

Fraction Match-Up

Building Fluency: understand fractions and how they are represented on the number line

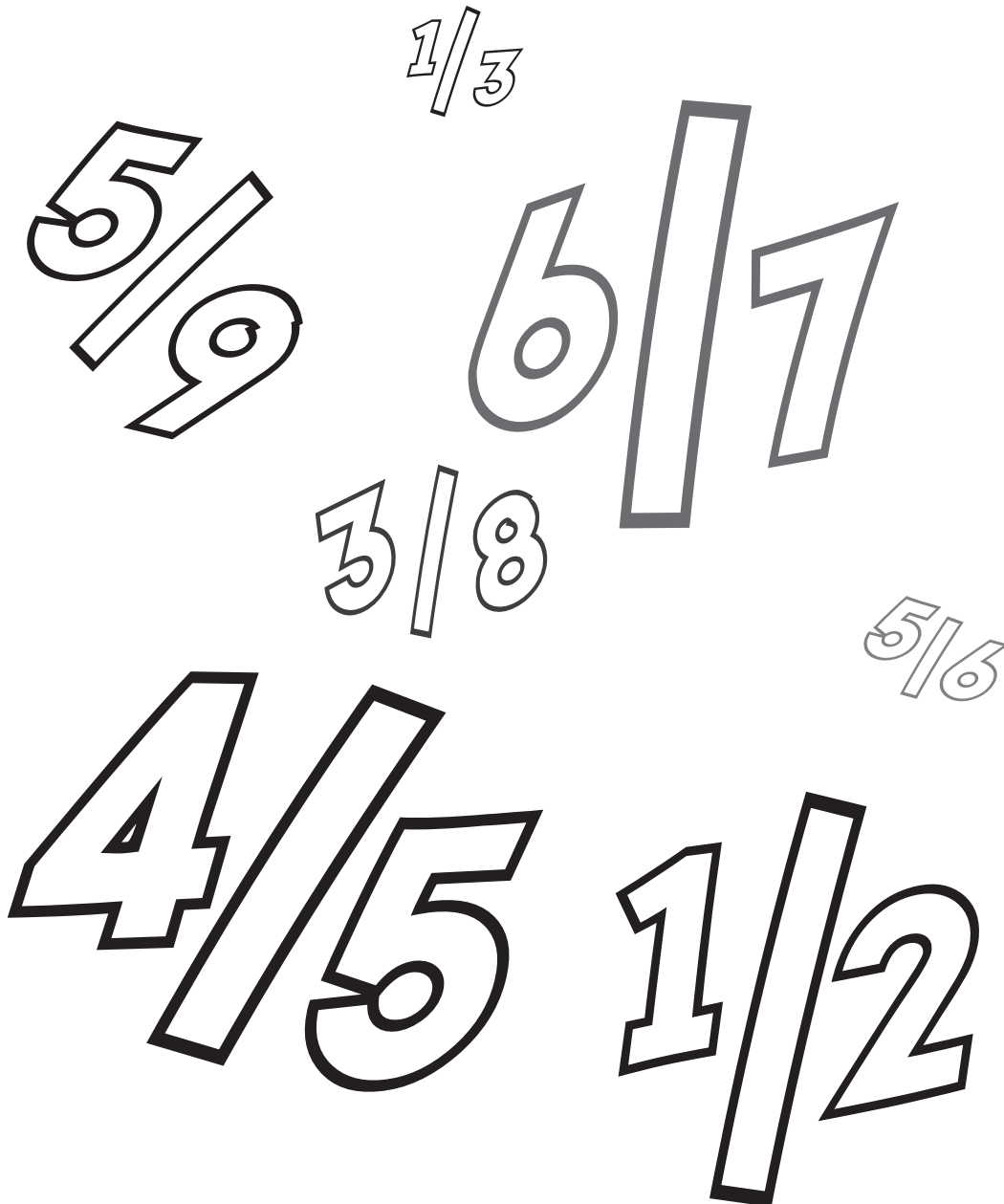
Materials: fraction bar cards and number lines cards

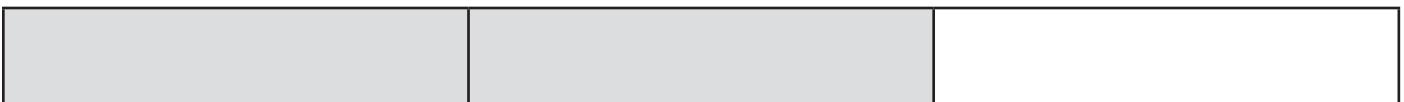
Number of Players: 2

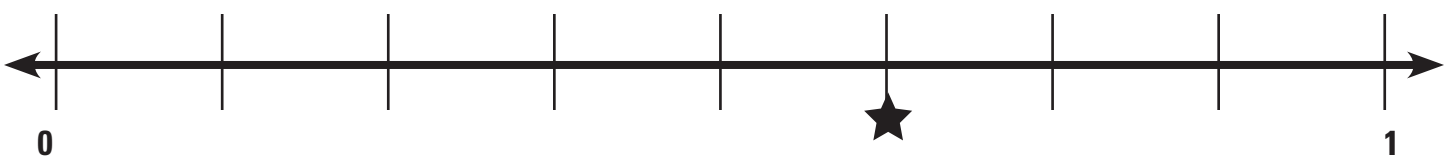
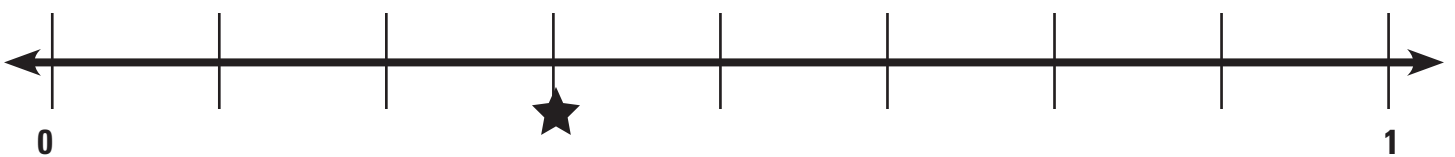
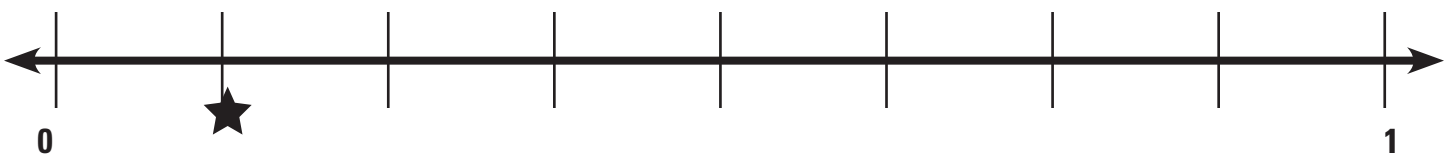
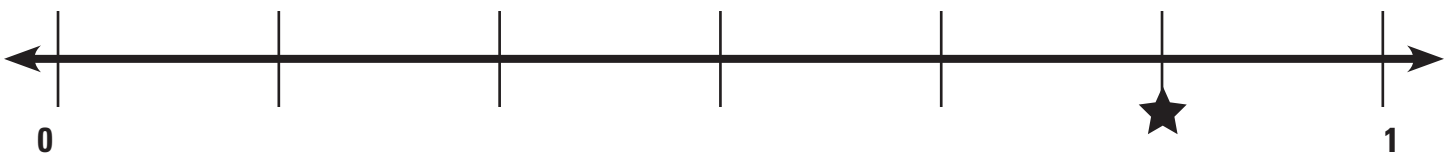
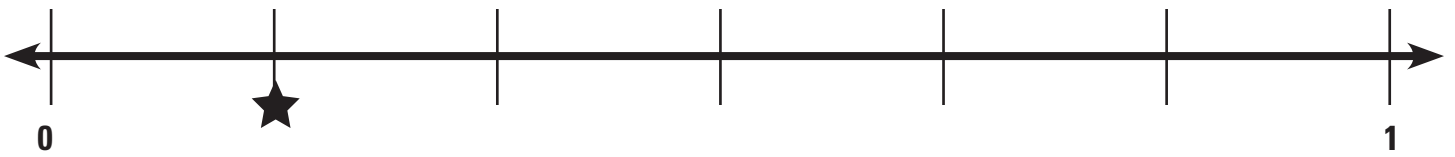
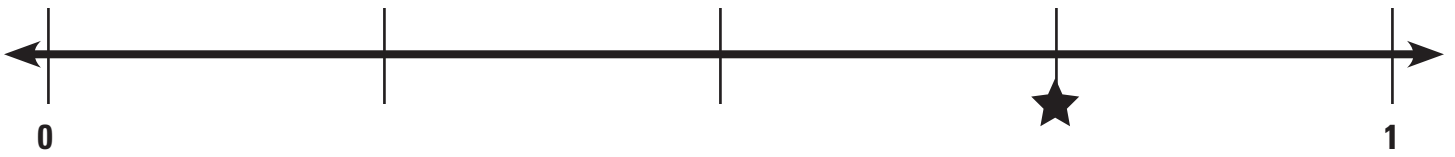
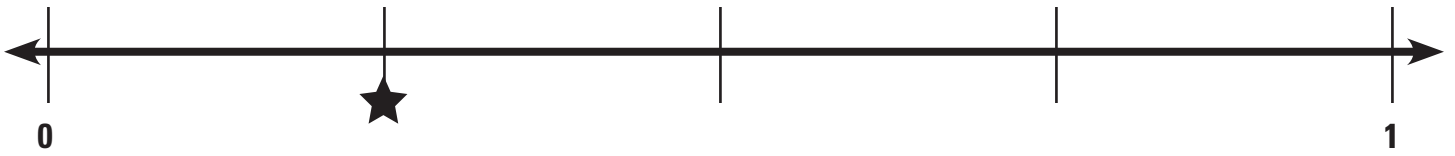
Directions:

1. Mix up the fraction bar cards and place them face down on one side of the game area. Mix up the number line cards and put them face down on the other side.
2. Players take turns turning up one card from each area. If the cards represent the same fraction, the player takes the cards. If they do not match, the player turns the cards back over.
3. The player with the most matches wins.

Variation/Extension: Have students make different representations of fractions (shaded circles or rectangles) and play the game matching those to number lines.







Fraction Roll'Em

Building Fluency: understand fractions as parts of a whole













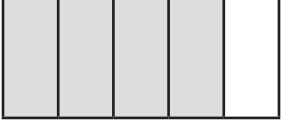

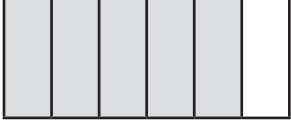


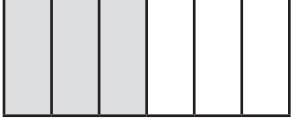
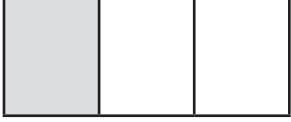

Materials: gameboard, pair of dice, game markers - different color for each player

Number of Players: 2

Directions:

1. Each player takes turns rolling dice to create a fraction.
2. The smaller number is the numerator and the larger number is the denominator.
3. The player finds the fraction on the gameboard and covers it with a marker.
4. If the fraction is already covered the player loses that turn.
5. The player with the most markers on the board wins.

Variation/Extension: Have students create other fraction gameboards with different representations such as circles or number lines. An additional gameboard has been added for your convenience.

Figuring Fourths

Building Fluency: understand fractions

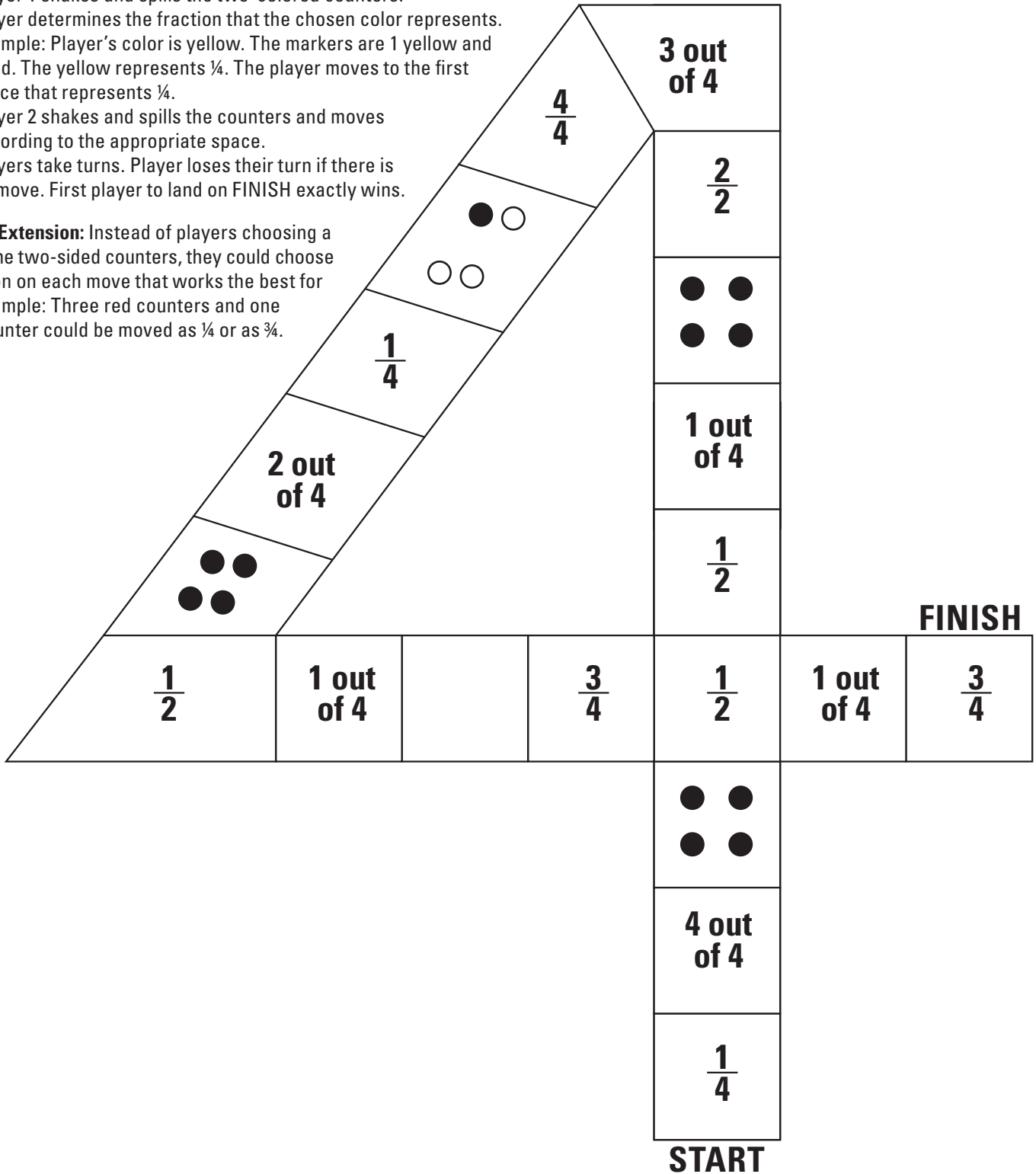
Materials: gameboard, four two-color counters, one small cup, game markers

Number of Players: 2

Directions:

1. Each player choose one of the colors from the two color counters.
2. Player 1 shakes and spills the two-colored counters.
3. Player determines the fraction that the chosen color represents.
Example: Player’s color is yellow. The markers are 1 yellow and 3 red. The yellow represents $\frac{1}{4}$. The player moves to the first space that represents $\frac{1}{4}$.
4. Player 2 shakes and spills the counters and moves according to the appropriate space.
5. Players take turns. Player loses their turn if there is no move. First player to land on FINISH exactly wins.

Variation/Extension: Instead of players choosing a color for the two-sided counters, they could choose the fraction on each move that works the best for them. Example: Three red counters and one yellow counter could be moved as $\frac{1}{4}$ or as $\frac{3}{4}$.



Three in a Row Gameboard

Building Fluency: understand fractions

Materials: gameboard, game cards, nine game markers per player.

Number of Players: 2-6

Directions:

1. Choose an answer board for each round.
2. Shuffle the Three-In-A-Row game cards and place them face down.
3. Turn over the top card.
4. All players cover the fraction with a game marker if it appears on their board.
5. Three in a row is a winner, horizontally, vertically or diagonally.

Variation/Extension: Players play using the same gameboard but take turns turning cards with only one player marking the play for each turn. Players could cover the entire board.

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

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

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

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

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

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

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


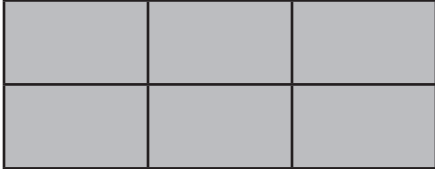




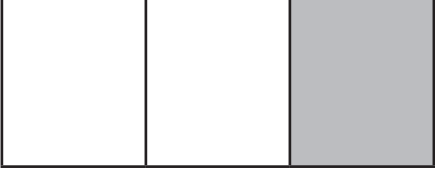
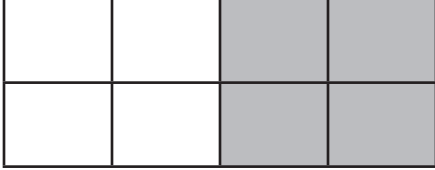
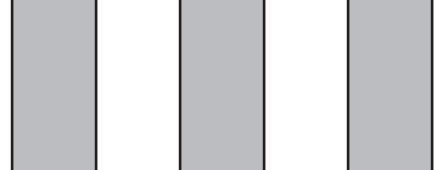
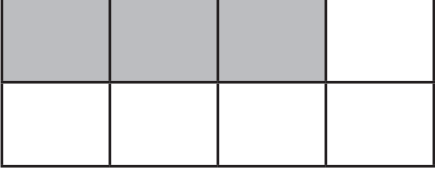

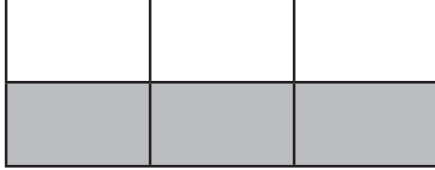
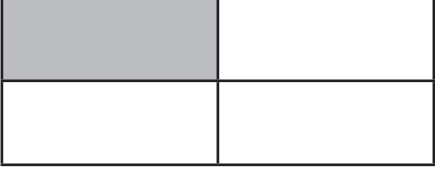
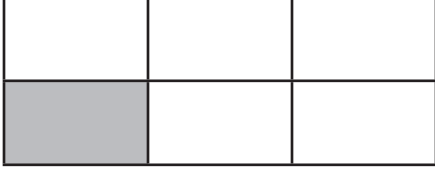
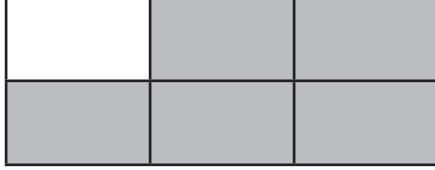

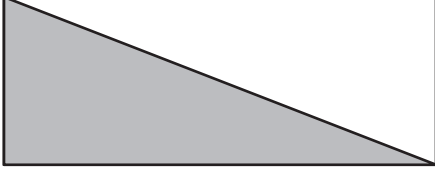
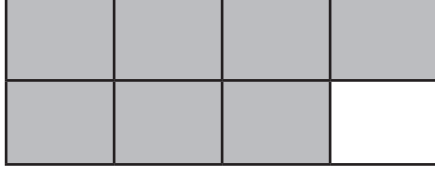


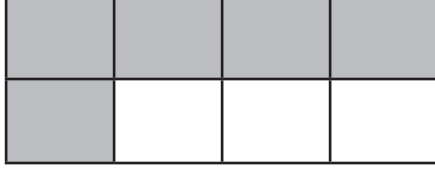
		
		
		
		
		
		
		

Figure Eighths

Building Fluency: understand fractions

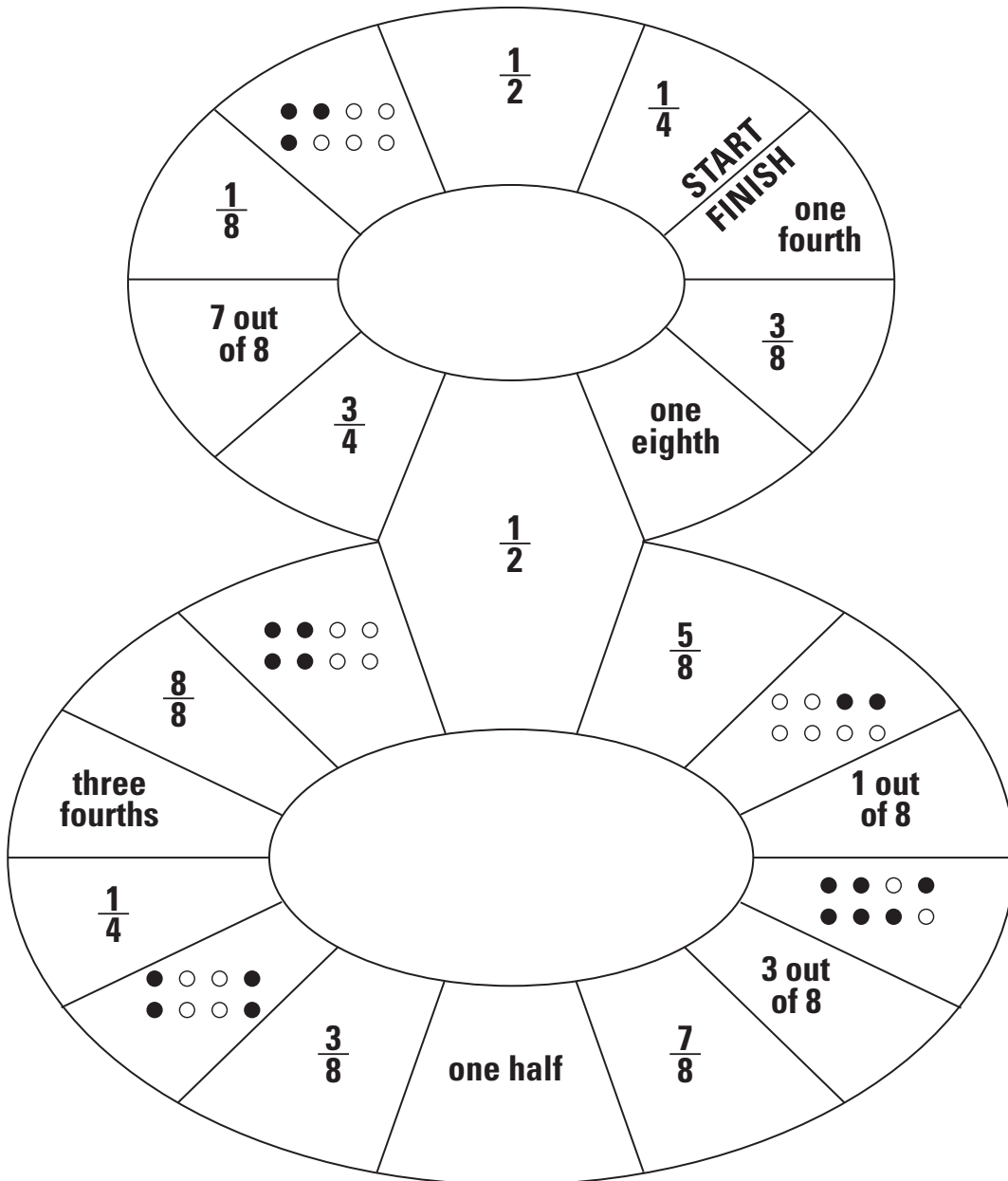
Materials: gameboard, eight two-color counters, one small cup, game markers

Number of Players: 2

Directions:

1. Each player chooses one color of the two-colored counters and chooses a game marker.
2. Player 1 shakes and spills the two-colored counters. Player determines the fraction that the chosen color represents. Each player moves on every spill. Example: Player’s color is yellow. The markers are 2 yellow and 6 red. The yellow represents $\frac{1}{4}$. The player moves to the first space that represents $\frac{1}{4}$. Player 2 has red. The red represents $\frac{3}{4}$. Player 2 moves to the first space that represents $\frac{3}{4}$.
3. Player 2 shakes and spills the counters and each player moves to the appropriate space. Players move in a continuous pattern to form a figure eight. Player loses a turn if there is no move.
4. First player to land on FINISH exactly wins.

Variation/Extension: Players take turns spilling and moving and choose the fraction that works best for that turn.



"I Have" Fraction Cards

Building Fluency: Understand a fraction as a number on the number line.

Materials: 2 sets of "I Have" cards

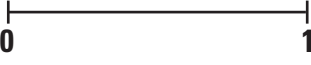
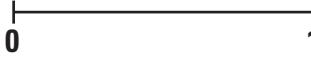
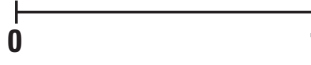
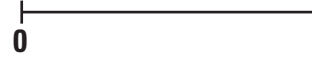








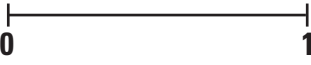
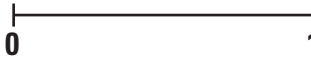
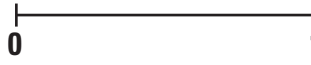
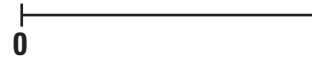




Number of Players: 2

Directions:

1. Shuffle cards. Each player has one set of the cards below.
2. First player draws a card saying, "Who has ___?" or the fraction on the card that is drawn by the first player. The second player finds the card that shows ___ and explains how the number line shows ___. If correct, the second player says, "Who has ___?"
3. Player #1 finds the card with a number line that shows ___. Player one explains how the number line represents the fraction. Once card is used they place the card face up on the table. Continue until all cards have been played by both players.

Variation/Extension: Students might work with partners to create more cards. Teacher and class may create more cards together. Additional cards have been added for your convenience.

<p>I have</p> <p>Who has $\frac{3}{4}$?</p>	<p>I have</p> <p>Who has $\frac{1}{4}$?</p>	<p>I have</p> <p>Who has $\frac{6}{8}$?</p>	<p>I have</p> <p>Who has $\frac{1}{8}$?</p>
<p>I have</p> <p>Who has $\frac{2}{3}$?</p>	<p>I have</p> <p>Who has $\frac{2}{2}$?</p>	<p>I have</p> <p>Who has $\frac{3}{6}$?</p>	<p>I have</p> <p>Who has $\frac{1}{2}$?</p>
<p>I have</p> <p>Who has $\frac{3}{4}$?</p>	<p>I have</p> <p>Who has $\frac{1}{4}$?</p>	<p>I have</p> <p>Who has $\frac{6}{8}$?</p>	<p>I have</p> <p>Who has $\frac{1}{8}$?</p>
<p>I have</p> <p>Who has $\frac{2}{3}$?</p>	<p>I have</p> <p>Who has $\frac{2}{2}$?</p>	<p>I have</p> <p>Who has $\frac{3}{6}$?</p>	<p>I have</p> <p>Who has $\frac{1}{2}$?</p>

<p>I have</p>  <p>Who has ___ ?</p>	<p>I have</p>  <p>Who has ___ ?</p>	<p>I have</p>  <p>Who has ___ ?</p>	<p>I have</p>  <p>Who has ___ ?</p>
<p>I have</p>  <p>Who has ___ ?</p>	<p>I have</p>  <p>Who has ___ ?</p>	<p>I have</p>  <p>Who has ___ ?</p>	<p>I have</p>  <p>Who has ___ ?</p>
<p>I have</p>  <p>Who has ___ ?</p>	<p>I have</p>  <p>Who has ___ ?</p>	<p>I have</p>  <p>Who has ___ ?</p>	<p>I have</p>  <p>Who has ___ ?</p>
<p>I have</p>  <p>Who has ___ ?</p>	<p>I have</p>  <p>Who has ___ ?</p>	<p>I have</p>  <p>Who has ___ ?</p>	<p>I have</p>  <p>Who has ___ ?</p>
<p>I have</p>  <p>Who has ___ ?</p>	<p>I have</p>  <p>Who has ___ ?</p>	<p>I have</p>  <p>Who has ___ ?</p>	<p>I have</p>  <p>Who has ___ ?</p>

Number Line Madness!

Number of Players: 1-2

Building Fluency: understand fractions on the number line

Materials: gameboard, game cards, and game marker

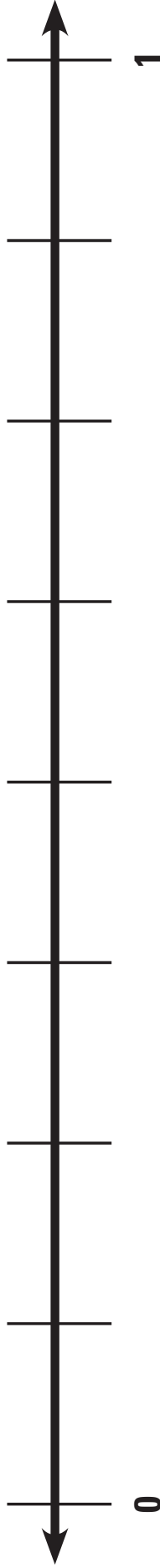
Number of Players: 2

Directions:

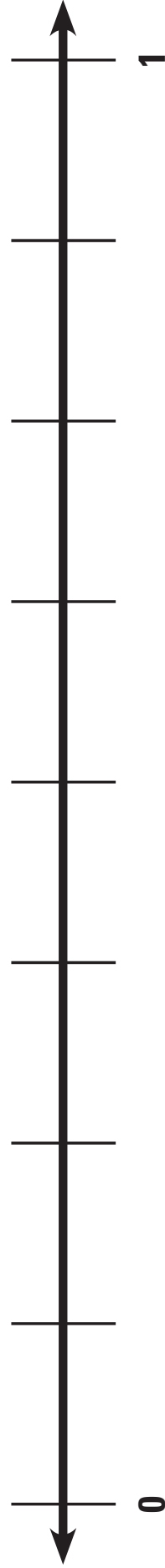
1. Each player in turn draws a card to see where to jump on the number line.
2. The player places the marker in the correct location.
3. Some cards move forward and others move backward. If the card requires a player to move lower than 0, the player loses the turn.
4. The player who lands exactly on 1 is the winner.

Variation/Extension: Play with the plus fraction cards only. Have each player draw a card. Compare fractions. Player with the larger fraction plays. Continue to draw with only one player moving each turn.

PLAYER 1



PLAYER 2



$$+\frac{1}{8}$$

$$-\frac{1}{8}$$

$$+\frac{2}{8}$$

$$-\frac{2}{8}$$

$$-\frac{3}{8}$$

$$+\frac{4}{8}$$

$$-\frac{4}{8}$$

$$+\frac{5}{8}$$

$$+\frac{6}{8}$$

$$-\frac{6}{8}$$

$$+\frac{7}{8}$$

$$-\frac{7}{8}$$

$$-\frac{1}{2}$$

$$+\frac{1}{4}$$

$$-\frac{1}{4}$$

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

$$+\frac{3}{8}$$

$$-\frac{5}{8}$$

$$+\frac{1}{2}$$

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

Capturing Hexagons

Building Fluency: understanding fractions

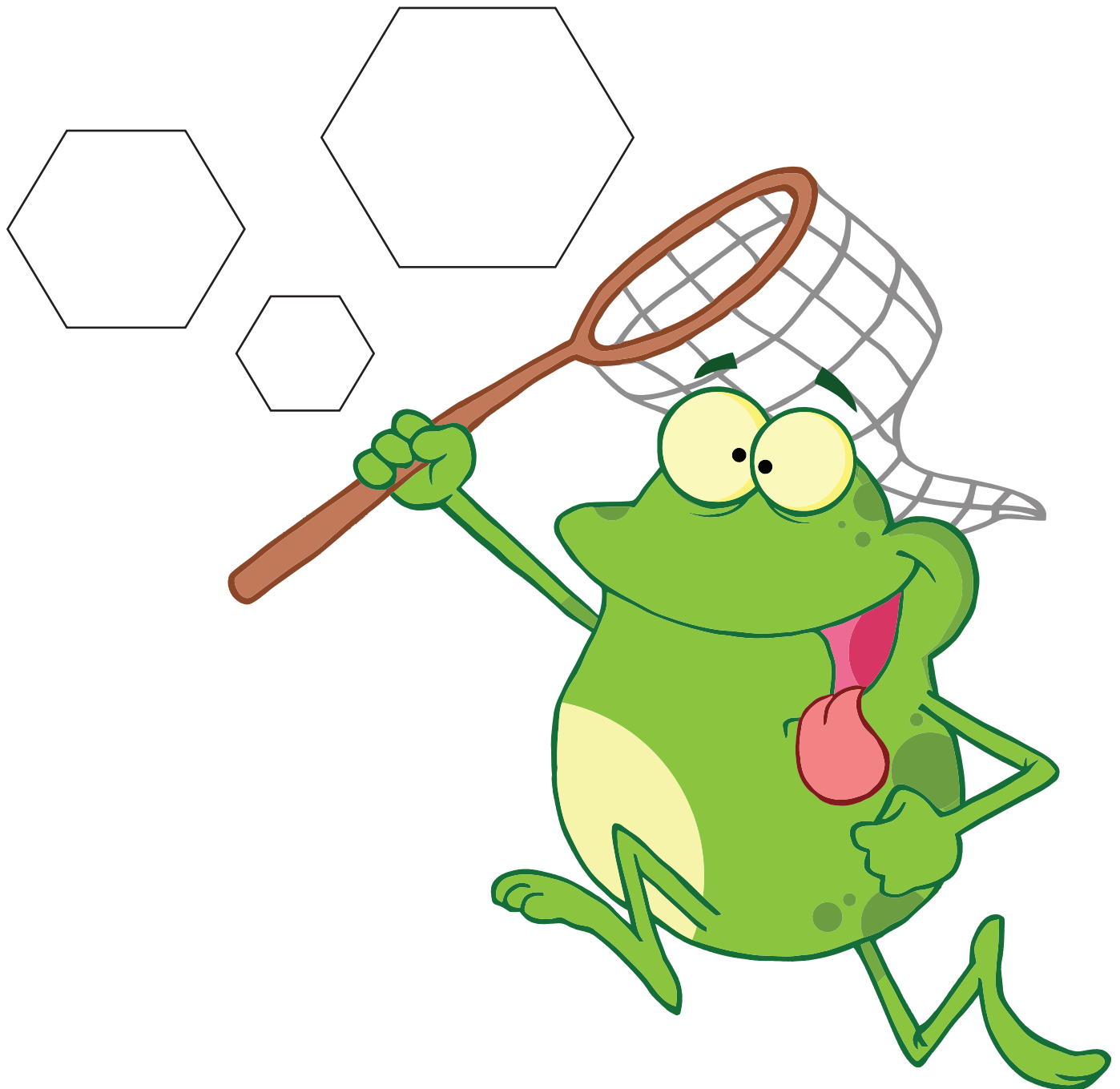
Materials: gameboard per player, spinner (pencil and paperclip), and pattern blocks (hexagons, triangles, trapezoids, and rhombuses)

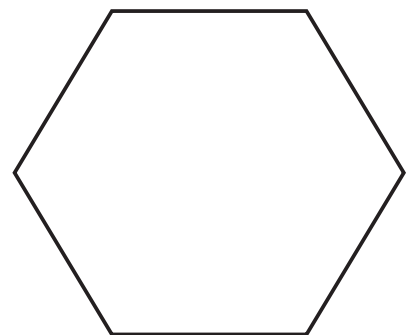
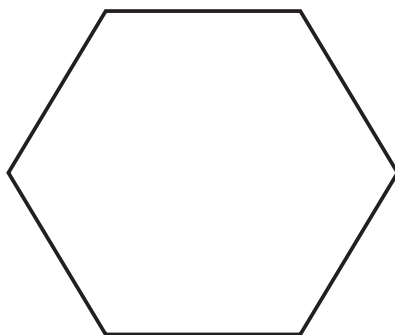
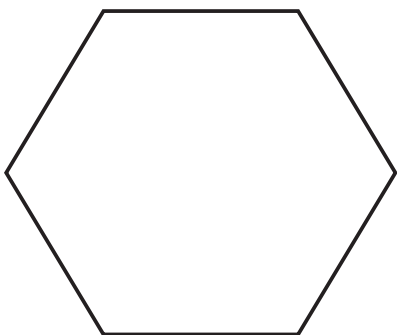
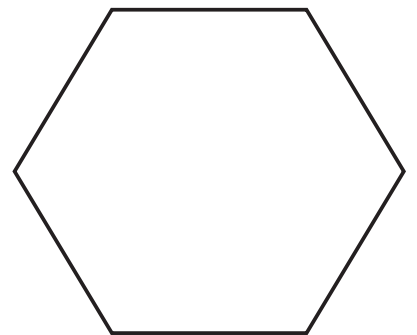
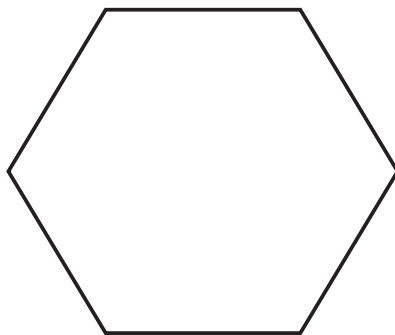
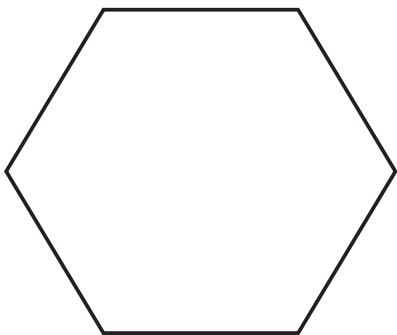
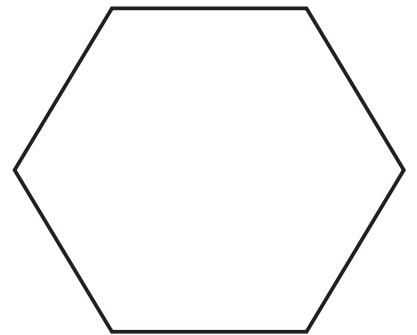
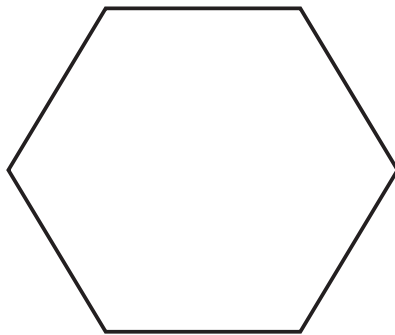
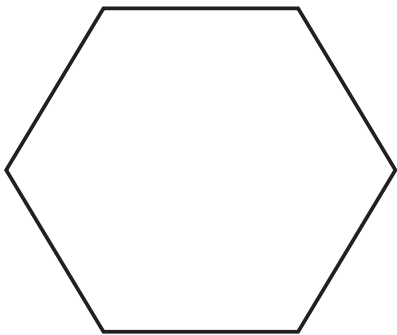
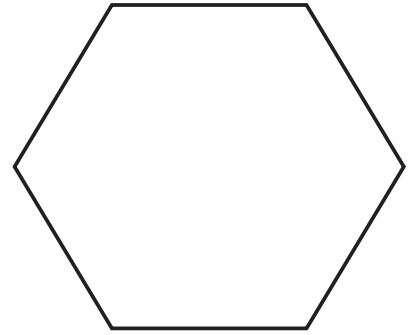
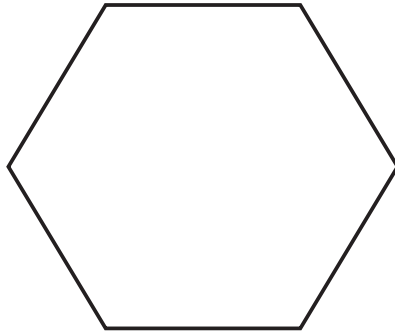
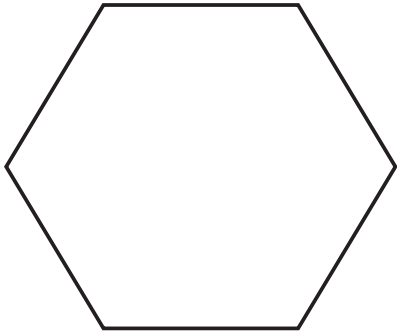
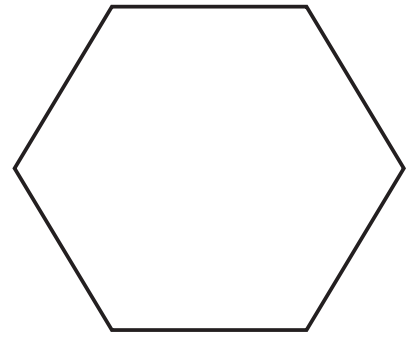
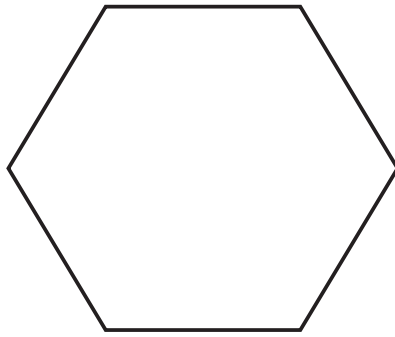
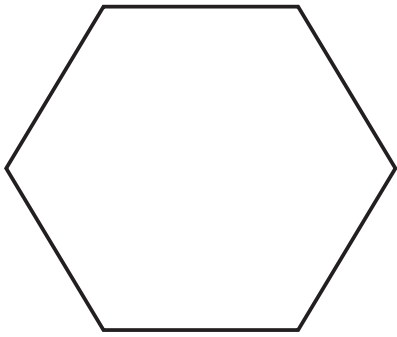
Number of Players: 2-4

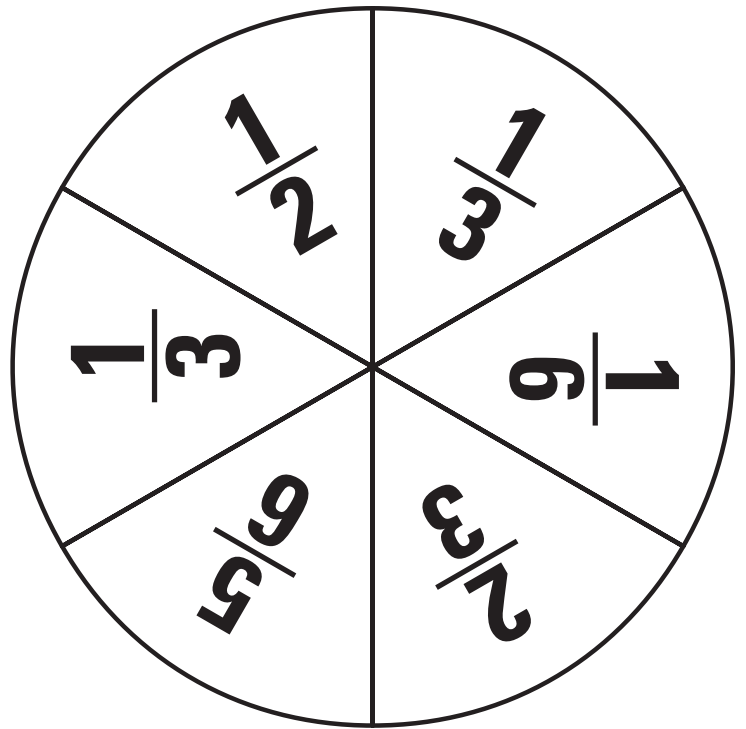
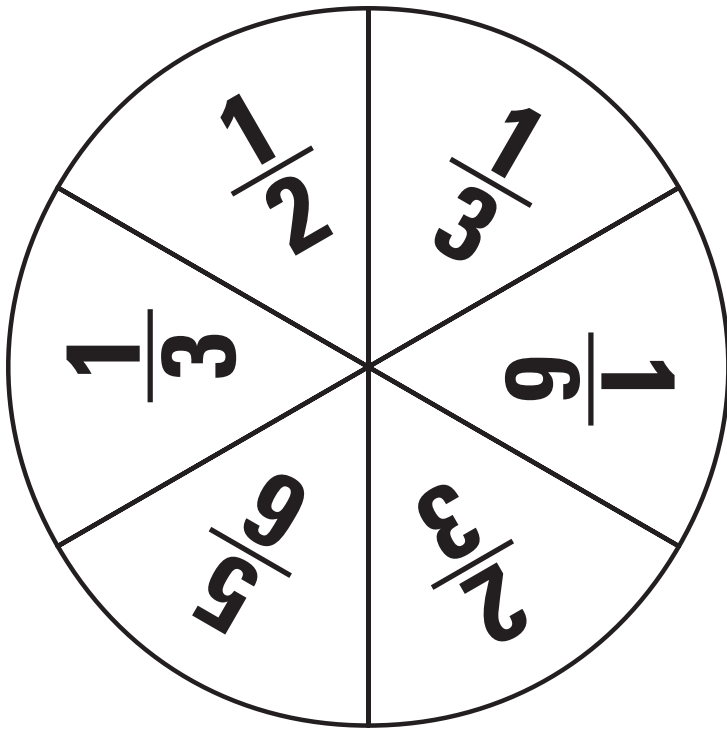
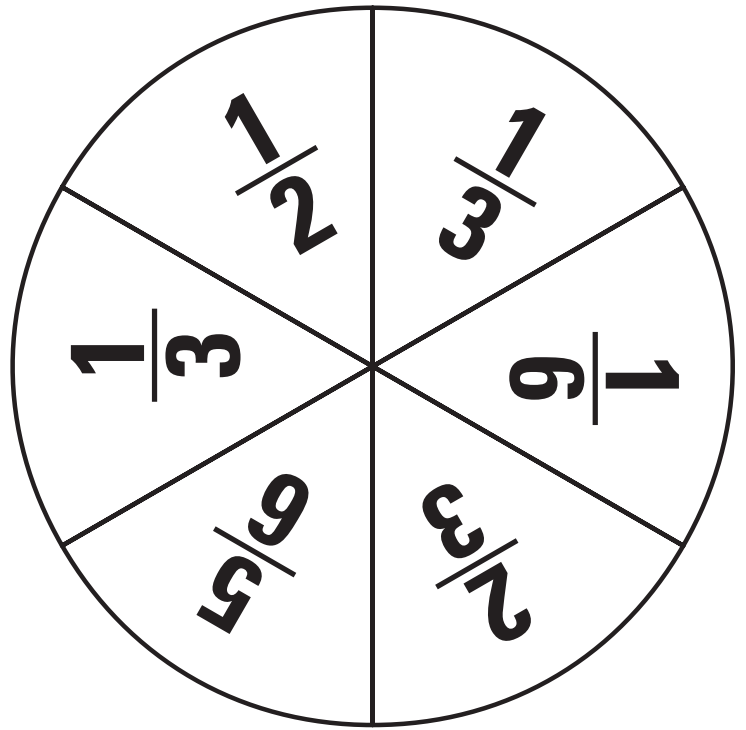
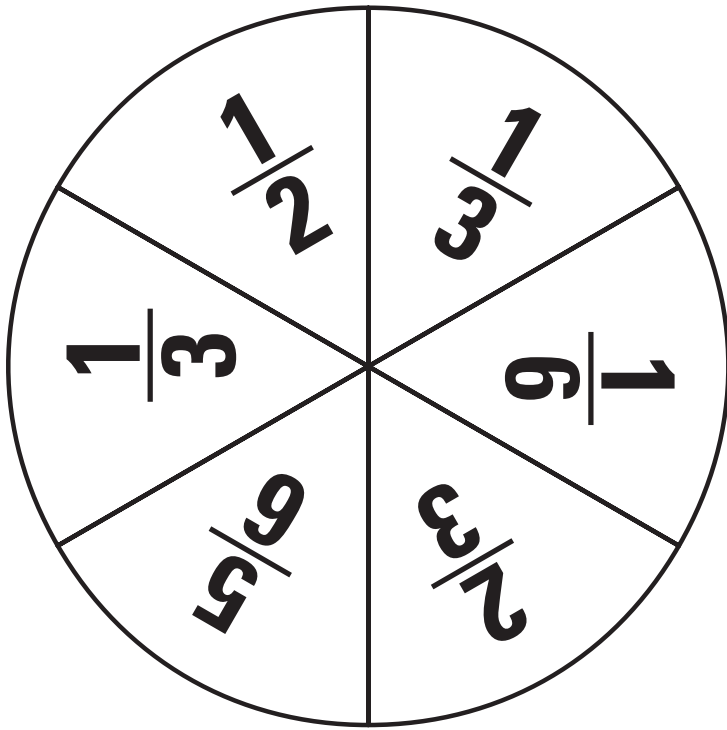
Directions:

1. Players take turns spinning the spinner and placing the pattern blocks on the gameboard. Players should be encouraged to trade up whenever possible.
2. When a player captures an entire hexagon, the shape is covered with a hexagon.
3. The winner is the first player to capture all of the hexagons on the gameboard.

Variation/Extension: The spinner contains two $\frac{1}{3}$ opportunities. Label one of these as “take away”.







Snail Nim

Building Fluency: equivalent fractions

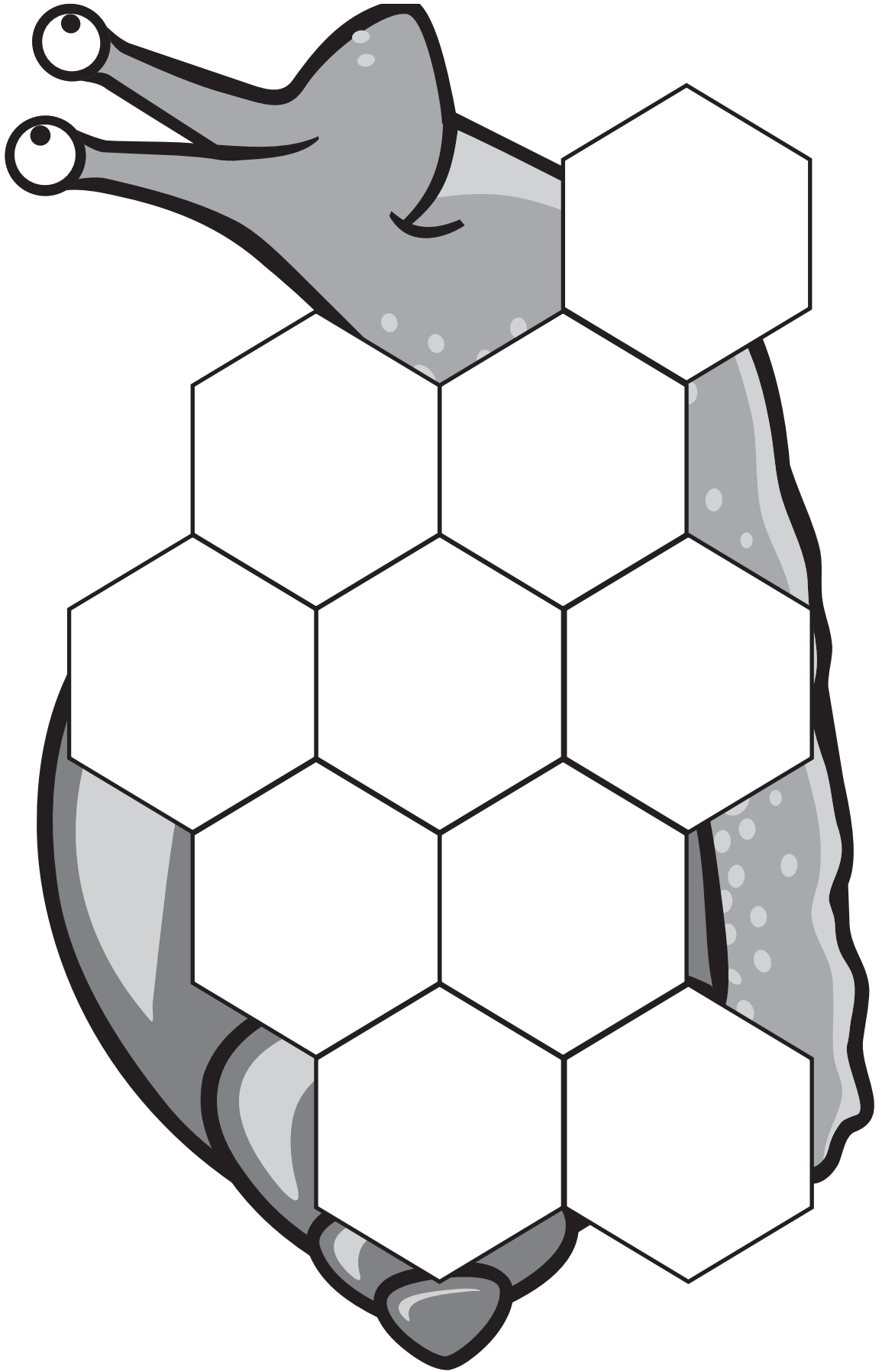
Materials: gameboard and pattern blocks (triangles, parallelograms, trapezoids, hexagons)

Number of Players: 2

Directions:

1. Players take turns placing pattern blocks on the snail. The player announces the fraction being placed. Example: Player places a triangle on the board and says "This is $\frac{1}{6}$ of the hexagon." Player places a trapezoid on the board and says "This is $\frac{1}{2}$ of the hexagon."
2. The person who places the last block on the gameboard loses the game.

Variation/Extension: The winner places the last piece or players may not cover adjoining hexagons in the same way. Example: If a player covers one hexagon with 2 trapezoids, the adjoining hexagons must have at least two different shapes.



Geo-Matchup

Building Fluency: reason with shapes and their attributes

Materials: a set of Geo-Matchup cards per player

Number of Players: 2-4

Directions:

1. Each player has a set of cards.
2. Players match up their cards.
3. Players compare their answers and agree or disagree.
4. Players defend and prove their answers until all players agree.

Variation/Extension: Play as a memory game. First player turns over two cards. If they match, the player takes the cards and plays again. If not, the player turns the cards back over and play passes to the next player. Players can create additional cards.

<p>A polygon with 8 sides and 8 angles</p>	<p>A quadrilateral with 2 pairs of parallel sides, all right angles, and all sides equal</p>	<p>A quadrilateral with 4 sides equal and 2 pairs of parallel sides, no right angles</p>
<p>A polygon with 5 sides and 5 angles</p>	<p>A quadrilateral with 2 pairs of parallel sides and all right angles. All sides are not congruent</p>	<p>A quadrilateral with one pair of parallel sides</p>
<p>A polygon with 3 sides and 3 angles</p>	<p>A quadrilateral with two pairs of adjacent equal sides. The four sides do not all have the same length.</p>	<p>A polygon with 4 sides and 4 angles</p>
<p>A polygon with 6 sides and 6 angles</p>		<p>A quadrilateral with two pairs of parallel sides</p>

