

# The Prisoner's Dilemma Tournament



## RULES OF PLAY

*“Two accomplice criminals have been arrested and separated. The district attorney offers both the opportunity to confess. Anyone who decides to do so must submit a note to the guard by the following morning. If one confesses while the other remains silent, the confessor will go free, while the other will serve the maximum sentence. If both confess, they will each serve the full sentence with a slight reduction. If neither confesses, they will face only a minor charge and thus serve a short sentence.”*

## Overview

The Prisoner's Dilemma Tournament is a print and play game for three to eight players, based on the famous problem from Game Theory, specifically inspired by the computerized tournament organized by Robert Axelrod. In this game, players must decide in each round which of the other players to cooperate with and which to defect against, with the ultimate goal of achieving the highest total score.

## Component Overview

- This rulebook
- 8 player sheet (to be reprinted for each match, according to the number of players)
- 1 first player token

Nickname

YOUR SYMBOL YOUR NUMBER **1**

2 3 4 5 6 7 8 9

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	TOT
1																					
2																					
3																					
4																					
5																					
6																					
7																					
8																					
9																					
10																					
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19																					
20																					
TOT																					

How would you rate your expertise in board games on a scale from 1 to 5? (Low) 1 2 3 4 5 (High)

Have you studied the strategy of the Prisoner's Dilemma? ☐ yes ☐ no

How many times have you played the Prisoner's Dilemma? ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5

Gender  Age

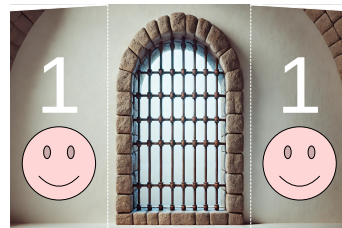
Optional questions

O: cooperate  
X: defect

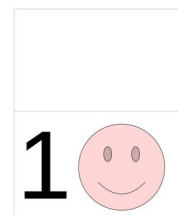
	O	X
O	3/3	0/5
X	5/0	2/2



- 8 player screen (optional, recommended if printed on cardstock)



- 8 player symbols (optional, an alternative to player screen more suitable to standard paper)



- 8 pencils or pens (**not included**).

- 11 match-end cards



# GAME SETUP

Before playing the game, perform the following steps:

1. Choose the first player, who will take the First Player Token. In case of indecision, the youngest player will go first.
2. The first player takes the Player Sheet with the number one. Proceeding clockwise, each player takes the Player Sheet with the next sequential number until every player has one.
3. Each player takes a pencil.
4. Each player takes the Player Screen with the corresponding number, if available. Otherwise, they take the Player Symbol with the same number, if available.
5. On the Player Screen, each player crosses out, by striking through the header or the entire section, the pairs of columns with numbers higher than the total number of players, as they will not be used. For example, in a five-player game, the columns labeled 6, 7, and 8 should be crossed out. Be careful not to cross out the last column on the right.
6. The player with the First Player Token shuffle the card deck.
7. Each player may choose to complete the questions at the bottom of their Player Sheet if they wish.

## POINTS

Before starting, players must have a clear understanding of the payoff matrix, which is displayed in the lower right section of the player sheet. This table specifies the points awarded for each individual encounter between players.

		opponent	
		O	X
you	O	3\3	0\5
	X	5\0	1\1

A player can choose between cooperation (O) and defect (X). The number of points obtained depends on both the player's choice and the opponent's choice. Each row in the table corresponds to one of the possible moves made by the player, while each column represents one of the possible moves made by the opponent. The first number indicates the points earned by the player, while the second represents the points earned by the opponent.

The combination that yields the highest score occurs when a player defects while the opponent cooperates: the player receives 5 points, and the opponent gets 0. The second highest-scoring combination is mutual cooperation: both players receive 3 points. The third combination is mutual defection, where both players receive 1 point. The lowest-scoring outcome occurs when a player cooperates while the opponent defects: the player gets 0 points, while the opponent earns 5.



# THE GAME ROUND


The Prisoner's Dilemma Tournament is played over 5 to 15 game rounds, each consisting of the following three phases:








1. Move planning: During this phase, moves are kept hidden. Each player secretly decides which move to execute against every other player and marks their choices on their own Player Sheet.

The Player Sheet contains a table for recording moves and scores. Each row corresponds to a round, and each pair of columns corresponds to an opponent. The first column in each pair is used to record moves: the symbol O represents cooperation, while X represents defect, as indicated in the legend at the bottom right of the Player Sheet.

*Example: A 6-player game. First round. The first player, Alex, selects a move for each of the 5 opponents and writes it in the corresponding column in the first row.*

Nickname

YOUR SYMBOL  YOUR NUMBER **1**


	2 	3 	4 	5 	6 	7 	8 	TOT	
	O/X	Points	O/X	Points	O/X	Points	O/X	Points	TOT
1	X		O		O		X		
2									








2. Move resolution: During this phase, moves are no longer kept hidden. The player with the First Player Token and the player to their left reveal their chosen moves to each other. Both players then record the points earned in the column next to the move. The first player continues clockwise, comparing their moves with each opponent and recording the corresponding points. Once the first player has completed this process, the player to their left follows the same procedure, proceeding clockwise until all players have recorded their scores. At the end of the phase, each player sums their points for the round and writes the total in the last column on the right.

The player with the First Player Token passes it to the player on their left.

*Example: The first player records the points earned in the box to the right of each move. Then, he calculate and write the total in the TOT column.*

Nickname

YOUR SYMBOL  YOUR NUMBER **1**

	2 	3 	4 	5 	6 	7 	8 	TOT	
	O/X	Points	O/X	Points	O/X	Points	O/X	Points	TOT
1	X	1	O	3	O	0	X	1	10
2									

3. End-condition check (**skipped game rounds 1 to 4**): The player with the First Player Token draws the top card from the deck and reveals it. If the card says STOP, the game ends immediately; otherwise, the next round begins.

## END OF THE GAME

At the end of the game, players sum up all their points and compare the totals. The player with the highest score wins. In case of a tie, victory is shared.

Players can also sum the scores in each individual column. This result can be used to verify the accuracy of the total recorded in the last column and to assess how many points were gained from interactions with each opponent.

## TERMS OF USE

The Prisoner's Dilemma Tournament is a board game adaptation, created by Filippo Gandino, of an iconic example from game theory. Specifically, it is based on the famous computerized tournament conducted by Robert Axelrod.

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