

The Product Game

Rules

1. Player A puts a paper clip on a number in the factor list. Player A does not mark a square on the product grid because only one factor has been marked: it takes two factors to mark a product.
2. Player B puts the other paper clip on any number in the factor list (including the same number marked by Player A) and then shades or covers the product of the two factors on the product grid.
3. Player A moves either one of the paper clips to another number and then shades or covers the new product.
4. Each player in turn moves a paper clip and marks a product. If a product is already marked, the player does not get a mark for that turn. The winner is the first player to mark four squares in a row—up and down, across, or diagonally.

Suggestions for Teacher:

Allow your students to play the Product Game several times with their partners.

Instruct them to look for interesting patterns and winning strategies.

Give them 10 minutes to free-write on their experience, asking them to reflect on strategies that worked or failed.

After they turn in their free-writes, facilitate a whole class discussion.

NCTM Standard: Number & Operations, Problem Solving

Grade level: Grades 4–8

Number of players: 2

Materials: Gameboard (1 for each game), 2 paper clips, 2 different colored markers

The Product Gameboard

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

Factors:

1 2 3 4 5 6 7 8 9

Source: Lappan et al. (1996c); used with permission.