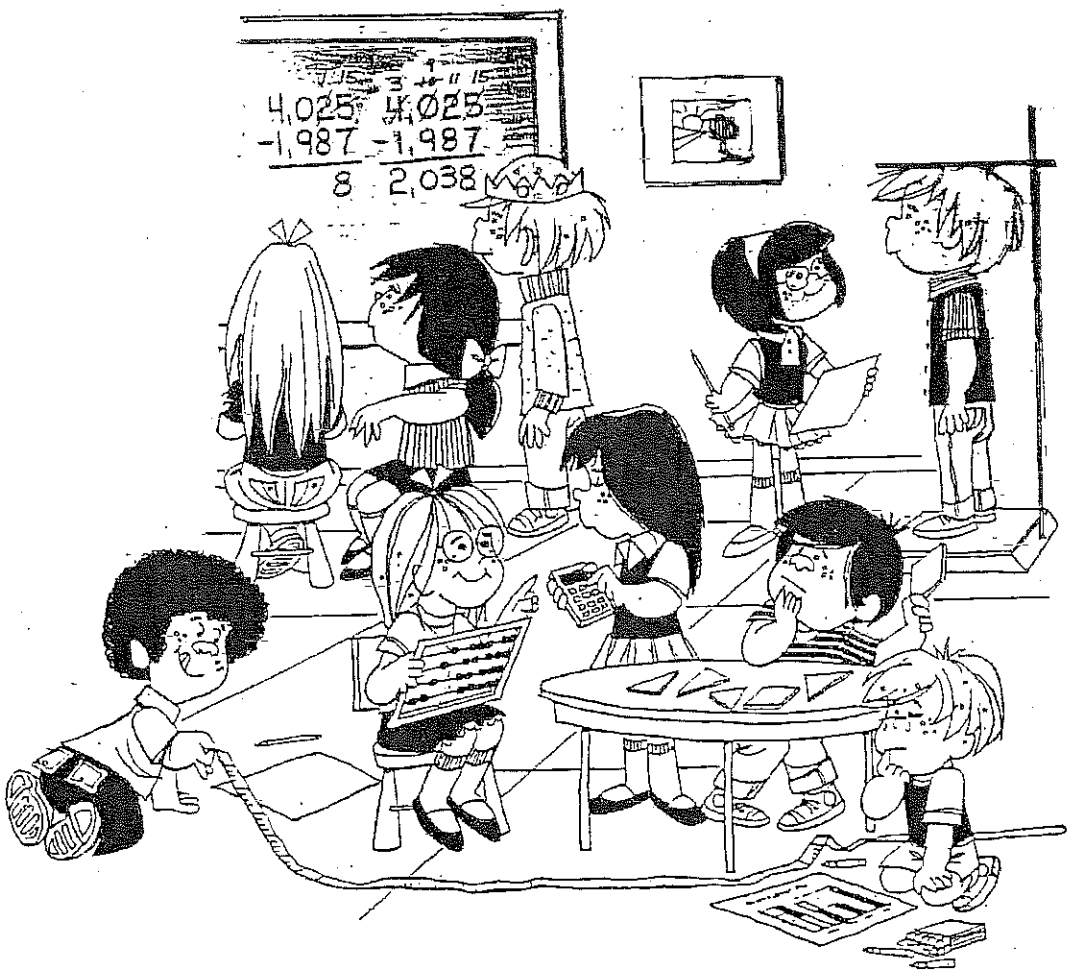
Using the

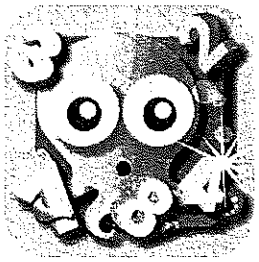
Georgia Standards of Excellence



Grades 4/5
Henry County
March 14, 2016
Math Stations

Learners Advantage
www.learnersadvantage.com

Addition & Subtraction



Activity 1: Close to Zero (deck of cards)

- Shuffle a deck of cards and place them face down in a stack. Take 6 cards each from the top of the stack and use them to create a subtraction problem with two 3-digit numbers. Arrange your cards to make a difference as close to zero as possible. Record and solve your subtraction problem. Use a calculator to check each other's work. The player with the difference closest to zero scores one point. The player with the most points after five rounds wins the game.

Activity 2: Money Trade In (Versions 1, 2, 3) (counters, spinner)

- Player 1 spins the money spinner, they will then use their counters to cover that coin amount. Player 2 spins and on their board they will use their counters to cover the coin amount that they rolled. This play will continue for each player. As each player spins, they will continue to add on to their total, trading up small coin amounts for larger coins. Ex: When a player has 5 pennies and 1 nickel covered up, they can trade their counters up for a dime. All trade-ins should happen on their turn. The goal of the game is to be the first player to trade up to $5.
- Each player starts with one counter on the $5 bill. Player 1 spins the money spinner, they will then subtract that amount from their $5. This will require trading in their $5 for smaller bills and coins. Player 2 spins and will also subtract the amount from their $5. As each player spins, they will continue to subtract from their total, each time counting down. The goal of the game is to be the first player to spend all their money down to zero.
- Each player will cover $2 and 50¢ on their boards. This can be created by any combination of coins and bills that the player decides. Player 1 spins the money spinner and the operation spinner. The operation spinner determines if the player will add or subtract the money amount that they spun. This play will continue for each player. As each player spins, they will continue to add on or subtract from their total, trading up to larger coins or trading down to smaller coins of equal value. Ex: When a player has 5 pennies and 1 nickel covered up, they can trade their counters up for a dime. All trade-ins should happen on their turn. The goal of the game is to be the first player to reach $5.

Activity 3: Decimal Golf (Dice)

- Players will take turns rolling the double die and using the two numbers to create a decimal number. Ex: rolled a 2 and a 5 could create .25, .52, 2.5, 5.2. The number created should be as close to par as possible for that particular round. Players will record their turns on their recording sheet. After each player goes in a round, they determine who was closest to par. The player who was closest will circle their turn for that round. If there is a tie, both players circle their turn. Play continues until each has shot all nine holes. The winner is the player at the end who has the most circled turns. Students can use any manipulatives needed to help with the computation in this game. The focus should remain on comparing decimal numbers rather than adding and subtracting. Players can use a calculator to verify their reasoning about who was closest each time.

Close to Zero

Materials: Deck of cards

- Shuffle a deck of cards and place them face down in a stack.
- Take 6 cards each from the top of the stack and use them to create a subtraction problem with two 3-digit numbers.
- Arrange your cards to make a difference as close to zero as possible.
- Record and solve your subtraction problem.
- The player with the difference closest to zero scores one point.
- The player with the most points after five
- rounds wins the game.

Money Trade In

Materials: counters, spinner

Version 1

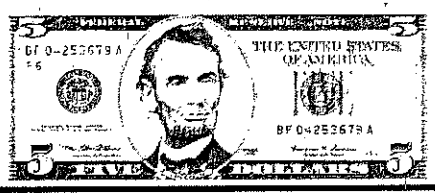
- Player 1 spins the money spinner, they will then use their counters to cover that coin amount.
- Player 2 spins and use their counters to cover the coin amount that they rolled.
- Play continues for each player.
- As each player spins, continue to add on to your total, trading up small coin amounts for larger coins. Ex: When a player has 5 pennies and 1 nickel covered up, they can trade their counters up for a dime. All trade-ins should happen on their turn.
- The goal of the game is to be the first player to trade up to $5.

Version 2

- Each player starts with one counter on the $5 bill.
- Player 1 spins the money spinner, and subtracts that amount from the $5. This will require trading in their $5 for smaller bills and coins.
- Player 2 spins and also subtracts the amount from their $5. As each player spins, they will continue to subtract from their total, each time counting down. The goal of the game is to be the first player to spend all their money down to zero.
-

Version 3

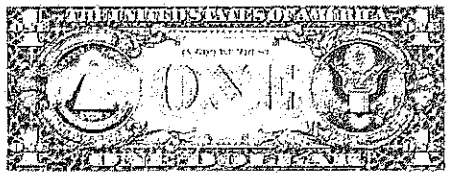
- Each player will cover $2 and 50¢ on their boards. This can be created by any combination of coins and bills that the player decides.
- Player 1 spins the money spinner and the operation spinner. The operation spinner determines if the player will add or subtract the money amount that they spun.
- Play will continue for each player. As each player spins, they will continue to add on or subtract from their total, trading up to larger coins or trading down to smaller coins of equal value. Ex: When a player has 5 pennies and 1 nickel covered up, they can trade their counters up for a dime. All trade-ins should happen on their turn.
- The goal of the game is to be the first player to reach $5.

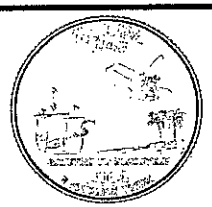

THE UNITED STATES OF AMERICA
FIVE DOLLARS


ONE


THE UNITED STATES OF AMERICA


THE UNITED STATES OF AMERICA


ONE




LIBERTY

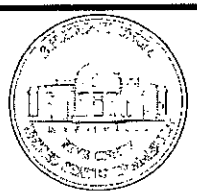

ONE DIME

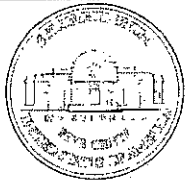

LIBERTY

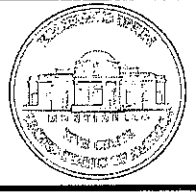

ONE DIME


LIBERTY


ONE DIME







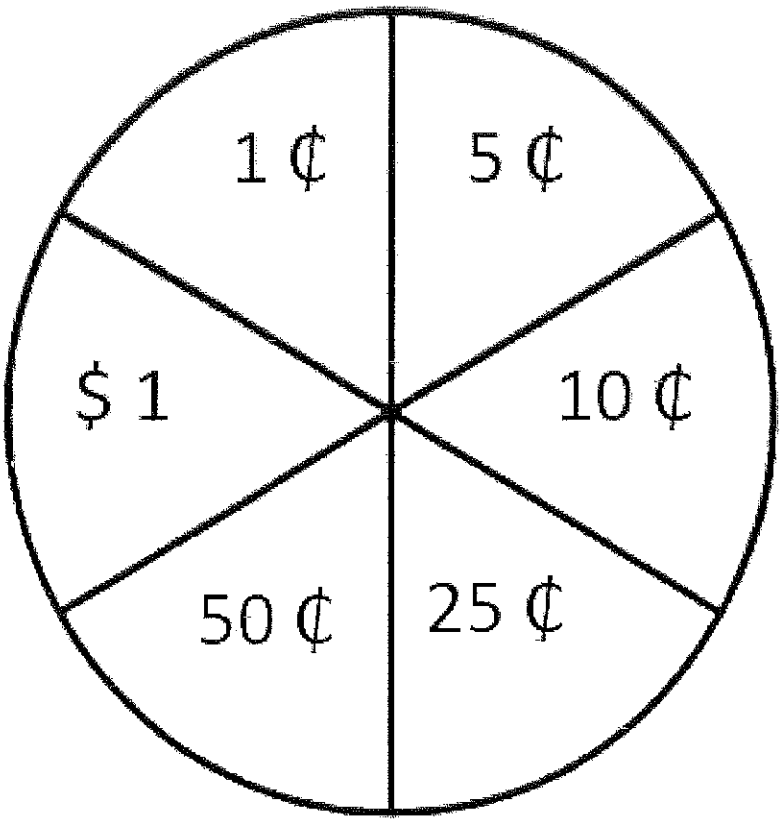

ONE CENT

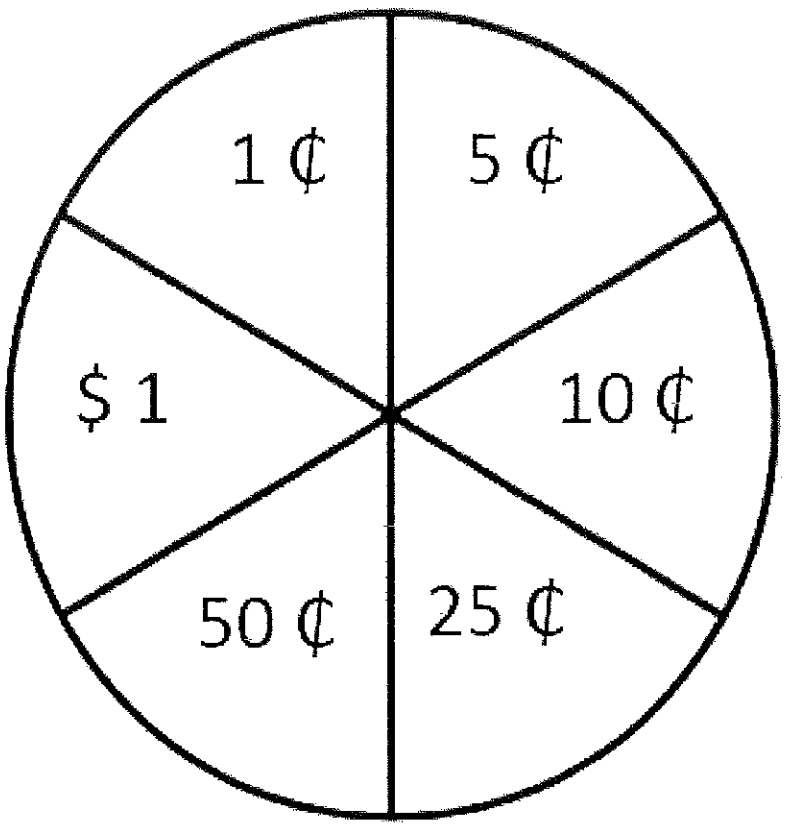

ONE CENT


ONE CENT


ONE CENT


ONE CENT


1 ¢
5 ¢
$ 1
10 ¢
50 ¢
25 ¢


1 ¢
5 ¢
$ 1
10 ¢
50 ¢
25 ¢

Decimal Golf

Materials: Dice

- Players will take turns rolling the double die and using the two numbers to create a decimal number. Ex: rolled a 2 and a 5 could create .25, .52, 2.5, 5.2. The number created should be as close to par as possible for that particular round.
- Players will record their turns on their recording sheet.
- After each player goes in a round, they determine who was closest to par.
- The player who was closest will circle their turn for that round.
- If there is a tie, both players circle their turn.
- Play continues until each has shot all nine holes.
- The winner is the player at the end who has the most circled turns.

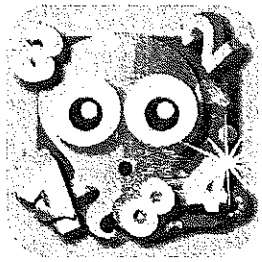
Hole Number	1	2	3	4	5	6	7	8	9
Par	0.25	1.0	0.15	0.5	0.64	3.5	0.58	1.3	0.22
Player One: ______									
Player Two: ______									

Hole Number	1	2	3	4	5	6	7	8	9
Par	0.25	1.0	0.15	0.5	0.64	3.5	0.58	1.3	0.22
Player One: ______									
Player Two: ______									

Hole Number	1	2	3	4	5	6	7	8	9
Par	0.25	1.0	0.15	0.5	0.64	3.5	0.58	1.3	0.22
Player One: ______									
Player Two: ______									

Hole Number	1	2	3	4	5	6	7	8	9
Par	0.25	1.0	0.15	0.5	0.64	3.5	0.58	1.3	0.22
Player One: ______									
Player Two: ______									

Fractions



Activity 1: Equivalence Go Fish (Fraction cards)

- Deal five cards to each player. The rest of the cards are put in the middle as the draw pile. If any player has any matches, they are able to put them down. Players will take turns asking one another for an equivalent match for a fraction they have in their hand. If a match is given, they are able to put it down and ask for another. If no match is given, the player must "Go Fish" from the draw pile. Play continues until the "pond" is depleted. The player with the most equivalent matches wins!

Activity 2: Cover Up & Uncover (Strips of a whole, halves, fourths, eighths, sixteenths, Spinner)

- **Cover**: Take turns spinning the fraction spinner. On your turn, the fraction that comes up on the spinner tells what size piece to place on the whole strip. Check with your partner to be sure he or she agrees with what you did. After finishing your turn, say "Done" and pass the die to your partner. The first player to cover his or her whole strip exactly wins. If you need only a small piece, $\frac{1}{8}$ or $\frac{1}{16}$ for example, and you spin $\frac{1}{2}$ or $\frac{1}{4}$ you can't play. You must spin a fraction smaller than or exactly what you need.
- **Uncover**: Each player covers his or her whole strip with the two $\frac{1}{2}$ pieces. Take turns spinning the fraction spinner. On your turn, take one of the three options: Remove a piece (only if you have a piece the size indicated by the fraction on the spinner), Exchange any of the pieces on your whole strip for equivalent pieces, Do nothing. Check with your partner to be sure he or she agrees with what you did. After finishing your turn, say "Done" and pass the spinner to your partner. The first player who removes all pieces from the whole strip wins. **Note:** You may not remove a piece and exchange on the same turn; you can only do one or the other. **Note:** You have to go out exactly. This means that if you have only one piece left and roll a fraction that is larger, you may **not** remove the piece.

Activity 3: Closest to 0, $\frac{1}{2}$, 1 (fraction cards, spinner)

- Cards are evenly distributed between two players. Each player turns over their top card and the spinner is spun. Whichever player's card matches the spinner gets to keep the 2 fraction cards. The player with the most cards after every card has been played wins. In order to prove which card is *more* or *less*, players must go through the following steps:
    1. Players must first discuss which fraction they think matches the spinner (why and how they know) (abstract)
    2. Players must identify where each card would be on the number line by placing a chip. (representation)
    3. Players verify their answer by modeling through fraction bars, circles, etc... (concrete)

Activity 4: Build a Fraction Wall (fraction word and numeral cards)

- Work with a partner. Place the cards face down in two stacks. One stack should have numerals and the other stack fraction words. Take turns to turn over two cards (one from each stack) and write your initials in a matching fraction on your Fraction Wall. For example, if you turn over 2 thirds you could write your initials in 2 thirds or in 4 sixths because they are equivalent. If you use an equivalent fraction use the math talk sentence to explain your thinking. If your turn over a card marked 'Free Choice Denominator' you may choose any denominator that you need. If you do not have the fraction on your board miss a turn. The winner is the person with the greatest number of wholes when there are no cards left in the stacks. Use fraction tiles to justify and check equivalencies.

Activity 5: Fraction Tracks (fraction cards, chips/counters)

- The object of the game is to capture chips by landing exactly on 1 on any track. When a player lands on 1, the player wins the chip. Start the game by placing one chip on each track, either at the beginning of each track or at randomly selected points for fractions less than $\frac{3}{4}$. Players take turns choosing a card from the deck. The fraction on the card is the total move a player must make using one or more chips. It does not indicate points to land on. Move a chip or chips to total the amount shown on the card. The play can move on one track or on several tracks, but the total must equal the fraction on the card. If this cannot be done, the player must pass. A play may not "wrap around" and keep going on the same track within a turn. When a player lands on 1, the player wins that chip. When a chip is won, place a new chip at 0 on the same track so the next player has access to a chip on every track.

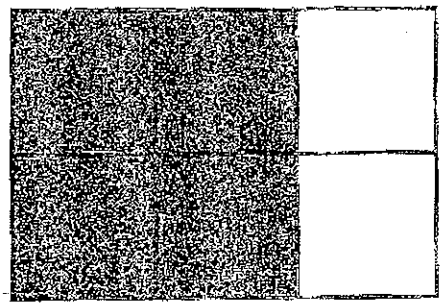
Activity 6: Snag a Spoon (plastic spoons, fraction/decimal cards)

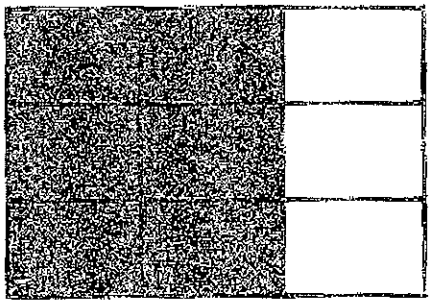
- In the middle of the table, place one less spoon than the number of players. For example, if there are 5 players, use 4 spoons. Deal 4 cards to each player and explain the rules. The object is to get "4 equivalents of a kind", for example .30, 30/100, 3/10, 6/20. The dealer will begin by taking the top card from the deck. She will look at it and decide if she wants to keep it or pass it. If she keeps it, she must discard one of her cards and pass it face-down to the next player. If she doesn't want it, she simply passes the card face-down to the next player. Play continues in a circle until one player gets "4 equivalents of a kind". That player grabs a spoon - trying to do so secretly. As soon as another player notices someone has grabbed a spoon, he should grab one, too! Suddenly, everyone will be grabbing for a spoon! The player who does not get a spoon is out. Remove one and continue playing until there are no spoons left - whoever gets the last one is the champion!

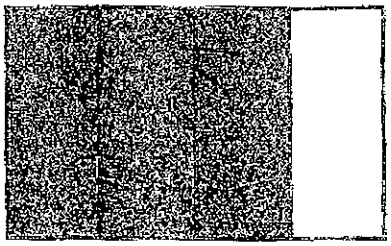
Equivalence Go Fish

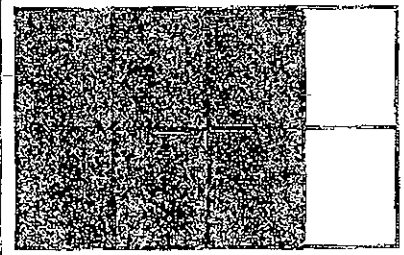
Materials: Fraction Cards

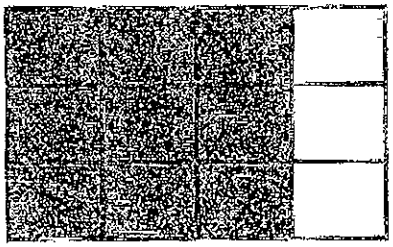
- Deal five cards to each player.
- The rest of the cards are put in the middle as the draw pile.
- If any player has any matches, put them down.
- Players will take turns asking one another for an equivalent match for a fraction they have in their hand.
- If a match is given, they are able to put it down and ask for another.
- If no match is given, the player must "Go Fish" from the draw pile.
- Play continues until the "pond" is depleted.
- The player with the most equivalent matches wins!



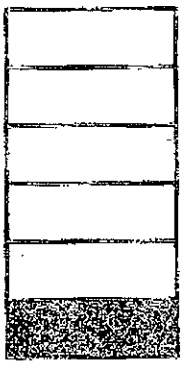




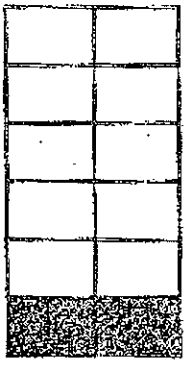


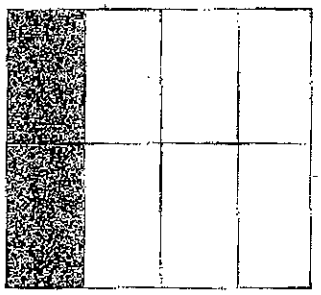


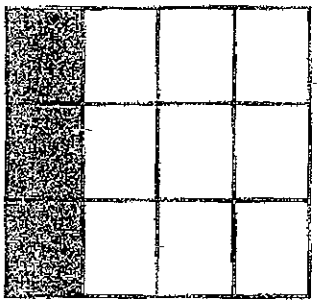
$$\frac{3}{4}$$



$$\frac{1}{6}$$

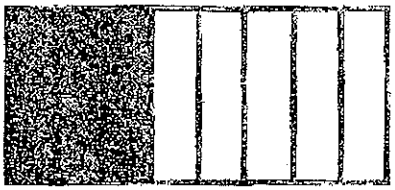


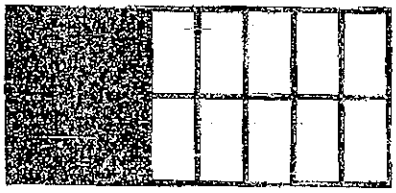


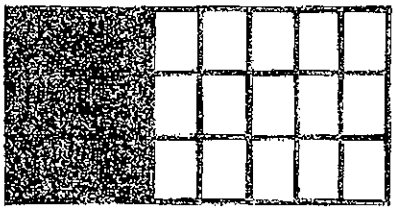


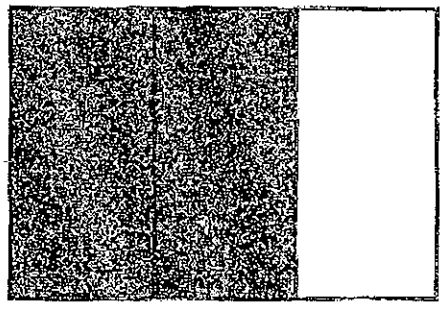
$\frac{1}{4}$

$\frac{3}{8}$

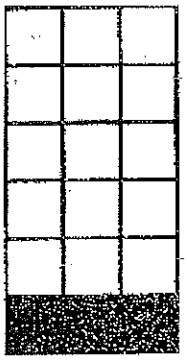
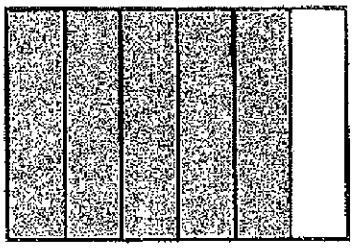
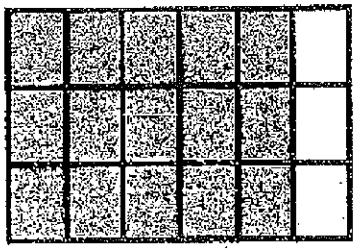
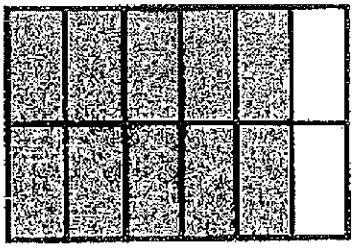
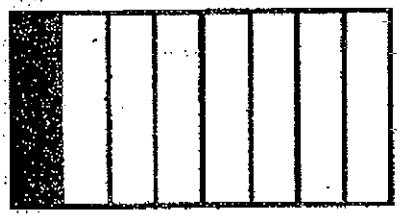
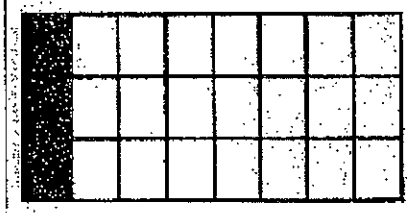


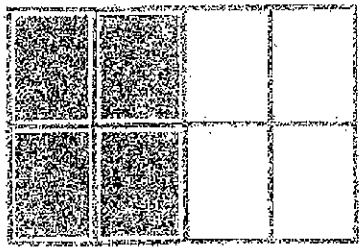
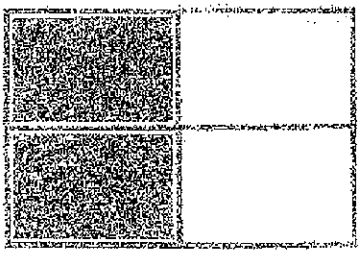
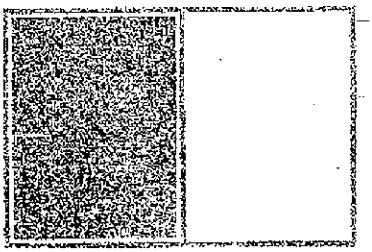
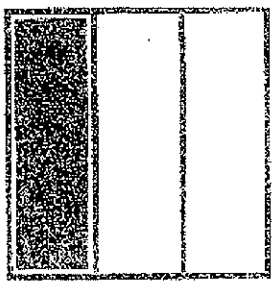
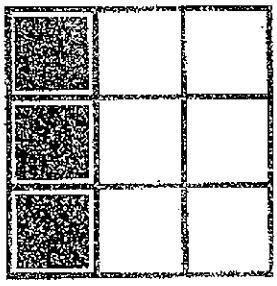
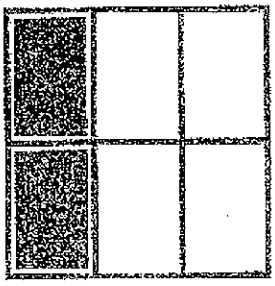
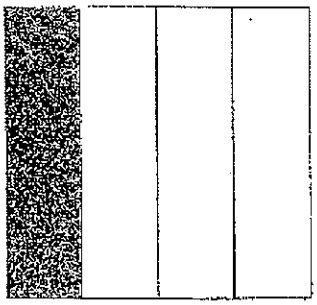






$\frac{2}{3}$

	$\frac{5}{6}$	
		$\frac{1}{8}$
		

	$\frac{1}{2}$	
		$\frac{1}{3}$
		

Cover Up & Uncover

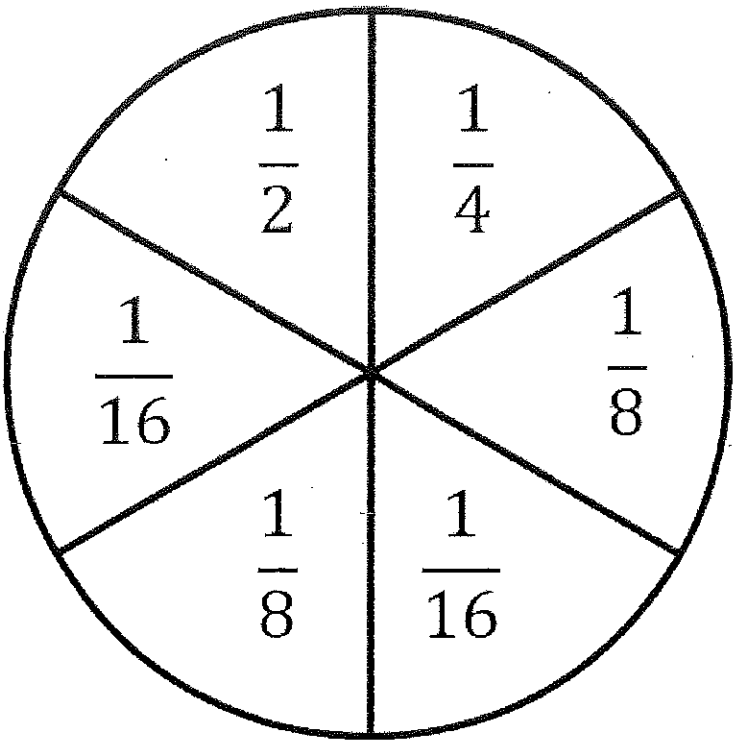
Materials: Strips of a whole, halves, fourths, eighths, sixteenths, Spinner

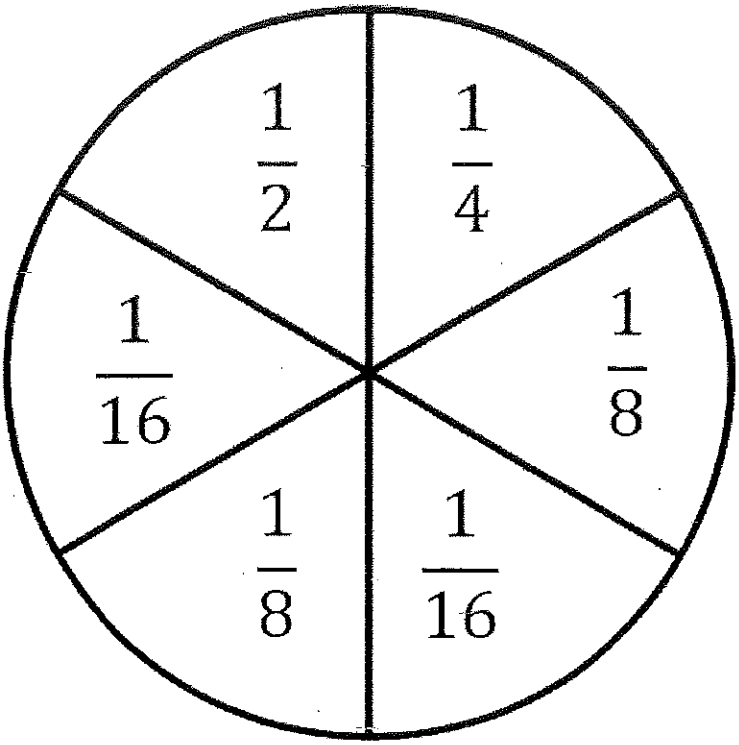
Cover:

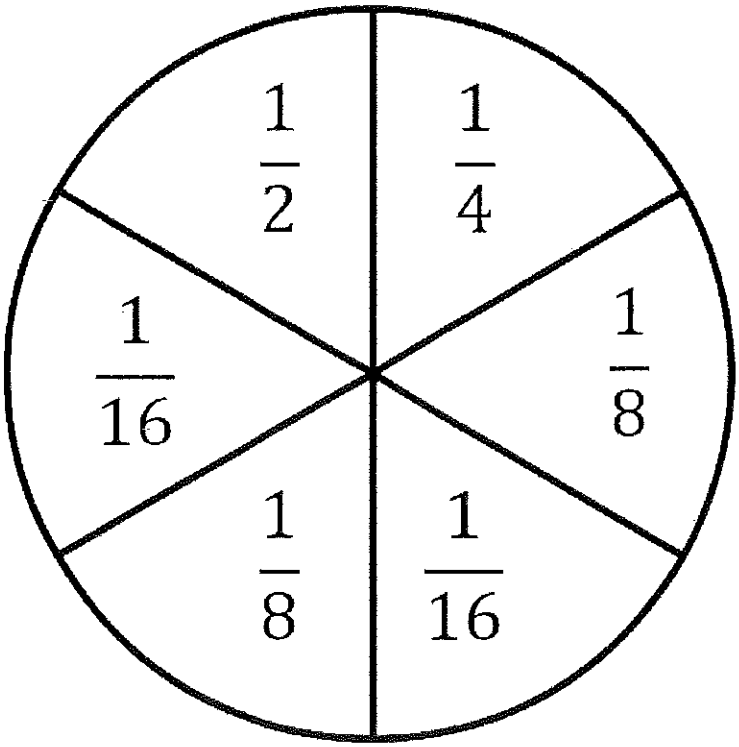
- Take turns spinning the fraction spinner.
- On your turn, the fraction that comes up on the spinner tells what size piece to place on the whole strip.
- Check with your partner to be sure he or she agrees with what you did.
- After finishing your turn, say "Done" and pass the die to your partner.
- The first player to cover his or her whole strip exactly wins.
- If you need only a small piece, $\frac{1}{8}$ or $\frac{1}{16}$ for example, and you spin $\frac{1}{2}$ or $\frac{1}{4}$ you can't play.
- You must spin a fraction smaller than or exactly what you need.

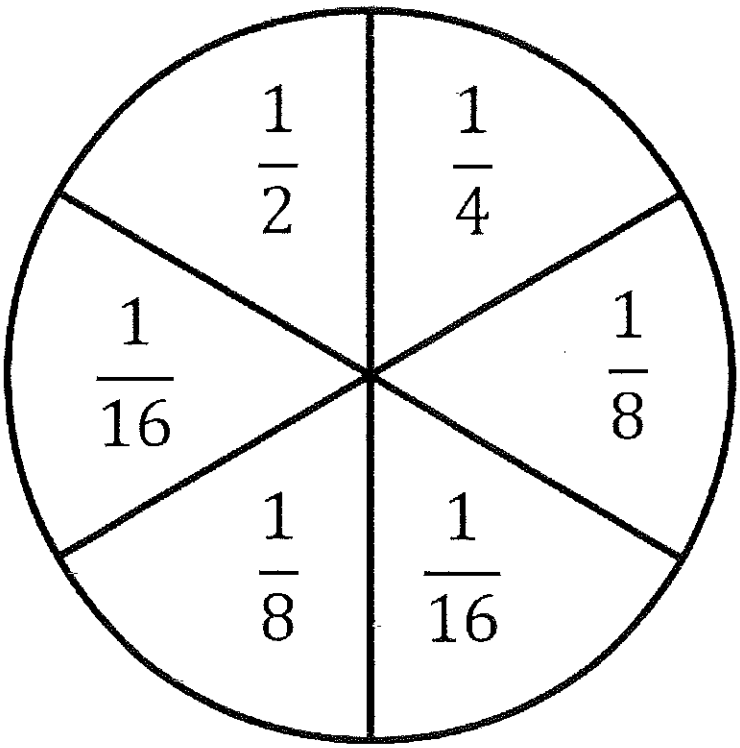
Uncover:

- Each player covers his or her whole strip with the two $\frac{1}{2}$ pieces.
- Take turns spinning the fraction spinner.
- On your turn, take one of the three options: Remove a piece (only if you have a piece the size indicated by the fraction on the spinner), Exchange any of the pieces on your whole strip for equivalent pieces, or Do nothing.
- Check with your partner to be sure he or she agrees with what you did.
- After finishing your turn, say "Done" and pass the spinner to your partner.
- The first player who removes all pieces from the whole strip wins.
- You may not remove a piece and exchange on the same turn; you can only do one or the other.
- You have to go out exactly. This means that if you have only one piece left and roll a fraction that is larger, you may **not** remove the piece.


1/2
1/4
1/16
1/8
1/8
1/16


1/2
1/4
1/16
1/8
1/8
1/16

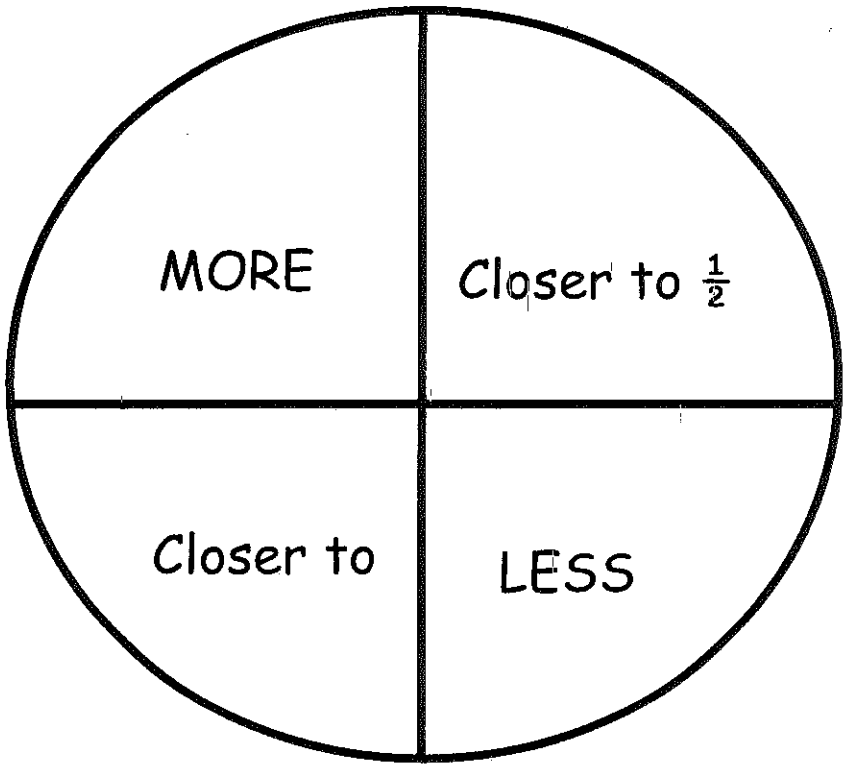

1/2
1/4
1/16
1/8
1/8
1/16


1/2
1/4
1/16
1/8
1/8
1/16

Closer to 0, $\frac{1}{2}$, or 1

Cards are evenly distributed between two players. Each player turns over their top card and the spinner is spun. Whichever player's card matches the spinner gets to keep the 2 fraction cards. The player with the most cards after every card has been played wins. In order to prove which card is *more* or *less*, players must go through the following steps:

1. Players must first discuss which fraction they think matches the spinner (why and how they know) (abstract)
2. Players must identify where each card would be on the number line by placing a chip. (representation)
3. Players verify their answer by modeling through fraction bars, circles, etc… (concrete)



$\frac{2}{3}$	$\frac{6}{12}$	$\frac{4}{5}$	$\frac{3}{4}$	$\frac{2}{8}$
$\frac{9}{12}$	$\frac{3}{9}$	$\frac{6}{8}$	$\frac{3}{12}$	$\frac{4}{8}$
$\frac{7}{8}$	$\frac{5}{6}$	$\frac{3}{6}$	$\frac{8}{12}$	$\frac{4}{6}$
$\frac{3}{5}$	$\frac{1}{3}$	$\frac{1}{4}$	$\frac{6}{8}$	$\frac{2}{6}$

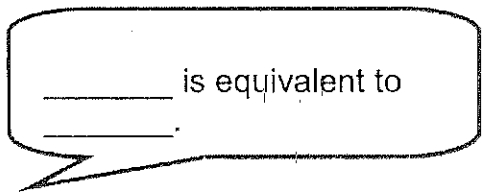
Build a Fraction Wall

Materials: Fraction Wall board in dry erase pocket for each player, set of Fraction Wall Game cards, dry erase markers

---

1. Work with a partner. Place the cards facedown in two stacks. One stack should have numerals and the other stack fraction words.

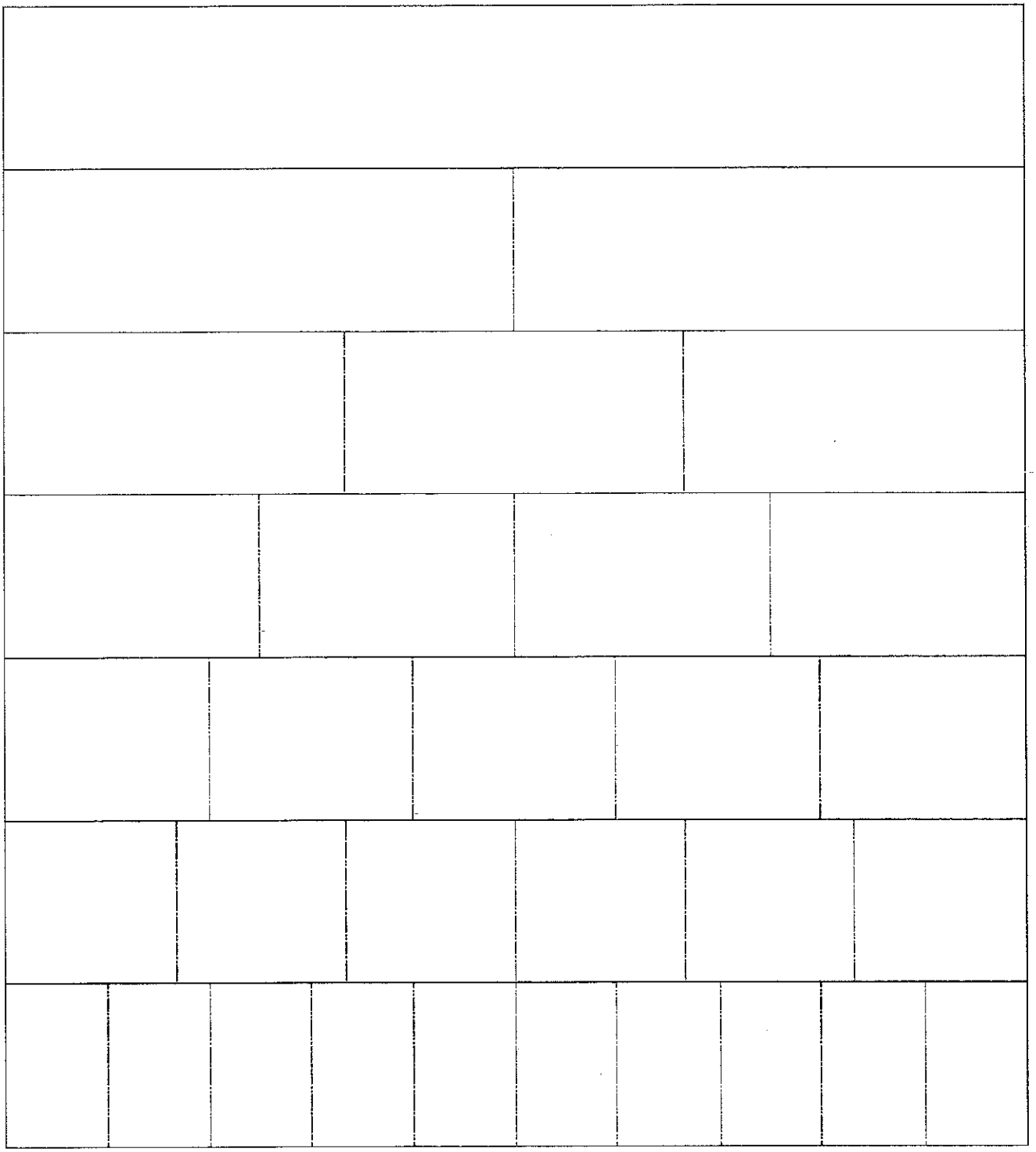
2. Take turns to turn over two cards (one from each stack) and write your initials in a matching fraction on your Fraction Wall. For example, if you turn over 2 thirds you could write your initials in 2 thirds or in 4 sixths because they are equivalent. If you use an equivalent fraction use the math talk sentence to explain your thinking.



3. If your turn over a card marked 'Free Choice Denominator' you may choose any denominator that you need. If you do not have the fraction on your board miss a turn.

4. The winner is the person with the greatest number of wholes when there are no cards left in the stacks.

Build a Fraction Wall



Print and cut out 2 sets of numeral/word fraction cards

1	1	2
2	3	3
4	4	5
5	1	2

Free choice denominator!	Free choice denominator!	halves
thirds	fourths	fifths
sixths	tenths	halves
thirds	fourths	sixths

Fraction Track Activity

You need:

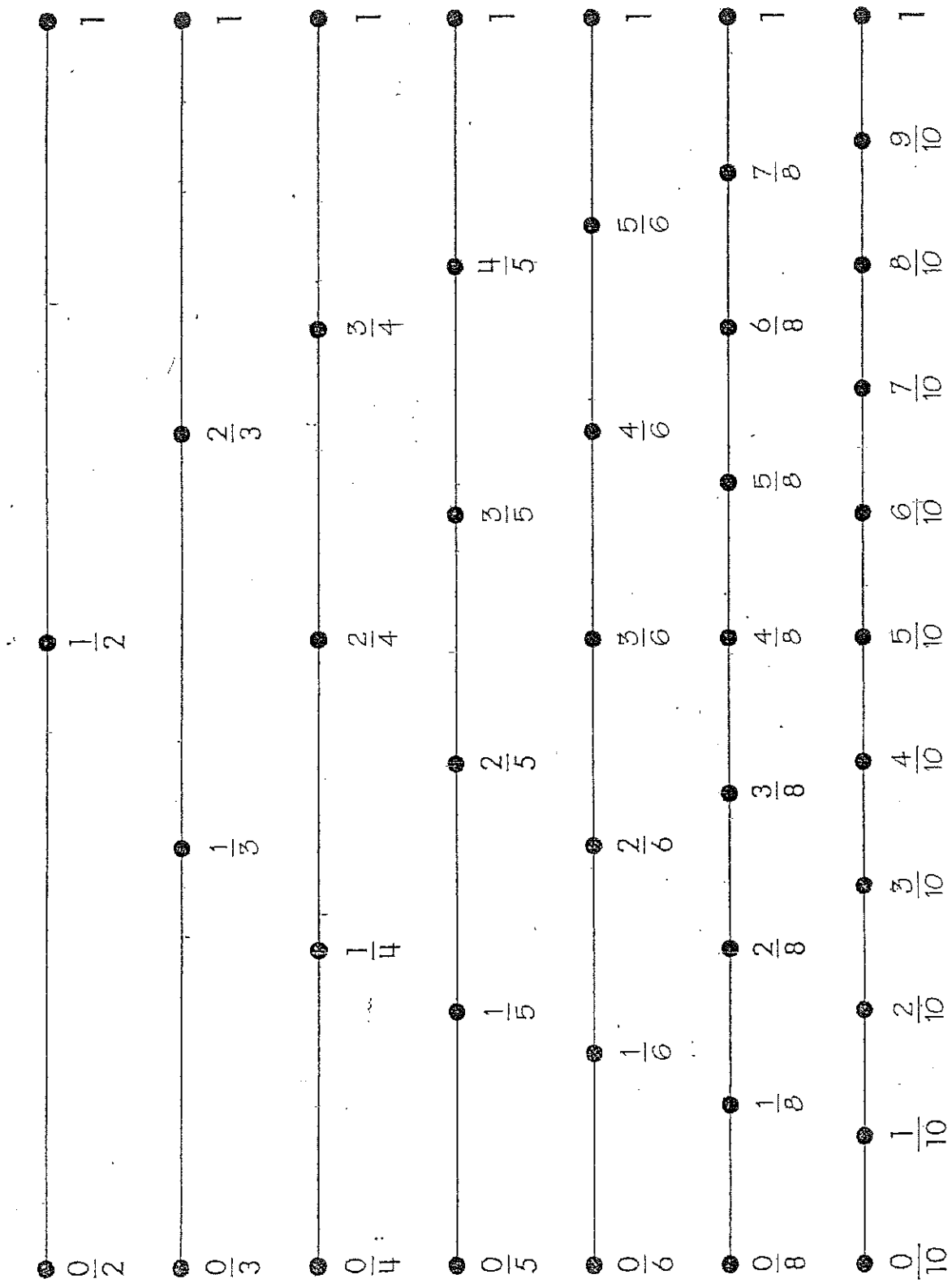
- Fraction Cards
- Fraction Track Gameboard
- 20 beans /counters

Play with 1 or 2 players or with 2 pairs.

Playing to 1

1. Use only the cards that are equal to 1 whole or less than 1. Mix the cards, and place the deck of cards facedown.
2. Use the Completed Fraction Track Game that goes to 1.
3. Place seven chips on the gameboard, one on each track, at zero.
4. Players take turns drawing the top card and moving a bean (or beans) to total the amount on the card.
5. The goal is to move beans so they land on exactly the number 1. When you land on 1 you win the bean. When a bean is won, place a new chip at 0 on the same track so that the next player has a chip on every track for that player's turn.
6. If you cannot move the total amount of your Fraction Card you lose that turn.

Completed *Fraction Track* Gameboard, Part 1



$\frac{1}{2}$	$\frac{1}{3}$	$\frac{2}{3}$	$\frac{1}{4}$
$\frac{3}{4}$	$\frac{1}{5}$	$\frac{2}{5}$	$\frac{3}{5}$
$\frac{4}{5}$	$\frac{1}{6}$	$\frac{5}{6}$	$\frac{1}{8}$
$\frac{3}{8}$	$\frac{5}{8}$	$\frac{7}{8}$	$\frac{1}{10}$
$\frac{3}{10}$	$\frac{7}{10}$	$\frac{9}{10}$	$\frac{6}{6}$

Fraction Cards

$\frac{2}{8}$	$\frac{4}{8}$	$\frac{6}{8}$	$\frac{8}{8}$
$\frac{4}{4}$	$\frac{5}{5}$	$\frac{2}{6}$	$\frac{2}{2}$
$\frac{2}{10}$	$\frac{4}{10}$	$\frac{5}{10}$	$\frac{6}{10}$
$\frac{8}{10}$	$\frac{10}{10}$	$\frac{1}{1}$	$\frac{3}{3}$
$\frac{4}{6}$	$\frac{3}{6}$	$\frac{2}{4}$	

Fraction Track Gameboard, Part 2

Fraction Cards (page 3 of 3)

			$\frac{11}{10}$
$\frac{9}{6}$	$\frac{10}{8}$	$\frac{6}{5}$	$\frac{6}{4}$
$\frac{11}{8}$	$\frac{7}{5}$	$\frac{5}{4}$	$\frac{7}{6}$
$\frac{12}{8}$	$\frac{13}{10}$	$\frac{15}{10}$	$\frac{3}{2}$
$\frac{9}{8}$	$\frac{14}{10}$	$\frac{12}{10}$	$\frac{8}{6}$
10%	50%	90%	$\frac{4}{3}$

Snag a Spoon

Materials: plastic spoons, fraction/decimal cards

- In the middle of the table, place one less spoon than the number of players. For example, if there are 5 players, use 4 spoons.
- Deal 4 cards to each player.
- The object is to get "4 equivalents of a kind", for example .30, 30/100, 3/10, 6/20.
- The dealer will begin by taking the top card from the deck.
- Player one will look at it and decide if he/she wants to keep it or pass it.
- If the player keeps it, she/he must discard one of his/her cards and pass it face-down to the next player.
- If she/he doesn't want it, she/he simply passes the card face-down to the next player.
- Play continues in a circle until one player gets "4 equivalents of a kind".
- That player grabs a spoon – trying to do so secretly.
- As soon as another player notices someone has grabbed a spoon, he/she should grab one, too!
- Suddenly, everyone will be grabbing for a spoon!
- The player who does not get a spoon is out.
- Remove one and continue playing until there are no spoons left – whoever gets the last one is the champion!

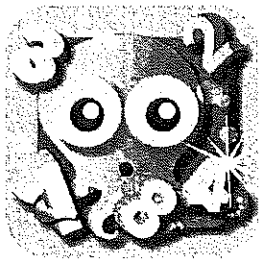
$\frac{1}{2}$	$\frac{4}{8}$	0.5	$\frac{50}{100}$	$\frac{1}{3}$
$\frac{4}{12}$	$\frac{10}{30}$	$\frac{3}{9}$	$\frac{1}{4}$	$\frac{3}{12}$

0.25	$\frac{25}{100}$	$\frac{6}{8}$	$\frac{3}{4}$	0.75
$\frac{75}{100}$	1	$\frac{10}{10}$	$\frac{100}{100}$	$\frac{5}{5}$

$2\frac{1}{10}$	$2\frac{10}{100}$	2.1	$\frac{210}{100}$	$1\frac{1}{2}$
1.5	$1\frac{50}{100}$	$1\frac{11}{22}$	$1\frac{3}{10}$	1.30

$1\frac{9}{30}$	$1\frac{30}{100}$	$\frac{1}{5}$	$\frac{20}{100}$	0.2
$\frac{3}{15}$	$4\frac{4}{5}$	$4\frac{80}{100}$	4.8	4.80

Place Value



Activity 1: Surrounding Digits (counters, dice)

- Each player places his/her counter on one square of the game board. Player one rolls the die. Player one may now move his/her counter to any square with a number with a digit the same as the die. The points earned are determined by the value of the digit. Player two continues by following the same directions. Compare scores after round one. Who is winning? By how much? Each round is played following the rules above. Starting with round two, compute the subtotal after each round. The player with the most points at the end of 10 rounds is the winner.

Activity 2: Target 300 and Target 15,287 (dice)

- Each student needs a recording sheet.
- Target 300 has the students try to get to 300 in 6 rolls without going over.
- Target 15,287 needs to be up on the board (15,287). The aim is to be on target or as close as possible by adding all the numbers that have been rolled at the end of 10 rolls of the die. Each student takes turns rolling the die. On his/her roll, the student chooses which number to write. For example, if he/she rolls a 5, the student elects to write 5, 50, 500, or 5000. Then, it is the next student's turn. Players will keep documenting their rolls from each turn on their recording sheet. If a zero is rolled, the student loses his/her turn. After ten rolls the player closest to 15, 287 without going over, wins!
- Change the Target and try again.

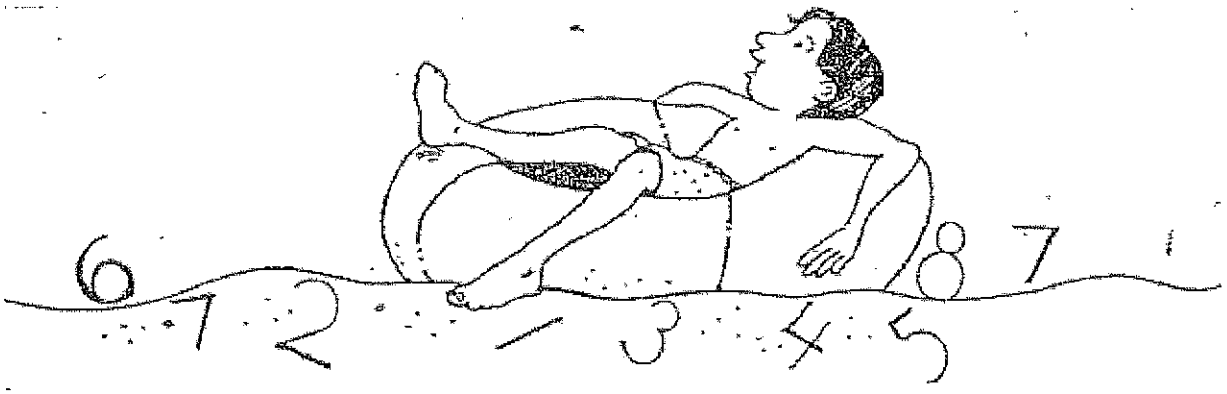
Activity 3: Guess Which Decimal (counters)

- Each player will secretly select one decimal number on their game board and write this number on a sticky note. Players will take turns asking yes or no questions to one another in attempt to narrow down the choices for the correct decimal guess. Players will cover the numbers on the board that do not match their partner's secret number. When a player believes they have determined their partner's number, they may guess it on their turn. The first person to guess correctly wins.

Activity 4: Deci-Mill Dunk (dice, counters)

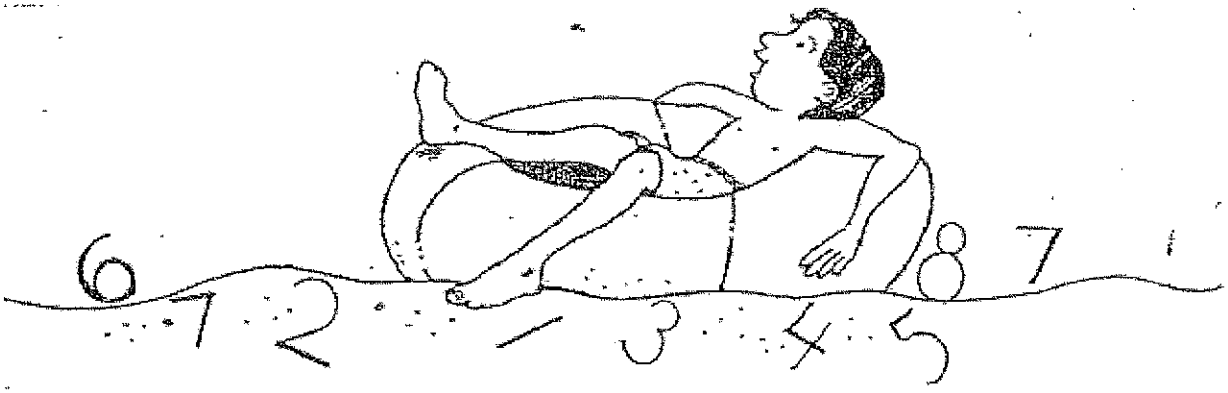
- Take turns rolling the dice. Choose either space on the grid named by the digits on the die. Example: (4,5) or (5,4). Find a number less than the number on the grid in the space you rolled. Place your marker there. If there is no open space with a number less than your roll, you lose a turn. Continue taking turns until one player has four in a row in any direction. If all spaces are filled with no color in a row of four, the player with the most markers on the board is the winner.

Surrounding Digits



245	1703	916	625	834	391	2816
596	840	762	2907	459	1428	653
913	627	218	536	2624	709	380
401	1569	727	348	940	2835	428
629	783	504	1299	851	167	640
317	2516	970	481	635	1838	592
758	839	1691	327	2304	912	706

Surrounding Digits



Players: 2

Materials: 2 counters, one 10 sided die, one game board

Directions:

- Each player places his/her counter on one square of the game board.
- Player one rolls the die. Player one may now move his/her counter to any square with a number with a digit the same as the die. The points earned are determined by the value of the digit.
- Player two continues by following the same directions.
- Compare scores after round one. Who is winning? By how much?
- Each round is played following the rules above.
- Starting with round two, compute the subtotal after each round.
- The player with the most points at the end of 10 rounds is the winner.

Target 300

You need:

1 die

2 players

Directions

The object of the game is to be the player whose total is closest to 300 after six rolls of the die. The total can be exactly 300, less than 300, or greater than 300. Each player must use all six turns.

1. Each player draws a two-column chart as a score sheet as shown, one column for each player.
2. Player 1 rolls the die and decides whether to multiply the number rolled by 10, 20, 30, 40, or 50, keeping in mind that each player will have six turns to reach the targeted amount of 300.
3. Both players write the multiplication sentence representing the first player's choice and product. For example, Player 1 rolls a 2 and chooses to multiply it by 20. Both players write the multiplication number model: $2 \times 20 = 40$.
4. Player 1 hands the die to Player 2. Player 2 follows the same steps as Player 1.
5. At the end of each turn, the player adds her new amount to the previous score to keep a running total.

Player 1	*Player 2*

Player 1	*Player 2*
$2 \times 20 = 40$	

6. At the end of six turns, players compare scores to see whose score is closest to 300. Each player records the following prompts under his or her chart:

_____ won.

_____ was _____ points away from 300.

_____ was _____ points away from 300.

Target 15 287

Roll #	Value chosen	Running Total
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

Total after 10 rolls: _____

Target 15 287

Roll #	Value chosen	Running Total
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

Total after 10 rolls: _____

Guess Which Decimal - Game Board A

0.02	0.27	1.28	2.07	4.08	9.72
8.9	0.04	0.25	1.3	2.63	8.38
0.61	6.14	6	0.23	6.57	7.18
3.15	0.53	7.67	0.08	0.21	1.34
7	2.41	0.55	0.2	0.1	5.22
3.61	1.5	10.9	0.46	4.9	0.12
0.75	5.17	0.09	5.43	0.4	4.04
0.15	0.78	2.54	0.82	3.27	1.08

Guess Which Decimal - Game Board B

5	0.3	1.31	2.1	4.1	9.75
8.82	0.07	0.28	1.33	2.66	8.4
0.64	6.2	0.09	0.26	6.6	7.21
3.1	0.56	0.7	0.11	0.24	7
0.03	2.44	4.8	0.05	10.3	5.25
3.64	1.54	0.23	0.13	7.5	10.6
9	0.2	0.72	5.45	0.17	4.07
0.18	0.81	2.57	0.79	3.2	1.41

Deci-Mill Dunk

Building Fluency: comparing decimals

Materials: a pair of dice, 20 different color game markers per player (color tiles)

Number of Players: 2-4

Directions:

1. Take turns rolling the dice.
2. Choose either space on the grid named by the digits on the die Example: (4,5) or (5,4).
3. Find a number less than the number on the grid in the space you rolled. Place your marker there.
4. If there is no open space with a number less than your roll, you lose a turn.
5. Continue taking turns until one player has four in a row in any direction. If all spaces are filled with no color in a row of four, the player with the most markers on the board is the winner.

Variation/Extension: Students can create their own gmaeboard. Have students explain how they know which decimal is bigger.

6	.04	.41	.46	.59	.45	.09
5	.26	.40	.76	.51	.75	.19
4	.33	.31	.62	.85	.68	.34
3	.37	.39	.69	.87	.61	.38
2	.17	.3	.74	.52	.73	.24
1	.07	.29	.44	.58	.43	.02
	1	**2**	**3**	**4**	**5**	**6**