

# Pattern Match

**Object:** to guess an arrangement of pattern blocks

**Materials needed:** two sets of four pattern blocks

**Number of players:** 2

## Teacher Preparation

none

## Game Play

- **Playing the game**

Player 1 arranges four pattern blocks in a row out of the view of player 2. Player 2 then uses his or her pattern blocks to guess the arrangement made by player 1. After each attempt, player 1 informs player 2 of the number of blocks that are in the correct position, without revealing which blocks they are. Play continues until player 2 correctly guesses the arrangement.

Once player 2 correctly guesses the arrangement, he or she arranges four pattern blocks out of the view of player 1, and play continues as above.

- **Winning the game**

The winner is the player who uses fewer guesses to find the correct arrangement.

- **Variations**

Players use more than four pattern blocks.

Each player uses his or her pattern blocks to form a shape that the other player must guess.

## Discussion

Encourage students to discuss their strategies for guessing the pattern, especially what they thought when told how many blocks were correct each time. Also, have the students consider the number of permutations that are possible for different numbers of pattern blocks.

