

PARALLEL AND PERPENDICULAR

11	2/4
Level	2 (Age group 8 – 10)
Resources Required	Toothpicks
	10 cards per player with 4 perpendicular, 4 straight and 2 parallel cards
	Chalk or pen to mark the start and finish line
Alternate Options for the Resources	Twigs (any straight small sticks) that are all the same length
	Make 10 cards per player for example if there are 3 players then 30 cards are needed. For every 10 cards, there should be 4 cards that say straight,
	perpendicular and straight and 2 that say parallel
Strand Covered	Shape and Measurements
Targeted Skills	Identify, recognize or draw parallel and perpendicular lines
Inspired by	EAA
Time Required	10 minutes to prepare
	15 minutes to play
Previous Learning Required	Background on straight, perpendicular and parallel lines. Right
	angles.
Support Required	Medium support

Rules of the Game:

Goal	Reach the finish line with the least possible sticks
Rules	The rules of the three cards include:
	 Straight card: The toothpick is placed contiguously in a straight line either in the straight forward direction to the goal (finish line) or in an upward direction depending on the direction of the previous toothpick.
	For example: or I
	 Perpendicular card: The toothpick is placed at a right angle to / perpendicular to the previous line (*this can either move you in the upward direction or back to the forward direction towards the goal.
	For example: _ I or I _
	 Parallel card: The toothpick is placed parallel to the previous one this could be either in the upward direction or straight forward direction depending on the direction of the previous toothpick.



	For example: I I or = If a perpendicular card is picked in the first round, the first toothpick will be placed	
	facing upward or away from the straight forward direction of the goal.	
	For example:	
	Start Image: Start Image: Start Image: Start Image: Start Image: Start Finish Image: Start Image:	
	If a parallel card is picked in the first round, this will be discarded to the bottom of	
	the pool of cards and a new card will be picked.	
Steps	 Step 1: Set a start and finish line per player. The finish line needs to be 10 straight sticks away from the start line Step 2: Keep the shuffled pack of cards in the center between the players 	
	Step 3: In each round players pick one card from the pack and they have place sticks based on the rule that it suggests	
	Step 4: The player that reaches the finish line with the least number of sticks wins	
Images or Illustrations	Example of how a game might look like:	
	Play 1: Straight	
	Play 2: Parallel	
	Play 3: Perpendicular Play 4: Straight	
	Play 5: Perpendicular	
	Play 6: Straight	
	Play 7: Perpendicular	
	Play 8: Parallel	
	Play 8: Perpendicular	
	Play 9: Straight	
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