

Four in a Row

Mathematical Understanding:

Building fluency with factors, multiples, and recall of single-digit multiplication facts.

Grade Level: 3-5

Number of Players: 2

Materials Needed: Four-in-a-row gameboard, two paperclips, pen or pencil

Object of the Game:

The first player to mark four squares in a row on the Four-in-a-row gameboard wins the game.

Directions:

Player 1 puts a paper clip on a number in the factor list. No square on the gameboard is marked or colored by Player 1 because only one factor has been marked; it takes two factors to make a product.

Player 2 puts the other paper clip on any number in the factor list (including the same number marked by Player 1) and then marks (may use an X, O, etc.) or covers the product of the two factors on the gameboard.

Player 1 moves either one of the paper clips to another number and then shades or covers the new product. Only one paper clip may be moved by a player during their turn. The two paper clips can be moved to the same factor to create a doubles fact.

Each player, in turn, moves a paper clip to create a new product and marks that product on the gameboard. If a product is already marked, the player does not get to mark a product for that turn. The winner is the first player to mark four squares in a row -- up and down, across, or diagonally.

Guiding Questions:

What do you know?

Where do you think you will begin?

Where are you stuck? What is confusing? What are you wondering about?

What are you going to try?
What did you think about to come to your answer?

Differentiation:

Before play begins, players may decide that either three-in-a-row (easier) or five-in-a-row (more challenging) is needed to win the game.

Players may add extra digits to the number line by writing them in. For example, writing in a 10 on the end of the number line creates more options for making some products.

Game Trajectory:

Pre-K-K: Players use a gameboard containing pictorial representations of digits 1-10. They match the pictorials to written digits on a number line to claim a square.

K-2: Players use the gameboard containing digits 1-20 and move paperclips on the number line to create sums and claim squares.

3-5: Players use the 6x6 products gameboard and move paperclips on a number line to create products and claim squares.

5-6: Players use the 6x6 products game board and move paperclips on a number line to create products and claim squares.

Clean up Checklist for Game Bag:

Copies of gameboard recording sheets

Pre K-K: Matching, pictorial representations

K-2: 5x4 Sums gameboard

3-5: 6x6 Products gameboard

5-6: 6x6 Products gameboard

Four in a Row

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

Winner _____

1	2	3	4	5	6
7	8	9	10	12	14
15	16	18	20	21	24
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Winner _____

1	2	3	4	5	6	7	8	9
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