	18	48	8	32
21	4	25	50	9	72	60	20	45	30
24	63	7	60	18	32	36	6	35	28
6	3	15	16	70	14	6	50	18	8
48	4	28	16	25	9	45	15	72	18
20	21	24	12	42	40	35	12	30	54

	1	2	3	4	5	6	7	8	9	10
	1	2	3	4	5	6	7	8	9	10

- The green player is on turn.
- The green player takes his/her green memo paper and moves his/her paper towards (let's say) number 9. Green makes the multiplication  $9 \times 4$  (number 4 was chosen by player 2) and puts a green memo paper in the main diagram in a space with the number 36.
- Is this a smart move? We don't know, but the yellow player has enough room now for the next move....

*See situation in picture 3*

8	36	81	30	70	48	2	42	54	5
56	20	3	16	27	6	10	40	36	63
12	15	45	49	2	80	12	24	24	72
40	1	64	28	35	42	4	10	56	9
10	54	14	90	5	100	18	48	8	32
21	4	25	50	9	72	60	20	45	30
24	63	7	60	18	32	36	6	35	28
6	3	15	16	70	14	6	50	18	8
48	4	28	16	25	9	45	15	72	18
20	21	24	12	42	40	35	12	30	54

	1	2	3	4	5	6	7	8	9	10
	1	2	3	4	5	6	7	8	9	10

- The yellow player looks at the diagram and thinks over: 'I will have to deal with the 9 of the green player....' He moves his/her memo paper to 8 and makes the multiplication  $8 \times 9 = 72$ . Now he has two spaces in a row yet! Still two spaces to go for 4 in a row!

*See situation in picture 4*

8	36	81	30	70	48	2	42	54	5
56	20	3	16	27	6	10	40	36	63
12	15	45	49	2	80	12	24	24	72
40	1	64	28	35	42	4	10	56	9
10	54	14	90	5	100	18	48	8	32
21	4	25	50	9	72	60	20	45	30
24	63	7	60	18	32	36	6	35	28
6	3	15	16	70	14	6	50	18	8
48	4	28	16	25	9	45	15	72	18
20	21	24	12	42	40	35	12	30	54

	1	2	3	4	5	6	7	8	9	10
	1	2	3	4	5	6	7	8	9	10

The green player has to play.

Looking at the diagram, the player will be a bit frightened.

The green player moves his/her memo paper to number 3 and makes the multiplication  $8 \times 3 = 24$

*See situation in picture 5*

8	36	81	30	70	48	2	42	54	5
56	20	3	16	27	6	10	40	36	63
12	15	45	49	2	80	12	24	24	72
40	1	64	28	35	42	4	10	56	9
10	54	14	90	5	100	18	48	8	32
21	4	25	50	9	72	60	20	45	30
24	63	7	60	18	32	36	6	35	28
6	3	15	16	70	14	6	50	18	8
48	4	28	16	25	9	45	15	72	18
20	21	24	12	42	40	35	12	30	54

	1	2	3	4	5	6	7	8	9	10
	1	2	3	4	5	6	7	8	9	10

Turn to the yellow player.

The yellow player puts his/her paper on 10.

So  $10 \times 3$  makes 30

*See situation in picture 6*

8	36	81	30	70	48	2	42	54	5
56	20	3	16	27	6	10	40	36	63
12	15	45	49	2	80	12	24	24	72
40	1	64	28	35	42	4	10	56	9
10	54	14	90	5	100	18	48	8	32
21	4	25	50	9	72	60	20	45	30
24	63	7	60	18	32	36	6	35	28
6	3	15	16	70	14	6	50	18	8
48	4	28	16	25	9	45	15	72	18
20	21	24	12	42	40	35	12	30	54

	1	2	3	4	5	6	7	8	9	10
	1	2	3	4	5	6	7	8	9	10

The green player puts his/her paper on 1 and makes 10 x 1 makes 10

*See situation in picture 7*

8	36	81	30	70	48	2	42	54	5
56	20	3	16	27	6	10	40	36	63
12	15	45	49	2	80	12	24	24	72
40	1	64	28	35	42	4	10	56	9
10	54	14	90	5	100	18	48	8	32
21	4	25	50	9	72	60	20	45	30
24	63	7	60	18	32	36	6	35	28
6	3	15	16	70	14	6	50	18	8
48	4	28	16	25	9	45	15	72	18
20	21	24	12	42	40	35	12	30	54

	1	2	3	4	5	6	7	8	9	10
	1	2	3	4	5	6	7	8	9	10

The yellow player looks at the diagram and puts his/her paper on 9.

1 x 9 makes 9!

Almost 4 in a row!!

*See situation in picture 8*

8	36	81	30	70	48	2	42	54	5
56	20	3	16	27	6	10	40	36	63
12	15	45	49	2	80	12	24	24	72
40	1	64	28	35	42	4	10	56	9
10	54	14	90	5	100	18	48	8	32
21	4	25	50	9	72	60	20	45	30
24	63	7	60	18	32	36	6	35	28
6	3	15	16	70	14	6	50	18	8
48	4	28	16	25	9	45	15	72	18
20	21	24	12	42	40	35	12	30	54

	1	2	3	4	5	6	7	8	9	10
	1	2	3	4	5	6	7	8	9	10

The green player is in serious problems... what to do?

The green player makes a mistakes and makes  $9 \times 4 = 36$ !

*See situation in picture 9*

8	36	81	30	70	48	2	42	54	5
56	20	3	16	27	6	10	40	36	63
12	15	45	49	2	80	12	24	24	72
40	1	64	28	35	42	4	10	56	9
10	54	14	90	5	100	18	48	8	32
21	4	25	50	9	72	60	20	45	30
24	63	7	60	18	32	36	6	35	28
6	3	15	16	70	14	6	50	18	8
48	4	28	16	25	9	45	15	72	18
20	21	24	12	42	40	35	12	30	54

	1	2	3	4	5	6	7	8	9	10
	1	2	3	4	5	6	7	8	9	10

What the green player did not notice?

Now the yellow player makes the multiplication  $4 \times 8 = 32$ !!

Yellow wins! Four in a row!

*See situation in picture 10*

8	36	81	30	70	48	2	42	54	5
56	20	3	16	27	6	10	40	36	63
12	15	45	49	2	80	12	24	24	72
40	1	64	28	35	42	4	10	56	9
10	54	14	90	5	100	18	48	8	32
21	4	25	50	9	72	60	20	45	30
24	63	7	60	18	32	36	6	35	28
6	3	15	16	70	14	6	50	18	8
48	4	28	16	25	9	45	15	72	18
20	21	24	12	42	40	35	12	30	54

	1	2	3	4	5	6	7	8	9	10
	1	2	3	4	5	6	7	8	9	10

A nice training in times tables and the possibility to make strategic moves!

Have a lot of fun with **FOUR IN A ROW !!!**