







Product Tac Toe is a fun game that allows students practice multiplication skills as well as problem solving strategies. It only takes a few minutes to learn and can be played with partners or class vs. teacher. Perhaps the best part of the game is that students are actually solving several multiplication problems each turn in order to come to a decision on one move, thus maximizing the opportunity for practice and problem solving in a fun and motivating format.

General Rules of the Game:

<u>How to Win:</u> A player is the winner when he or she can form a straight line of four in a row. The line can be horizontal, vertical, or diagonal.

How to Play (Basics): The player to go first (teacher/parent can decide how to decide this) places two markers on any two numbers (factors) to form a multiplication problem. Player One can put both markers on the same factor if they would like because that would still give a problem. At this point, the player needs to say the problem and the answer (product) so the other player can hear it. Once the player has stated the problem and the product, they then mark the product on the board with their marker. It is the job of the opposing player to ensure that the player whose turn it is gives the correct product for the factors chosen. From this point on throughout the rest of the game, only one factor marker can be moved per turn. After Player One takes their turn, it is Player Two's turn. Again, THEY CAN ONLY MOVE ONE OF THE FACTOR MARKERS TO CREATE A NEW PROBLEM. For example, if Player One puts the markers on 4 and five, player two can move the marker from 4 OR from five, but they cannot move both during one turn. Player Two moves one of the factor markers to create a new product and they then state the question and answer out loud so Player One can hear them. Player Two marks the product on the game board and it is then Player One's turn again. The players continue to alternate turns throughout the rest of the game until there is a winner.



Important Footnotes:

Only on the very first turn by Player One are both factor markers put down simultaneously. After the very first move of the game, ONLY ONE MARKER CAN BE MOVED PER TURN FOR THE REMAINDER OF THE GAME. PLAYER TWO DOES NOT MOVE TWO MARKERS ON THEIR FIRST TURN. THAT ONLY HAPPENS ON THE VERY FIRST MOVE OF THE GAME.

- * Once a player moves a factor marker AND REMOVES THEIR HAND FROM THE MARKER THEY HAVE MOVED, they cannot change their mind and move the piece any more during that turn. Once the player releases the marker, they are required to leave it there and state the question and answer.
- * If a player moves a marker, states the problem, and gives the WRONG ANSWER, the markers stay and they lose their turn. The marker that was moved is not returned to its previous position.
- * If a player moves a marker to a factor and gives the problem and answer and that product is already taken, that player loses their turn and the marker remains where it was placed and is not returned to its previous position.
- * If there is a move available on the board, the player whose turn it is *must* make a move.
- * NOTE: If the opposing player chooses to do so, they can tell the player whose move it is to redo their turn and move the marker back to its previous position or show their opponent an available move. The reason for this is simple. Occasionally, a player may *purposely* make a mistake to avoid a move that would be detrimental to their chances of winning. *If* there is an available move and the opponent wants them to, a player must make a move.

Enjoy: These are the basics to the game. It is a fun way to get students to both practice multiplication and use problem solving strategies. Enjoy the game and the results you get from playing it.





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

1 2 3 4 5 6 7 8 9

