FractWards

Rules

- 1. On each turn, you will roll all four dice. You can make any two fractions, using all numbers facing up as either numerators or denominators.
- 2. If you decide to make one of your fractions a whole number, you must make this number negative.
- 3. Write these two fractions of your choice on your worksheet, and add them.
- 4. Move forward the sum of your fractions, or backward if your result is negative. On the first round, since you are starting off of the board, you will find the sum on the Game Board. For the following rounds, you will have to add the sum of fractions from the dice to your 'Old Spot' on the Game board. Hence, the last two columns on your worksheet. If you have to move so far back it takes you off of the board, consider yourself starting over and starting at zero again.
- 5. If you can create two equivalent fractions, you win another turn! Roll the dice again before passing the dice to your opponent.
- 6. If you get the same number on all of the four dice, you must move your piece to the beginning (zero) and start over.
- 7. If you land on one of the special icons (smile, heart, sun or cube), you must move to the matching icon. This will sometimes mean you advance, and sometimes mean you digress. So be clever in the fractions you create!
- 8. The winner is the player that gets to the end of the Game Board first. You do not have to land exactly on the last square (16) to win; your sum may take you past.

NCTM Standard: Number & Operations, Problem Solving

Grade level: Grades 6-8

Number of players: 2 or more (less is better)

Materials: Gameboard (1 for each game), different gamepiece for each player (paper clip, button, penny, M&M, etc.), 4 special dice (see following template), recording sheet for each player

FractWards Student Recording Sheet

First Fraction	Second Fraction	Sum of Fractions	Old Spot on Game Board	New Spot on Game Board	
			3 9		
	*				
d					
*				**************************************	

≥ (3)								
YOU WIN	∞	2	9	2	4	3	2	1
	95/12 →	1 83/12 →	71/12 →	59/12 →	47/12 ≯	35/12 →	23/12 →	11/12 >
	↑	↑	↑	↑	↑	1	↑	↑
	47/6	41/6	35/6	29/6	23/6	17/6	11/6	9/9
	↑	↑	↑	↑	↑	^	↑	↑
	31/4	27/4	13/4	19/4	15/4	11/4	7/4	3/4
					↑	↑	↑	
	23/3	20/3	17/3	14/3	11/3	8/3	5/3	2/3
	→	→	→	→	†	↑	↑	→
	91/12	79/12	67/12	₹ 55/12	43/12	31/12	19/12	7/12
	↑	↑	↑	↑	↑	1	↑	^
	15/2	13/2	11/2	9/2	7/2	5/2	3/2	1/2
	↑	↑		↑	↑	↑	↑	
	89/12	77/12	65/12	53/12	41/12	29/12	17/12	5/12
		∀	→		↑	↑	↑	
	22/3	19/3	16/3	13/3	10/3	7/3	4/3	1/3
	↑	↑	→	↑		↑	↑	↑
	29/4	25/4	21/4	17/4	13/4	9/4	5/4	1/4
	↑	^	↑	1	个	↑	↑	↑
	43/6	37/6	31/6	25/6	19/6	13/6	9/2	1/6
	↑	↑	↑	↑	↑	↑	1	ART →
	85/12	73/12	61/12	49/12	37/12	25/12	13/12 →	← START

FractWards Dice Template

