Game Rules

Number of Players: 2–4
Ages: 8 and up
Game Pieces Included: 22 Red Tiles, 17 Blue Tiles, 14 Green Tiles, 89 Yellow Tiles, and 2 "Wild" Tiles

Game Board Set Up:
Break apart the tile sets. Once separated, the tiles can be stored in the appropriate drawstring bag.
1. Remove the tiles from the bag and separate them according to color, placed number side down.
2. Randomly select 10 Red Tiles and place a tile number side faceup on each red space on the game board.
3. Randomly select 7 Blue Tiles and place a tile number side faceup on each blue space on the game board.
4. Randomly select 4 Green Tiles and place a tile number side faceup on each green space on the game board.
5. The game board is now ready for play.

Player Set-Up:
1. Place all yellow tiles number side facedown to the side of the game board to form a draw pool.
2. To decide who plays first, each player draws a yellow tile. Highest number goes first. In the case of a tie for the highest number, the players who tied draw again until one has a higher number.
3. A "wild" tile is considered higher than any number tile.
4. Once first player is determined, replace yellow tiles in the draw pool and remix.
5. Players each draw 5 yellow tiles and place the tiles number side faceup on their side of the board. The yellow tiles drawn are their play tiles.

How to Play Sums of 1: Fractions
1. Each player gets 5 yellow play tiles and a score sheet.
2. The goal of each play is to make a sum of 1 by placing yellow play tiles on the board horizontally and/or vertically.
3. Taking turns, each player adds one or more yellow play tiles to a row or column of tiles already on the board. The tiles played must touch at least one tile already on the board.
4. The sum of all the yellow, red, and blue (or green) tiles in the horizontal and/or vertical play must equal 1.
5. Player completes his/her turn by recording the score for that play on the score sheet. Player then draws new tiles from the draw pool to replace the tiles played on that turn.
6. Play continues in a clockwise direction.
7. The game ends when all yellow tiles have been drawn and a player has played all his or her tiles (goes out) OR no player can play a tile.

Scoring:
Players earn 10 points for each sum of 1 made plus 3 points for each yellow tile played per turn. If a player is able to use all 5 tiles in one play, the player receives a 30-point bonus.

Trading or Passing:
Players may choose to either trade or pass during any turn. If players choose to trade, they place one or more tiles facedown in the draw pool and then draw the same number of new tiles. If a player chooses to trade, 3 points are deducted from the player's score for each tile traded. If a player chooses to pass, he or she simply loses a turn. There is no penalty for passing.

"Wild" Tiles:
Two yellow "wild" tiles are included. They may be played as any fraction with the denominator 1, 2, 4, 8, or 16 (units, halves, fourths, eighths, or sixteenths). When playing a "wild" tile, the player must name the fraction the tile represents. It remains that fraction for the rest of the game. It may be helpful to record the value of the "wild" tile to avoid confusion.

+10 Squares:
The first sum of 1 that covers any of the +10 squares earns an extra 10 points. Future sums of 1 that connect to that tile do not earn the additional 10 points. If, on a single play a player makes a vertical and horizontal sum of 1 such that the +10 lies under both sums, that player receives the +10 twice, for a total of 20 points.

Time-limited Versions:
- Use a smaller draw pool (i.e., divide in half the number of yellow tiles as in the basic game).
- Set a time limit for game play. The player who has the most points when time runs out wins the game (assuming each player has had an equal number of turns).

Bonus Ending:

The first player to play his/her last tile after the draw pile is empty gains 1 bonus point for each unplaced tile his opponents have remaining.

Examples: Playing and Scoring

1. Player One has drawn the following tiles:

$\frac{1}{16}$	$\frac{1}{16}$	$\frac{1}{4}$	$\frac{3}{8}$	$\frac{5}{16}$

Player One plays a 1/16, 1/16, and 3/8 on the game board, as shown:

	$\frac{1}{16}$	$\frac{1}{4}$	$\frac{2}{8}$	$\frac{1}{16}$	$\frac{3}{8}$	+10

This play earns Player One 19 points: 10 points for the sum of 1 and 3 points for each yellow tile played.

The player may decide, instead, to place 1/16, 1/16, and 3/8 after the blue tile, thus covering the "+10" square and earning an additional 10 points.

		$\frac{1}{4}$	$\frac{2}{8}$	$\frac{1}{16}$	$\frac{1}{16}$	$\frac{3}{8}$

2. Player One plays a 2/4, 1/16, 1/16, and 3/8 on the board, as shown below.

				$\frac{2}{4}$	$\frac{2}{16}$	$\frac{2}{8}$	$\frac{2}{16}$
				$\frac{1}{16}$			
				$\frac{1}{16}$			
		$\frac{4}{16}$	$\frac{3}{8}$	$\frac{3}{8}$		+10	

This play connects two horizontal rows of tiles, allowing Player One to make the sum of 1 three ways: 2/4 + 2/16 + 2/8 + 2/16 and 4/16 + 3/8 + 3/8 horizontally, and 2/4 + 1/16 + 1/16 + 3/8 vertically.

Player One earns 10 points for each sum of 1 made (30 points) plus 3 points for every yellow tile played (3 x 4 = 12), for a total score of 42.

2/4 + 2/16 + 2/8 + 2/16	or 10 points
4/16 + 3/8 + 3/8	or 10 points
2/4 + 1/16 + 1/16 + 3/8	or 10 points
3 × 4	or 12 points
Total points	**42**

Note: Whenever tiles are placed touching other tiles, the resulting sum must be 1. The same 4 yellow tiles may not be played as shown below, as the horizontal sum at the bottom, 4/16 + 3/8 + 1/16, is not equal to 1.

				$\frac{2}{4}$	$\frac{2}{16}$	$\frac{2}{8}$	$\frac{2}{16}$
				$\frac{1}{16}$			
				$\frac{3}{8}$			
		$\frac{4}{16}$	$\frac{3}{8}$	$\frac{1}{16}$		+10	