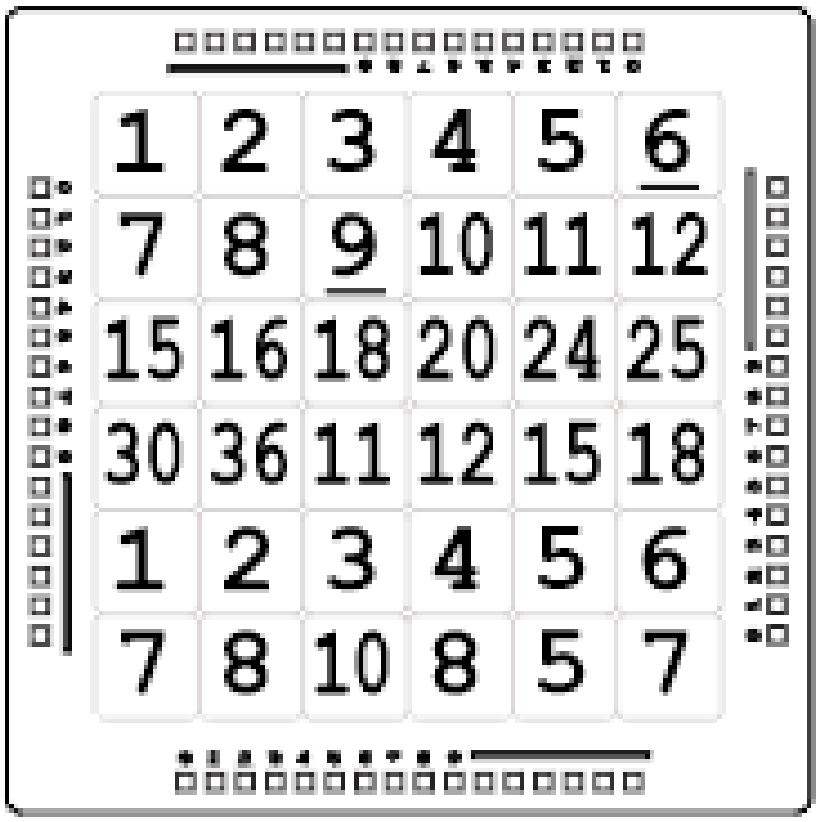
MATH TAC TOE

Mathematical Dice Game

(Updated March 10, 2020)

Math Tac Toe is a strategic dice game where two to four players attempt to control sufficient territory using mathematical equations. Players take turns flipping tiles in a 6x6 grid using dice rolls. The arrows on the flip side will point towards the player. Aligning enough adjacent arrows towards a player causes the player to score points.



LASERCUT COMPONENTS:

- 6x6 game board for up to four players with …
- 4 integrated scoring tracks and score markers
- 36 numbered tiles
- Two dice.

SETUP: Place all the tiles face up in the grid randomly. Reset the score board markers to 0.

GAME PLAY:

On each turn, a player will…

- Roll both dice
- Determine the two to four math equations using both numbers (see chart below)
- Flip any tile that matches that matches the answer to one of the mathematical equations based on the two numbers rolled.
- Align the arrow to point to the player
- Look for sufficient adjacent arrow alignments to score one point (see patterns below)
- After scoring, flip the tiles back to their numbered faces.

NOTES:

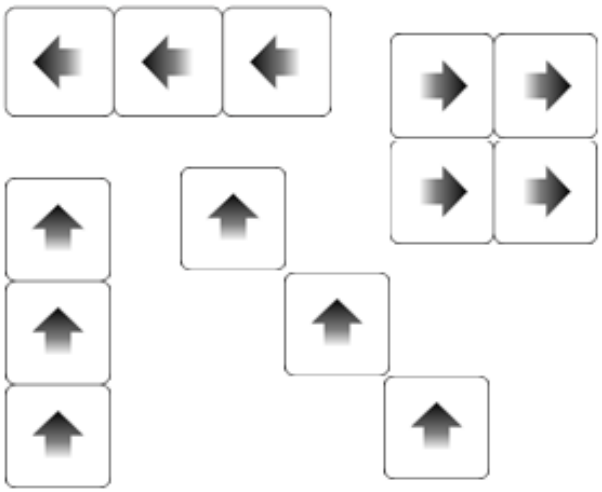
- When a die roll has **no matching answer**, call out your equation then choose a random opponent's arrow and flip it over to reveal its number. Should the number match your answer, flip it back and point the arrow to you. Score if possible.

STRATEGIES:

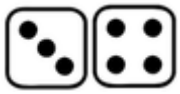
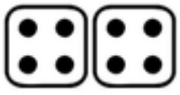
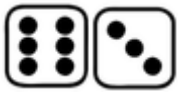
- Don't always flip a tile to point to yourself. Thwart your opponent with a potential block.
- Try to remember where numbers are in case you get a chance to flip back an arrow (when there is no match).

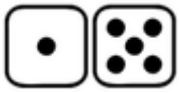
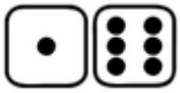
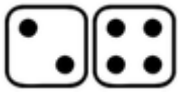
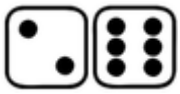
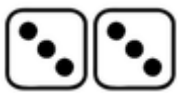
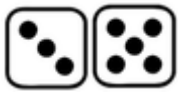
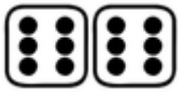
Winning Patterns

Three arrows in a straight line in any direction and a 2x2 square are the winning patterns to score one point:



Mathematical Die Rolls

Dice Rolls	Equations
	1+1=**2** 1÷1=**1**
	1+2=**3** 2-1=**1** 2x1=**2**
	1+3=**4** 3-1=**2** 3x1=**3**
	2+3=**5** 3-2=**1** 2x3=**6**
	2+5=**7** 5-2=**3** 2x5=**10**
	2x2=**4** 2÷2=**1**
	3+4=**7** 4-3=**1** 3x4=**12**
	4x4=**16** 4÷4=**1** 4+4=**8**
	6+4=**10** 6-4=**2** 4x6=**24**
	6-5=**1** 5+6=**11** 6x5=**30**
	6-3=**3** 3+6=**9** 6x3=**18** 6÷3=**2**

Dice Rolls	Equations
	1+4=**5** 4-1=**3** 4x1=**4**
	1+5=**6** 5-1=**4** 5x1=**5**
	1x6=**6** 6-1=**5** 6x1=**6**
	2+4=**6** 4-2=**2** 2x4=**8**
	2+6=**8** 6÷2=**3** 6x2=**12** 6-2=**4**
	3x3=**9** 3÷3=**1** 3+3=**6**
	5-3=**2** 3x5=**15** 5+3=**8**
	4+5=**9** 5-4=**1** 4x5=**20**
	5+5=**10** 5÷5=**1** 5x5=**25**
	6÷6=**1** 6+6=**12** 6x6=**36**

Alternate Game: Use three dice and use sums.

Bonus Points: If you are able to complete two shapes with one flip, score an extra point.

Steal Rule: If a player misses their own winning line up of arrows, then any other player can steal the win.

Brainy Games lasercuts all sorts of other games.

Visit www.BRAINY.games for more unique games.