

Notes Concerning *Tic-Tac-Toe*

Level: Beginner/intermediate/advanced

Recommended # of players: 2

Materials: Tic-Tac-Toe game board; 6 Xs and 6 Os (or any 12 markers, 6 each of 2 types; see notes below)

Relationships: spatial reasoning

Notes:

The classic game of *Tic-Tac-Toe* (also known as *Noughts and Crosses*) has been around for several centuries, although its history is relatively unknown. One reason why it has endured for so long may be because it is so versatile. This game can be played virtually anywhere that a person can make marks on a surface, including on a chalkboard or paper or even sketched into dirt or sand.

Children as young as 3 years of age can play this game, although they may not play precisely according to the rules or recognize the competitive nature of the game. Frequently, when 3-year-olds play this game, they believe that the goal is simply to get 3 in a row, and that if both players achieve this goal, both have won. They do not recognize the temporal nature of the game; that is, that the *first* person to get 3 in a row is the winner.

Beginners may find it challenging to track all 8 of the potential rows of 3 that they can make (young children often fail to notice the diagonal), and may not notice when the other player is about to make a row of 3. Once they learn how to block, they may focus on blocking, and fail to notice a row of 3 that they could have made. As they become better able to coordinate these 2 goals (getting 3 in a row and blocking the other player from doing so), they may begin to notice how they can set up 2-way strategies for winning. This requires thinking 2 or more moves ahead.

Teachers interested in learning more about developmental stages in children's play of Tic-Tac-Toe can read more in DeVries, R. & Fernie, D. (1990), Stages in children's play of Tic Tac Toe. *Journal of Research in Childhood Education*, 4, 98-

111.

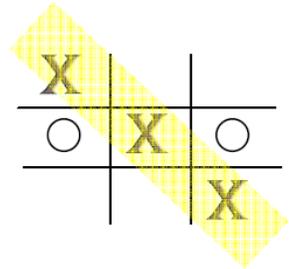
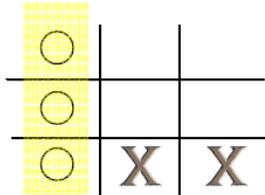
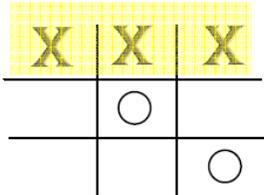
Tic-Tac-Toe

Materials: *Tic-Tac-Toe* game board, 6 X's, 6 O's

Objectives: To be the first player to get 3 X's or O's in a row.

To Play:

1. Players decide who will be X and who will be O.
2. Players decide who will go first.
3. Players take turns placing one of their markers in an empty space.
4. The first player to get 3 of their markers in a row (a straight line horizontally, vertically or diagonally) wins the game.



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