

Four in a Row explained

Firstly, **don't** be put off by what appears to be pages of numbers!!! Take a bit of time to familiarise yourself with the concept and, believe me, the children who use it will thank you. It is a great idea ... and the children love it.

Instructions

The book is divided into four sections – addition, subtraction, multiplication and division. The principles of the game apply throughout the book, so once the children have got the hang of one game, they don't need further direction. The samples here are from the addition section.

Have a look at the simplest of the addition games (Game 1) - there is a main grid of 30 numbers and below it a strip of 10 numbers.

- Player A chooses a number in the main grid (say 6 in the centre of the grid) and has to add any two numbers from the bottom strip to make 6 (example $4 + 2$). Player A has to **say** “ $4 + 2 = 6$ ” and covers the number 6 in the main grid with a coloured token (or marker pen).
- Player B has a turn and picks, for example, the number 9 in the main grid, looks at the bottom strip and says “ $5 + 4 = 9$ ” and covers the number 9 in the main grid with a different coloured token.

The **aim** of the game is to get four of your tokens in a row (vertically, horizontally or diagonally) to win the game (like *Connect 4*). So in the game we've started, Player A's next move might be to cover the number 8 and so has the diagonal 6 and 8. Player B is forced to block by covering the number 2. And so on.

The games on the following pages get progressively more difficult, making differentiation easy. Have a look at Game 23 in which simple **fractions** are introduced. Remember, the same game rules apply – add any two fractions from the bottom strip to make up a number in the main grid.

Decimals are introduced in Game 25 ...

Have a look at a Subtraction game Game 6 from that section. The only difference you will notice is that there is a heavy black line marking a separation in the bottom strip. This simply means players must subtract one number from one side of the heavy line from a number on the other side.

At the back of the book you'll find a couple of blank templates. The idea of these is that you copy them and let the children try and make their own *Four in a Row* game – a terrific exercise in itself because they soon realise every calculation has to work.

Just one final point – teachers who use the games in the classroom have suggested that it's better to copy and laminate the sheets and use marker pens that can be wiped clean, rather than using coloured counters. Counters get dropped, lost, thrown about etc.

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

1	1	2	2	3	3	4	4	5	5
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20	60	70	80	40	30
50	80	20	30	50	50
30	70	50	60	70	80
70	30	60	40	20	60
60	40	80	50	80	20

10	10	20	20	30	30	40	40
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4	9	10	7	4	11
7	3	8	6	10	2
5	6	2	11	5	6
2	4	5	9	3	7
6	7	3	4	8	10

$\frac{1}{2}$	$1\frac{1}{2}$	$2\frac{1}{2}$	$3\frac{1}{2}$	$4\frac{1}{2}$	$5\frac{1}{2}$	$6\frac{1}{2}$
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5.7	1.2	5.4	6.4	3.7	1.5
3.8	11	1.3	3.7	5.7	9
3.4	9	1.1	0.9	8	5.5
6.7	3.7	5.8	1.5	3.4	6.7
6.5	3.5	6.8	1.3	1.1	1.2

0.7	5	0.4	3	0.8	6	0.5
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8	7	4	5	8	4
4	6	10	7	10	7
10	5	9	4	4	5
7	10	6	10	9	10
9	8	8	9	7	6

2	2	3	3	4	4	5	5
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11	14	19	18	16	11
17	18	13	9	18	17
9	12	15	19	15	9
15	19	10	14	10	16
13	11	16	12	17	12

4	5	6	7	8	9	10
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7	4	4	9	4	7
5	6	7	5	9	5
9	8	5	7	6	6
4	9	8	8	5	8
6	7	6	9	8	4

5	6	7		11	12	13	14
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Game 6