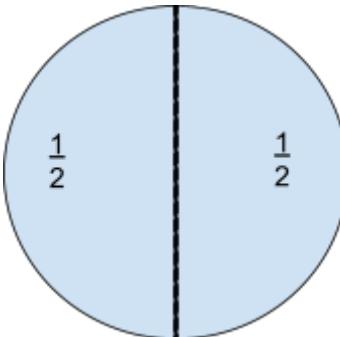


## FRACTIONS FIRST!

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<b>Level</b>	3 (Age group 12-14)
<b>Resources Required</b>	8 paper plates Scissors Pencil and paper
<b>Alternate Options for the Resources</b>	To make a paper plate, players can: 1. Take a sheet of paper 2. Trace a circular object onto the paper (the mouth of a bowl or ceramic plate) 3. Cut out the circle, repeat up to 8 times per player.
<b>Strand Covered</b>	Numbers and Operations
<b>Targeted Skills</b>	Multiplying and dividing Fractions
<b>Inspired by</b>	We are the teachers
<b>Time Required</b>	15 minutes for the game 30 minutes to prepare the game
<b>Previous Learning Required</b>	Knowledge of fractions with different and equal denominators Knowledge on adding fractions
<b>Support Required</b>	Medium support

### Rules of the Game:

<b>Goal</b>	To be the first to write up 8 fraction sums that add up to 1
<b>Rules</b>	1. Before a fraction is written, the players must show evidence by piecing together the paper plate fractions 2. This game can accommodate 4-5 players
<b>Steps</b>	Preparation: 1. Take the 8 paper plates and cut 2 plates into 2 (halves), 2 plates into 3 (thirds), 2 plates into 4 (quarters) and 2 plates in 8 (eighths). 2. Write on each segment, the fraction that the plate is. For example, if it's a segment from the plate that was cut into 3, write "1/3" on each segment. Example of 1/2:  3.

	<p>4. You should have 34 pieces of cut up plates now that are all labelled.</p> <p>The game:</p> <p>Step 1: The players sit in a circle with the pile of paper plate segments in the middle. They each have a sheet of paper and a pencil.</p> <p>Step 2: Players take turns multiplying and dividing any two pieces together. E.g.: player 1 picks up <math>\frac{1}{2}</math> and <math>\frac{1}{3}</math> and divides them to get <math>\frac{3}{2}</math>. They get one point for every correct answer.</p> <p>Step 3: Each player plays at least twice alternating between division and multiplication of at least 2 pieces (fractions).</p> <p>Players can choose to do more at a time - for example 3 or 4 fractions. They can also get a bonus if they express their answer in decimal form.</p>
<b>Enrichment</b>	Use more complicated fractions: 1) Different unit fractions ( $\frac{1}{7}, \frac{1}{9}, \frac{1}{11}$ ) 2) Fractions with non-unit numerators and denominators ( $\frac{2}{5}, \frac{3}{7}$ , etc.)
<b>Simplification</b>	1. The first to 5 sums wins