## Trash Can Basketball Contest

| Player\#1 | Number of <br> Tosses | Number of <br> "Baskets" (Use <br> tallies) | Score as a <br> fraction | Score as a <br> decimal | Score as a <br> percentage |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |
| Player \#2 | Number of <br> Tosses | Number of <br> "Baskets" (Use <br> tallies) | Score as a <br> fraction | Score as a <br> decimal | Score as a <br> percentage |
|  |  |  |  |  |  |

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|  |  |  |  |  |  |

This is your chance to demonstrate your basketball skills! You have been chosen to participate in a paper-ball throwing contest.

## Directions:

1. Use the scrap paper to make 10 paper balls per group. (Wad the paper balls up tightly so they are easier to aim.)
2. Place a trash can (or other large container) 5 feet away.
3. Take turns with your partner(s) throwing the ten paper balls into the trash can. Your partner will collect data using tally marks on the chart below to show how many of the 10 paper balls went into the trash can.
4. When each player has thrown their paper balls, on your own paper, add the fractions, multiply the fractions, and divided the fractions if you are up for the challenge!!
5. When each player has completed the fraction problems, add the decimals, multiply the decimals, and divided the decimals.
6. If you have completed both the fraction and decimal problems then see if you can improve your basketball skills and play again!

## Simplifying Fractions Card Game

## What You Do:

Create a fraction bar sheet by drawing a line across a piece of paper.
Set up the game so that the players face one another. For each pair of two players, you'll need to create a separate fraction game board.

Shuffle the deck of cards.
Distribute the deck evenly between the two players.
Have the players' place their decks face down in front of them.
Players should begin by simultaneously turning over a card from their decks and place it on the fraction bar sheet. Each player should place one card above the fraction bar. The cards above the fraction bar represent the numerator.

Then, players should place one card below the fraction bar. The card below the bar represents the denominator.

There should be a card above the bar and a card below the bar.
The first player to correctly simplify the fraction shown by the cards wins all four cards. If a tie results, split the cards evenly.

If the fraction can't be simplified, each player should collect the card that the other player put down and position it at the bottom of his deck.

Play continues until one player has accumulated all of the cards.
Alternatively, you could set a time limit on the game. When time is up, the player with the most cards wins!

## SOLAR Lesson

## Ashley Birrenkott

$5^{\text {th }}$ Grade Math (review)
Materials:
recycled paper
Playing cards
Trash cans/bins
White boards

## Standards:

5.NF. 1 Add and subtract fractions with unlike denominators (including mixed numbers) by replacing given fractions with equivalent fractions in such a way as to produce an equivalent sum or difference of fractions with like denominators
5.NBT. 7 Add, subtract, multiply, and divide decimals to hundredths, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used.

## Objectives:

Students will be able to produce their own fraction/decimal problems during game play.
Students will be able to produce answers for simplifying fractions
Students will be able to demonstrate good sportsmanship and respect towards partners and classmates

## Lesson

Since the students are transitioning to adding and subtracting whole numbers, this lesson will proved the review they need to make sure their basic fraction/decimal skills are where they need to be.

The students will be split into two large groups and then further divided into pairs.
One group will play trashcan fractions and the other group will play fraction simplifying cards. Each group will get around 25-30 mins at each game.

## Assessment

The students will be assessed on participation during review games, their work from the basketball trashcan game, and their respect for others

## Review

