Game of Nim

Rules

Nim is a two-player game of logic and strategy. The goal of Nim is to be the player who marks the last of ten circles on the gameboard. A player must mark one or two circles during their turn. The player who marks the last circle wins!

Questions for Students:
• Is this game fair regardless of who goes first or second?
• How many circles do you need your opponent to leave you to ensure that you’ll win?
• What is your strategy?
• How would your strategy change if you could pick 1, 2, or 3 circles?

NCTM Standard: Problem Solving

Grade level: Grades 4–8
Number of players: 2
Materials: pencil, gameboard
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Gameboards

Game 1

Game 2

Game 3