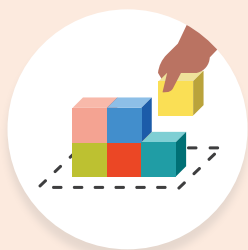


Amplify Desmos Math

Grade 4

Centers Resources



Can You Build It?

Stage 1

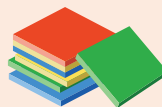
Let's build rectangles with a given area.

Pairs

You'll need . . .



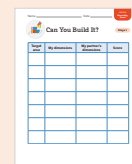
folders



inch tiles or
grid paper



Area Cards



Recording
Sheet



Set-up

- Draw an Area Card. This is the target area for this round.



How to Play

- 1 Each player secretly builds a rectangle with the target area.
- 2 Record and compare the dimensions of your rectangles.
- 3 If both rectangles have the same dimensions, you earn 1 point. If both rectangles have different dimensions, you earn 2 points.
- 4 If possible, repeat Steps 1–3 for the same target area until one or both players cannot build another rectangle.



How to Win


- Keep playing, trying to earn at least 5 points.



Can You Build It?

Stage 1

CENTER
Area Cards

 **Directions:** Make one copy per pair of students. Pre-cut the cards and distribute them so that each pair of students receives one set of cards.

10

Can You Build It?, Stage 1

11

Can You Build It?, Stage 1

12

Can You Build It?, Stage 1

13

Can You Build It?, Stage 1

14

Can You Build It?, Stage 1

15

Can You Build It?, Stage 1

16

Can You Build It?, Stage 1

17

Can You Build It?, Stage 1

18

Can You Build It?, Stage 1

20

Can You Build It?, Stage 1

21

Can You Build It?, Stage 1

22

Can You Build It?, Stage 1

24

Can You Build It?, Stage 1

25

Can You Build It?, Stage 1

26

Can You Build It?, Stage 1

27

Can You Build It?, Stage 1

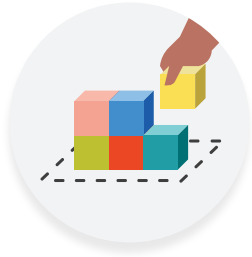
28

Can You Build It?, Stage 1

30

Can You Build It?, Stage 1

Name _____ Date _____



Can You Build It?

Stage 1

Target area	My dimensions	My partner's dimensions	Score



Can You Draw It?

Let's use area and perimeter to draw rectangles.

Pairs

You'll need . . .



folders



Grid Mat



Recording Sheet



How to Play

- 1 **Player A:** Draw a rectangle on the Recording Sheet using the grid. Do not show it to your partner! Tell your partner either the area or the perimeter of your rectangle.
- 2 **Player B:** Draw the rectangle you think your partner drew.
- 3 Compare the measurements and the shapes.
- 4 Take turns.



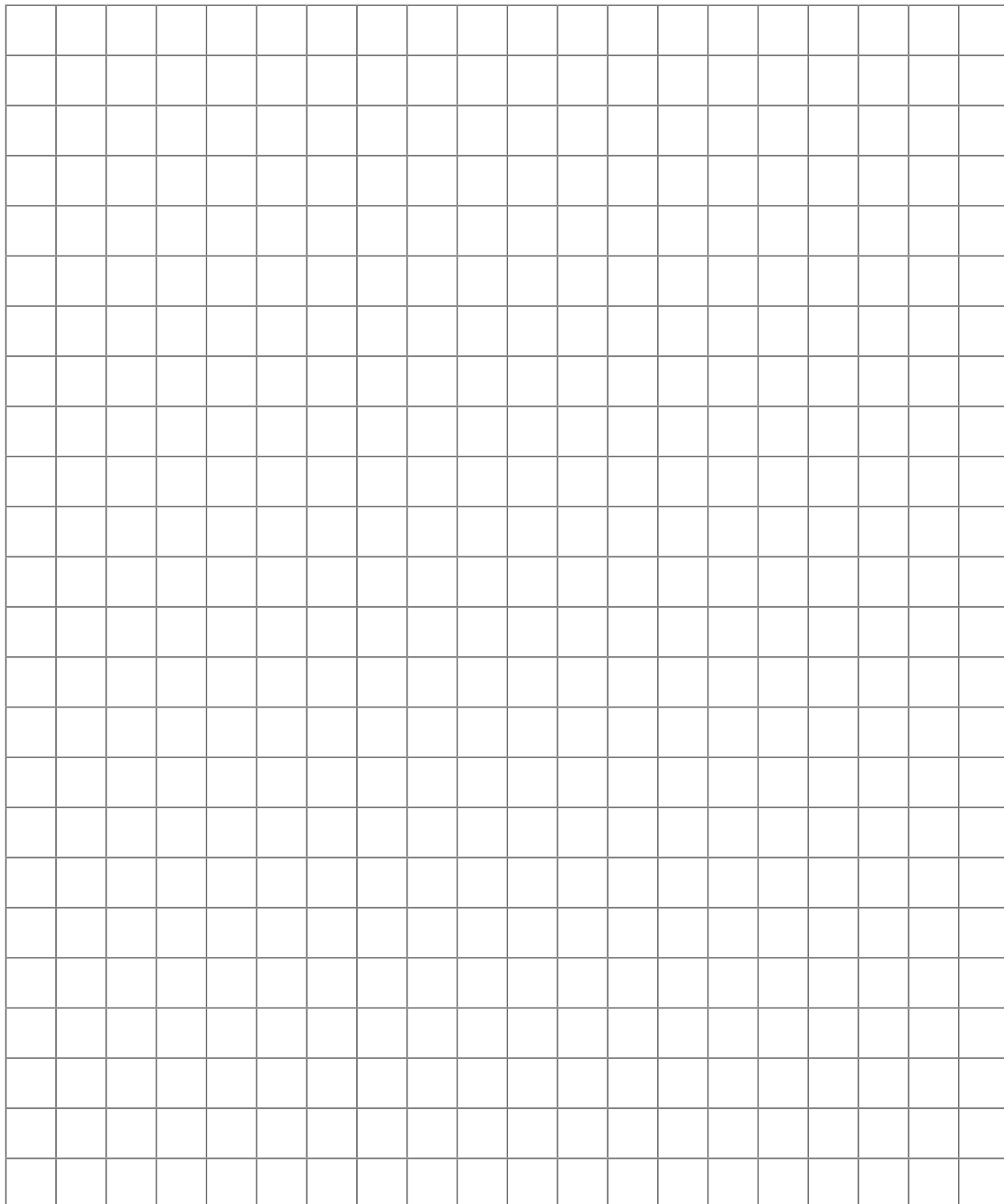
How to Win

- On each turn, Player B earns:
 - 2 points if the rectangles match exactly.
 - 1 point if the rectangles do not match exactly, but Player B's rectangle has the same area or perimeter.
- The partner who earns more points at the end of 5 rounds wins.



Can You Draw It?

Stage 4



Name _____ Date _____



Can You Draw It?

Stage 4

Round	Partner's area or perimeter	My area or perimeter	Same rectangle?	Points
1				
2				
3				
4				
5				



Can You Draw It?

Let's describe and draw geometric figures.

Pairs

You'll need . . .



Geometric Figure Cards



Recording Sheet



Set-up

- Place the Figure Cards facedown in a pile.



How to Play

- 1 Player A:** Choose a Figure Card. Do not show it to your partner! Describe the figure so your partner can draw it.
- 2 Player B:** Draw the figure you think is on the card.
- 3** Compare the figures. If the figures match, Player A keeps the card. If the figures do not match, place the card facedown at the bottom of the pile.
- 4** Take turns.



How to Win


- The player who earns more cards after 8 rounds wins.

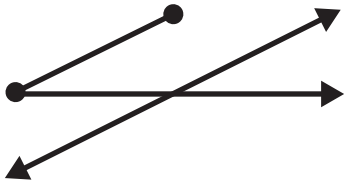


Can You Draw It?

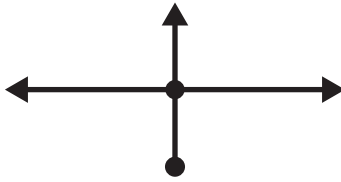
Stage 5

CENTER
Geometric
Figure Cards
(p. 1 of 2)

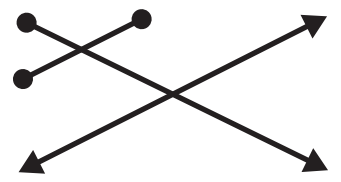
 **Directions:** Make 1 copy per pair of students. Pre-cut the cards and distribute them so that each pair receives one set of cards.



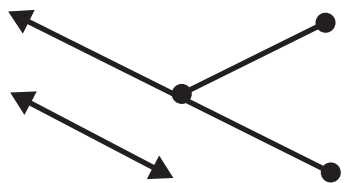
Can You Draw It?



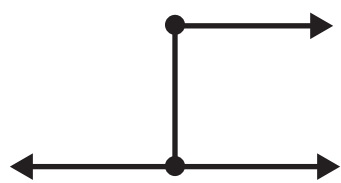
Can You Draw It?



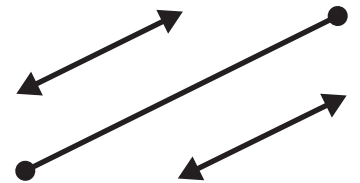
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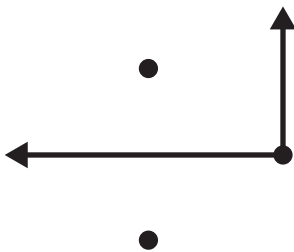
Can You Draw It?



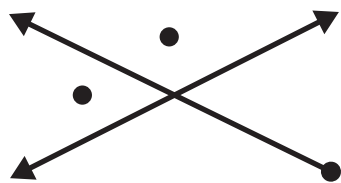
Can You Draw It?



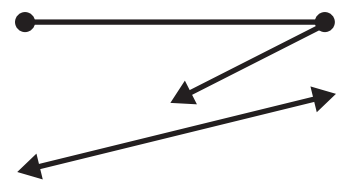
Can You Draw It?



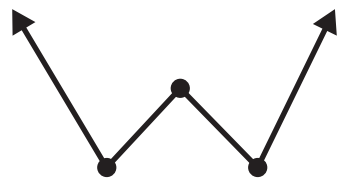
Can You Draw It?



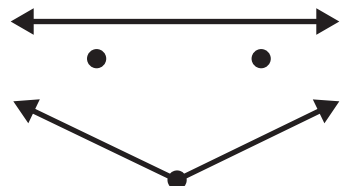
Can You Draw It?



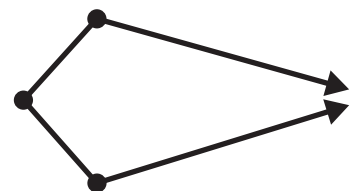
Can You Draw It?



Can You Draw It?



Can You Draw It?



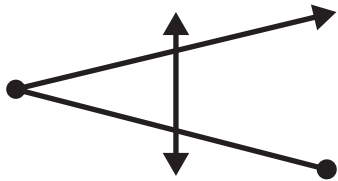
Can You Draw It?



Can You Draw It?

Stage 5

CENTER
Geometric
Figure Cards
(p. 2 of 2)



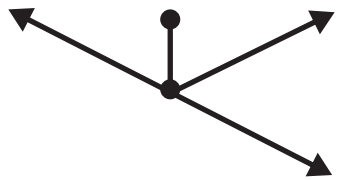
Can You Draw It?



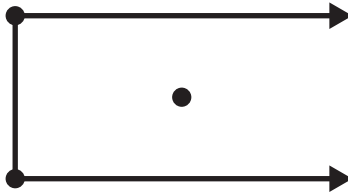
Can You Draw It?



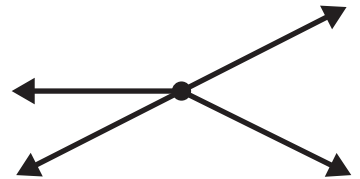
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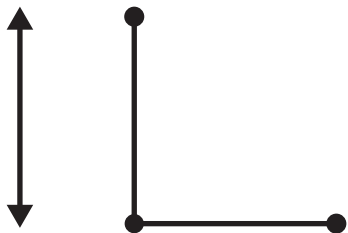
Can You Draw It?



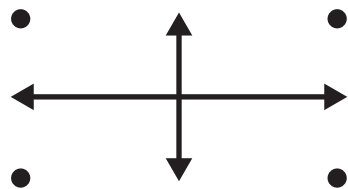
Can You Draw It?



Can You Draw It?



Can You Draw It?



Can You Draw It?

Name _____ Date _____



Can You Draw It?

Stage 5

Round	Drawing	Round	Drawing
1		5	
2		6	
3		7	
4		8	



Can You Draw It?

Let's describe and draw shapes.

Pairs

You'll need . . .



Shape Cards, Grade 4



Recording Sheet



Set-up

- Place the Shape Cards facedown in a pile.



How to Play

- 1 Player A:** Choose a Shape Card. Do not show it to your partner! Describe the shape so your partner can draw it.
- 2 Player B:** Draw the shape you think is on the card.
- 3** Compare the shapes. If the shapes match, Player A keeps the card. If the shapes do not match, place the card facedown at the bottom of the pile.
- 4** Take turns.



How to Win

- The player who earns more cards after 8 rounds wins.

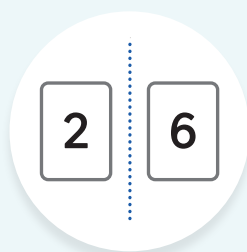
Name _____ Date _____



Can You Draw It?

Stage 6

Round	Drawing	Round	Drawing
1		5	
2		6	
3		7	
4		8	



Compare

Let's compare quotients.

Pairs 

You'll need . . .



One- and Two-Digit
Divisor Cards



Set-up

- Divide the cards between both players. Place your cards facedown in a pile.




How to Play

- 1 Each player flips over a card. Compare the quotients.
- 2 The player with the greater quotient keeps both cards. Place the cards you win faceup in another pile.
- 3 If the quotients are equivalent, each player flips over 1 more card. The player with the greater quotient keeps all 4 cards.
- 4 Play until you run out of facedown cards.



How to Win

- The player with more cards at the end of the game wins.

 **Directions:** Make one copy per pair of students. Pre-cut the cards and distribute them so that each pair receives one set of cards.

$$78 \div 6$$

Compare, Stage 6

$$84 \div 7$$

Compare, Stage 6

$$68 \div 4$$

Compare, Stage 6

$$65 \div 5$$

Compare, Stage 6

$$90 \div 6$$

Compare, Stage 6

$$45 \div 15$$

Compare, Stage 6

$$57 \div 19$$

Compare, Stage 6

$$72 \div 18$$

Compare, Stage 6

$$52 \div 13$$

Compare, Stage 6

$$84 \div 12$$

Compare, Stage 6

$$42 \div 7$$

Compare, Stage 6

$$56 \div 8$$

Compare, Stage 6

$$72 \div 9$$

Compare, Stage 6

$$64 \div 8$$

Compare, Stage 6

$$92 \div 4$$

Compare, Stage 6



Compare

Stage 6

CENTER
One- and Two-Digit
Divisor Cards

(p. 2 of 3)

$$81 \div 9$$

Compare, Stage 6

$$72 \div 3$$

Compare, Stage 6

$$84 \div 4$$

Compare, Stage 6

$$69 \div 3$$

Compare, Stage 6

$$92 \div 4$$

Compare, Stage 6

$$72 \div 3$$

Compare, Stage 6

$$63 \div 3$$

Compare, Stage 6

$$84 \div 21$$

Compare, Stage 6

$$63 \div 21$$

Compare, Stage 6

$$78 \div 13$$

Compare, Stage 6

$$84 \div 7$$

Compare, Stage 6

$$52 \div 13$$

Compare, Stage 6

$$68 \div 4$$

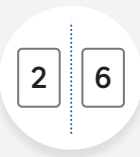
Compare, Stage 6

$$65 \div 13$$

Compare, Stage 6

$$42 \div 6$$

Compare, Stage 6



Compare Stage 6

$$90 \div 6$$

Compare, Stage 6

$$45 \div 3$$

Compare, Stage 6

$$72 \div 8$$

Compare, Stage 6

$$57 \div 19$$

Compare, Stage 6

$$72 \div 18$$

Compare, Stage 6

$$81 \div 9$$

Compare, Stage 6

$$84 \div 12$$

Compare, Stage 6

$$56 \div 7$$

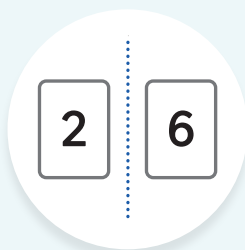
Compare, Stage 6

$$64 \div 8$$

Compare, Stage 6

$$72 \div 3$$

Compare, Stage 6



Compare

Let's compare fractions.

Pairs 

You'll need . . .



Fraction Cards,
Denominators of 2,
3, 4, and 6



Fraction Cards,
Denominators of 5, 8,
10, 12, and 100



Set-up

- Divide the Fraction Cards between both players. Place your cards facedown in a pile.



How to Play

- 1 Each player flips over a card. Compare the values.
- 2 The player with the greater value keeps both cards. Place the cards you win faceup in another pile.
- 3 If the values are equivalent, each player flips over 1 more card. The player with the greater value keeps all 4 cards.
- 4 Play until you run out of facedown cards.




How to Win

- The player with more cards at the end of the game wins.

2

6

Compare Stage 7

 **Directions:** Make one copy per pair of students. Pre-cut the cards and distribute them so that each pair receives one set of cards.

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

Compare, Stage 7

$$\frac{2}{4}$$

Compare, Stage 7

$$\frac{4}{6}$$

Compare, Stage 7

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

Compare, Stage 7

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

Compare, Stage 7

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

Compare, Stage 7

$$\frac{5}{4}$$

Compare, Stage 7

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

Compare, Stage 7

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

Compare, Stage 7

$$\frac{2}{6}$$

Compare, Stage 7

$$\frac{3}{6}$$

Compare, Stage 7

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

Compare, Stage 7

$$\frac{5}{6}$$

Compare, Stage 7

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

Compare, Stage 7

$$\frac{6}{3}$$

Compare, Stage 7

$$\frac{7}{6}$$

Compare, Stage 7

2

6

Compare Stage 7

$$\frac{4}{2}$$

Compare, Stage 7

$$\frac{16}{6}$$

Compare, Stage 7

$$\frac{2}{2}$$

Compare, Stage 7

$$\frac{6}{2}$$

Compare, Stage 7

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

Compare, Stage 7

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

Compare, Stage 7

$$\frac{5}{3}$$


Compare, Stage 7

$$\frac{13}{4}$$

Compare, Stage 7



Compare Stage 7

 **Directions:** Make one copy per pair of students. Pre-cut the cards and distribute them so that each pair receives one set of cards.

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

Compare, Stage 7

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

Compare, Stage 7

$$\frac{1}{5}$$

Compare, Stage 7

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

Compare, Stage 7

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

Compare, Stage 7

$$\frac{3}{5}$$

Compare, Stage 7

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

Compare, Stage 7

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

Compare, Stage 7

$$\frac{5}{5}$$

Compare, Stage 7

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

Compare, Stage 7

$$\frac{8}{8}$$

Compare, Stage 7

$$\frac{1}{10}$$

Compare, Stage 7

$$\frac{2}{5}$$

Compare, Stage 7

$$\frac{3}{10}$$

Compare, Stage 7

$$\frac{4}{10}$$

Compare, Stage 7

$$\frac{4}{5}$$

Compare, Stage 7



Compare Stage 7

CENTER
Fraction Cards,
Denominators of 5,
8, 10, 12, and 100
(p. 2 of 3)

$$\frac{5}{10}$$

Compare, Stage 7

$$\frac{6}{10}$$

Compare, Stage 7

$$\frac{6}{5}$$

Compare, Stage 7

$$\frac{7}{10}$$

Compare, Stage 7

$$\frac{8}{10}$$

Compare, Stage 7

$$\frac{2}{10}$$

Compare, Stage 7

$$\frac{9}{10}$$

Compare, Stage 7

$$\frac{10}{10}$$

Compare, Stage 7

$$\frac{11}{10}$$

Compare, Stage 7

$$\frac{19}{10}$$

Compare, Stage 7

$$\frac{13}{12}$$

Compare, Stage 7

$$\frac{1}{12}$$

Compare, Stage 7

$$\frac{1}{12}$$

Compare, Stage 7

$$\frac{3}{12}$$

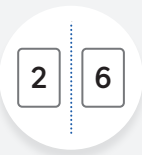
Compare, Stage 7

$$\frac{1}{100}$$

Compare, Stage 7

$$\frac{4}{12}$$

Compare, Stage 7



Compare Stage 7

CENTER
Fraction Cards,
Denominators of 5,
8, 10, 12, and 100

(p. 3 of 3)

$$\frac{7}{12}$$

Compare, Stage 7

$$\frac{10}{100}$$

Compare, Stage 7

$$\frac{9}{12}$$

Compare, Stage 7

$$\frac{10}{12}$$

Compare, Stage 7

$$\frac{49}{100}$$

Compare, Stage 7

$$\frac{15}{12}$$

Compare, Stage 7

$$\frac{51}{100}$$

Compare, Stage 7

$$\frac{75}{100}$$

Compare, Stage 7

$$\frac{5}{100}$$

Compare, Stage 7

$$\frac{99}{100}$$

Compare, Stage 7

$$\frac{200}{100}$$

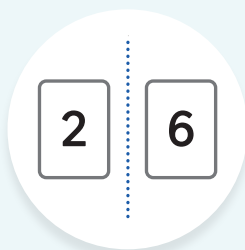
Compare, Stage 7

$$\frac{20}{100}$$

Compare, Stage 7

$$\frac{50}{100}$$

Compare, Stage 7



Compare

Let's compare expressions with fractions.

Pairs 

You'll need . . .



Fraction Addition and Subtraction Cards



Set-up

- Divide the cards between both players. Place your cards facedown in a pile.



How to Play

- 1 Each player flips over a card. Compare the values.
- 2 The player with the greater value keeps both cards. Place the cards you win faceup in another pile.
- 3 If the values are equivalent, each player flips over 1 more card. The player with the greater value keeps all 4 cards.
- 4 Play until you run out of facedown cards.



How to Win


- The player with more cards at the end of the game wins.

2

6

Compare

Stage 8

 **Directions:** Make one copy per pair of students. Pre-cut the cards and distribute them so that each pair receives one set of cards.

$$\frac{4}{6} + \frac{1}{6}$$

Compare, Stage 8

$$\frac{2}{4} - \frac{1}{4}$$

Compare, Stage 8

$$3\frac{1}{4} - 1\frac{3}{4}$$

Compare, Stage 8

$$2\frac{2}{5} + 3\frac{3}{5}$$

Compare, Stage 8

$$1\frac{4}{6} + 4\frac{1}{6}$$

Compare, Stage 8

$$1 - \frac{3}{12} - \frac{5}{12}$$

Compare, Stage 8

$$3\frac{1}{4} - \frac{2}{4}$$

Compare, Stage 8

$$4\frac{3}{5} - 2\frac{4}{5}$$

Compare, Stage 8

$$\frac{9}{10} + \frac{4}{10} + \frac{5}{10}$$

Compare, Stage 8

$$5\frac{2}{12} - \frac{7}{12}$$

Compare, Stage 8

$$2 + \frac{3}{6} + \frac{4}{6}$$

Compare, Stage 8

$$\frac{3}{4} + \frac{6}{4} + 1$$

Compare, Stage 8

$$5\frac{2}{8} + \frac{4}{8} + \frac{3}{8}$$

Compare, Stage 8

$$1\frac{3}{8} - \frac{6}{8}$$

Compare, Stage 8

$$6\frac{5}{8} - 2\frac{7}{8}$$

Compare, Stage 8

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

Compare, Stage 8

$$1\frac{3}{100} + \frac{17}{100}$$

Compare, Stage 8

$$\frac{3}{5} + \frac{2}{5}$$

Compare, Stage 8

$$8 + \frac{2}{3}$$

Compare, Stage 8

$$6\frac{1}{2} - 5\frac{1}{2}$$

Compare, Stage 8

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

Compare, Stage 8

$$1 - \frac{40}{100} - \frac{6}{100}$$

Compare, Stage 8

$$\frac{8}{4} - \frac{5}{4}$$


Compare, Stage 8

$$\frac{8}{4} + \frac{12}{4}$$

Compare, Stage 8



Compare Stage 8

 **Directions:** Make one copy per pair of students. Pre-cut the cards and distribute them so that each pair receives one set of cards.

$$\frac{2}{5} + \frac{4}{10}$$

Compare, Stage 8

$$\frac{3}{6} - \frac{1}{3}$$

Compare, Stage 8

$$\frac{5}{10} + \frac{43}{100}$$

Compare, Stage 8

$$\frac{4}{6} + \frac{4}{12}$$

Compare, Stage 8

$$\frac{5}{8} - \frac{1}{2}$$

Compare, Stage 8

$$\frac{4}{6} + \frac{4}{12}$$

Compare, Stage 8

$$\frac{7}{10} + \frac{35}{100}$$

Compare, Stage 8

$$\frac{8}{10} - \frac{64}{100}$$

Compare, Stage 8

$$\frac{7}{10} + \frac{35}{100}$$

Compare, Stage 8

$$\frac{8}{10} + \frac{26}{100}$$

Compare, Stage 8

$$\frac{7}{10} - \frac{59}{100}$$

Compare, Stage 8

$$\frac{8}{10} + \frac{26}{100}$$

Compare, Stage 8

$$\frac{9}{10} - \frac{72}{100}$$

Compare, Stage 8

$$\frac{2}{5} - \frac{4}{10}$$

Compare, Stage 8

$$\frac{3}{6} + \frac{1}{3}$$

Compare, Stage 8

$$\frac{5}{8} - \frac{1}{2}$$

Compare, Stage 8

$$\frac{4}{6} - \frac{4}{12}$$

Compare, Stage 8

$$\frac{3}{8} + \frac{1}{2}$$

Compare, Stage 8

$$\frac{3}{10} + \frac{20}{100}$$

Compare, Stage 8

$$\frac{75}{100} - \frac{2}{10}$$

Compare, Stage 8

$$\frac{7}{10} - \frac{20}{100}$$

Compare, Stage 8

$$\frac{8}{10} - \frac{50}{100}$$

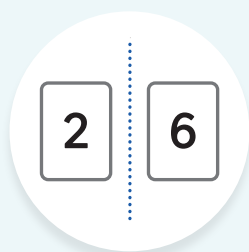
Compare, Stage 8

$$\frac{60}{100} + \frac{4}{10}$$

Compare, Stage 8

$$\frac{10}{100} + \frac{1}{10}$$

Compare, Stage 8



Compare

Let's compare expressions.

Pairs 

You'll need . . .



Expression Cards



Set-up

- Divide the cards between both players. Place your cards facedown in a pile.



How to Play

- 1 Each player flips over a card. Compare the values.
- 2 The player with the greater value keeps both cards. Place the cards you win faceup in another pile.
- 3 If the values are equivalent, each player flips over 1 more card. The player with the greater value keeps all 4 cards.
- 4 Play until you run out of facedown cards.




How to Win

- The player with more cards at the end of the game wins.

2

6

Compare Stage 9

 **Directions:** Make one copy per pair of students. Pre-cut the cards and distribute them so that each pair receives one set of cards.

$$23,400 + 12,002$$

Compare, Stage 9

$$43,001 + 102,300$$

Compare, Stage 9

$$27,000 + 821,800$$

Compare, Stage 9

$$91,004 + 89,001$$

Compare, Stage 9

$$902,005 + 81,900$$

Compare, Stage 9

$$82,000 + 28,000$$

Compare, Stage 9

$$27,300 - 16,100$$

Compare, Stage 9

$$86,900 - 42,300$$

Compare, Stage 9

$$30,204 - 8,000$$

Compare, Stage 9

$$100,000 - 72,700$$

Compare, Stage 9

$$182,000 - 18,600$$

Compare, Stage 9

$$109,203 - 73,001$$

Compare, Stage 9

$$8,354 \times 5$$

Compare, Stage 9

$$5,294 \times 8$$

Compare, Stage 9

$$9,263 \times 4$$

Compare, Stage 9

$$4,826 \times 9$$

Compare, Stage 9

2

6

Compare

Stage 9

$$7,934 \times 6$$

Compare, Stage 9

$$6,839 \times 7$$

Compare, Stage 9

$$36 \times 24$$

Compare, Stage 9

$$28 \times 42$$

Compare, Stage 9

$$54 \times 25$$

Compare, Stage 9

$$68 \times 29$$

Compare, Stage 9

$$74 \times 56$$

Compare, Stage 9

$$47 \times 32$$

Compare, Stage 9

$$2,286 \div 3$$

Compare, Stage 9

$$1,244 \div 4$$

Compare, Stage 9

$$5,286 \div 6$$

Compare, Stage 9

$$2,530 \div 5$$

Compare, Stage 9

$$6,972 \div 3$$

Compare, Stage 9

$$8,728 \div 4$$

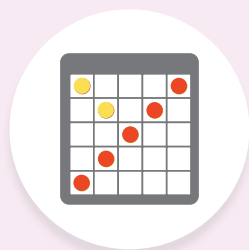
Compare, Stage 9

$$6,905 \div 5$$

Compare, Stage 9

$$8,728 \div 8$$

Compare, Stage 9



Cover Up

Let's multiply using factors of 1–5 and 10.

Pairs 

You'll need . . .



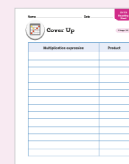
2 base-ten units



two-color counters



Gameboard A or B



Recording Sheet



Set-up

- Choose a Gameboard.
- Choose who will use red counters and who will use yellow counters.



How to Play

1

Player A:

- Place each cube on a number in the gray row. Each cube can be on a different number, or both cubes can be on the same number. Multiply the numbers.
- Cover the product of the two numbers with a counter.
- Record the multiplication expression and product.

2

Player B:

- Move one of the cubes. Multiply the numbers.
- If the product is not already covered with a counter, cover it.
- Record the multiplication expression and product.

3

Take turns moving one cube at a time. Record each multiplication expression and product, even if you were unable to cover the product.



How to Win

- The first player to cover 5 squares in a row wins.



Cover Up

Stage 12

40	2	3	30	5
6	20	8	15	10
100	15	2	16	50
12	9	16	20	25
4	1	50	4	100

1	2	3	4	5	10
---	---	---	---	---	----

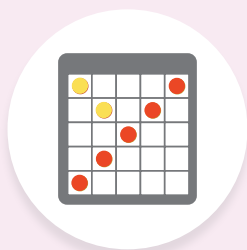


Cover Up

Stage 12

100	15	10	20	6
12	8	4	2	50
16	40	3	9	15
20	1	5	50	2
4	25	100	16	30

1	2	3	4	5	10
---	---	---	---	---	----



Cover Up

Let's multiply using factors of 1–9.

Pairs 

You'll need . . .



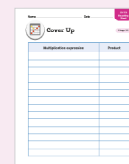
2 base-ten units



two-color counters



Gameboard A or B



Recording Sheet



Set-up

- Choose a Gameboard.
- Choose who will use red counters and who will use yellow counters.



How to Play

1

Player A:

- Place a cube on any two numbers in the gray rows. More than one cube can be on the same number. Multiply the numbers.
- Cover the product of the two numbers with a counter.
- Record the multiplication expression and product.

2

Player B:

- Move one of the cubes. Multiply the numbers.
- If the product is not already covered with a counter, cover it.
- Record the multiplication expression and product.

3

Take turns moving one cube at a time. Record each multiplication expression and product, even if you were unable to cover the product.



How to Win

- The first player to cover 6 squares in a row wins.



Cover Up

Stage 13

1	2	3	4	5	6
7	8	9	10	12	14
15	16	18	20	21	24
25	27	28	30	32	35
36	40	42	45	48	49
54	56	63	64	72	81

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

6	7	8	9
---	---	---	---



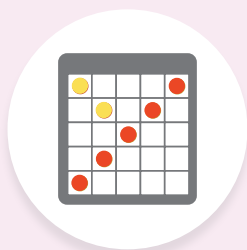
Cover Up

Stage 13

3	25	12	40	8	15
30	63	20	28	36	4
56	9	49	2	18	81
5	35	16	48	24	10
72	1	64	14	45	54
21	42	7	32	27	6

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

6	7	8	9
---	---	---	---



Cover Up

Let's multiply two-digit factors.

Pairs 

You'll need . . .



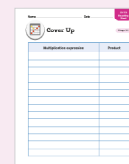
2 base-ten units



two-color counters



Gameboard A or B



Recording Sheet



Set-up

- Choose a Gameboard.
- Choose who will use red counters and who will use yellow counters.



How to Play

1

Player A:

- Place a cube on any two numbers in the gray rows. More than one cube can be on the same number. Multiply the numbers.
- Cover the product of the two numbers with a counter.
- Record the multiplication expression and product.

2

Player B:

- Move one of the cubes. Multiply the numbers.
- If the product is not already covered with a counter, cover it.
- Record the multiplication expression and product.

3

Take turns moving one cube at a time. Record each multiplication expression and product, even if you were unable to cover the product.



How to Win

- The first player to cover 6 squares in a row wins.



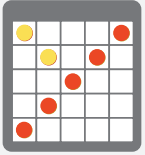
Cover Up

Stage 14

252	351	630	360	312	168
360	576	273	315	294	900
420	324	729	144	810	441
156	405	336	450	210	504
195	648	390	169	720	288
225	196	182	567	180	378

12	13	14	15
----	----	----	----

21	24	27	30
----	----	----	----



Cover Up

100	160	170	180	200	220
256	260	272	280	288	289
306	320	324	340	352	360
374	396	400	416	440	442
448	468	476	484	504	520
560	572	616	676	728	784

10	16	17	18
----	----	----	----

20	22	26	28
----	----	----	----



Flipping for Fractions

Stage 1

Let's make equivalent fractions.

Pairs

You'll need . . .



Number Cards, 1–9



Recording Sheet



Set-up

- Shuffle two sets of Number Cards and arrange them facedown in an array.



How to Play

- 1 Player A:** Flip over 3 Number Cards.
- Use two or three of the numbers to make the first fraction on your Recording Sheet. For example, if you flipped a 1, 2, and 3, you could make the fraction $\frac{1}{2}$ or the fraction $\frac{3}{12}$. Do not show your partner your fraction.
- Set the first 3 cards aside. Flip over another 3 Number Cards. Try to make a second fraction that is equivalent to your first fraction. If you need to, you can set aside 1 or more of the Number Cards and flip over replacements one time. If you can make an equivalent fraction, record it, and you earn 1 point. Otherwise, your turn is over.
- 4 Player B:** Complete Steps 1–3 to complete the round.



How to Win

- The player who earns more points after 5 rounds wins.

Name _____ Date _____



Flipping for Fractions

Stage 1

Round	Equivalent fractions	Points
1	$\frac{\square}{\square} = \frac{\square}{\square}$	
2	$\frac{\square}{\square} = \frac{\square}{\square}$	
3	$\frac{\square}{\square} = \frac{\square}{\square}$	
4	$\frac{\square}{\square} = \frac{\square}{\square}$	
5	$\frac{\square}{\square} = \frac{\square}{\square}$	



Flipping for Fractions

Stage 2

Let's multiply a whole number and a unit fraction.

Pairs

You'll need . . .



Number Cards, 1–9



Recording Sheet



Set-up

- Arrange the Number Cards facedown in an array.



How to Play

- 1 Player A:** Flip over 2 Number Cards.
- 2** Use the numbers to make a multiplication expression on your Recording Sheet. Do not show your partner your expression.
- 3** Determine the product. Record it. Do not show your partner your product.
- 4 Player B:** Replace the cards, shuffle, and rearrange them facedown again. Complete Steps 1–3.
- 5** Compare the products. The player with the product closer to 1 earns 1 point.



How to Win

- The player who earns more points after 5 rounds wins.

Name _____ Date _____



Flipping for Fractions

Stage 2

Round	Expression	Product	Points
1	$\square \times \frac{1}{\square}$		
2	$\square \times \frac{1}{\square}$		
3	$\square \times \frac{1}{\square}$		
4	$\square \times \frac{1}{\square}$		
5	$\square \times \frac{1}{\square}$		



Flipping for Fractions

Stage 3

Let's multiply a whole number and a fraction.

Pairs

You'll need . . .



Number Cards, 1–9



Recording Sheet



Set-up

- Arrange the Number Cards facedown in an array.



How to Play

- 1 Player A:** Flip over 3 Number Cards.
- 2** Use the numbers to make a multiplication expression on your Recording Sheet. Do not show your partner your expression.
- 3** Determine the product. Record it. Do not show your partner your product.
- 4 Player B:** Replace the cards, shuffle, and rearrange them facedown again. Complete Steps 1–3.
- 5** Compare the products. The player with the product closer to 1 earns 1 point.



How to Win

- The player who earns more points after 5 rounds wins.

Name _____ Date _____



Flipping for Fractions

Stage 3

Round	Expression	Product	Points
1	$\square \times \frac{\square}{\square}$		
2	$\square \times \frac{\square}{\square}$		
3	$\square \times \frac{\square}{\square}$		
4	$\square \times \frac{\square}{\square}$		
5	$\square \times \frac{\square}{\square}$		



Fraction Match

Let's match fractions and diagrams.

Pairs

You'll need . . .



Fraction Match Cards



Recording Sheet



Set-up

- Arrange the cards facedown in an array.



How to Play

- 1 On each turn, flip over 2 cards. Two cards match if they represent the same fraction.
- 2 If the cards match, collect them and take another turn. If the cards do not match, flip them over facedown, and your turn is over. If you collect 2 matches in a row, your turn is over.
- 3 Record each match.
- 4 Take turns.



How to Win

- After all the matches have been found, the player who collected more cards wins.



Fraction Match

Stage 1

CENTER
Cards
(p. 1 of 2)

Directions: Make 1 copy per pair of students. Pre-cut the cards and distribute them so that each pair receives one set of cards.

$$\frac{2}{2}$$

Fraction Match Stage 1

$$\frac{4}{6}$$

Fraction Match Stage 1

$$\frac{2}{4}$$

Fraction Match Stage 1

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

Fraction Match Stage 1

two-thirds

Fraction Match Stage 1

five-eighths

Fraction Match Stage 1

two-sixths

Fraction Match Stage 1

four-thirds

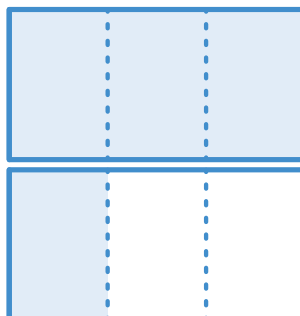
Fraction Match Stage 1



Fraction Match Stage 1



Fraction Match Stage 1



Fraction Match Stage 1



Fraction Match Stage 1



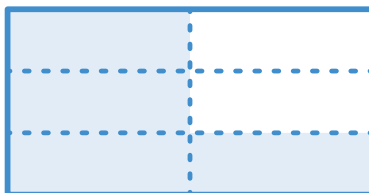
Fraction Match

Stage 1

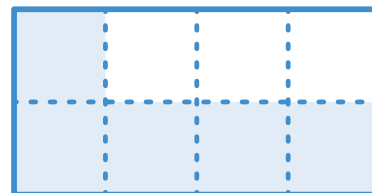
CENTER
Cards
(p. 2 of 2)



Fraction Match Stage 1



Fraction Match Stage 1



Fraction Match Stage 1



Fraction Match Stage 1

seven-fourths

Fraction Match Stage 1

eight-eighths

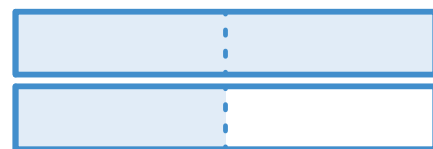
Fraction Match Stage 1

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

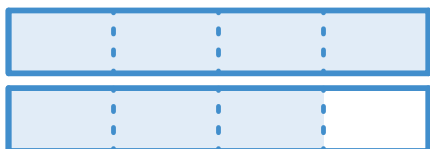
Fraction Match Stage 1

$$\frac{9}{6}$$

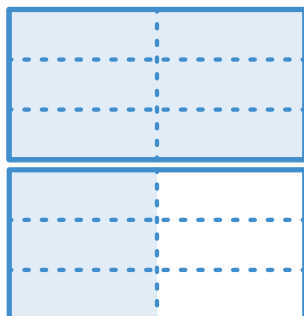
Fraction Match Stage 1



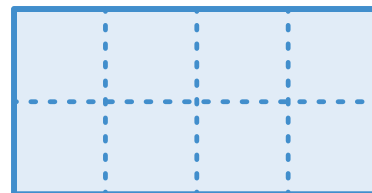
Fraction Match Stage 1



Fraction Match Stage 1



Fraction Match Stage 1



Fraction Match Stage 1

Name _____ Date _____



Fraction Match

Stage 1

Numeric form or word form	Fraction diagram

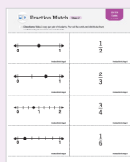


Fraction Match

Let's match fractions and number lines.

Pairs

You'll need . . .



Fraction Match Cards



Recording Sheet



Set-up

- Arrange the cards facedown in an array.



How to Play

- 1 On each turn, flip over 2 cards. Two cards match if they represent the same fraction.
- 2 If the cards match, collect them and take another turn. If the cards do not match, flip them over facedown, and your turn is over. If you collect 2 matches in a row, your turn is over.
- 3 Record each match.
- 4 Take turns.



How to Win


- After all the matches have been found, the player who collected more cards wins.



Fraction Match

Stage 2

CENTER
Cards
(p. 1 of 3)

 **Directions:** Make 1 copy per pair of students. Pre-cut the cards and distribute them so that each pair receives one set of cards.



Fraction Match Stage 2

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

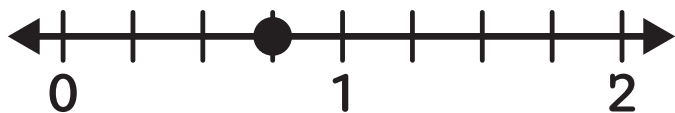
Fraction Match Stage 2



Fraction Match Stage 2

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

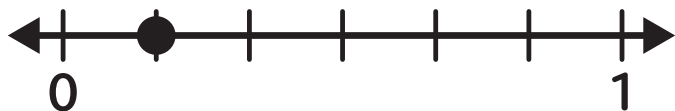
Fraction Match Stage 2



Fraction Match Stage 2

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

Fraction Match Stage 2



Fraction Match Stage 2

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

Fraction Match Stage 2



Fraction Match

Stage 2

CENTER
Cards
(p. 2 of 3)



Fraction Match Stage 2

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

Fraction Match Stage 2



Fraction Match Stage 2

$$\frac{5}{3}$$

Fraction Match Stage 2



Fraction Match Stage 2

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

Fraction Match Stage 2



Fraction Match Stage 2

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

Fraction Match Stage 2



Fraction Match

Stage 2

CENTER
Cards
(p. 3 of 3)



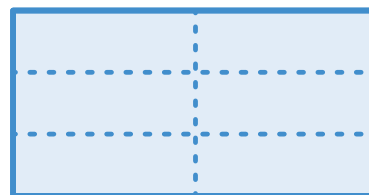
Fraction Match Stage 2

$$\frac{7}{6}$$

Fraction Match Stage 2



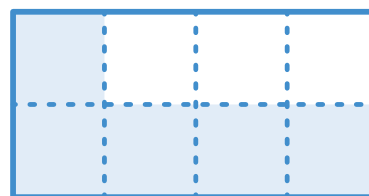
Fraction Match Stage 2



Fraction Match Stage 2



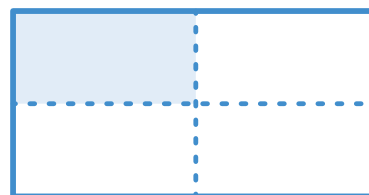
Fraction Match Stage 2



Fraction Match Stage 2



Fraction Match Stage 2



Fraction Match Stage 2

Name _____ Date _____



Fraction Match

Stage 2

Fraction or diagram	Number Line



Fraction Match

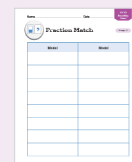
Let's match equivalent fractions.

Pairs

You'll need . . .



Fraction Match Cards,
Rounds 1–2



Recording Sheet



Set-up

- Arrange the cards facedown in an array.



How to Play

- 1 On each turn, flip over 2 cards. Two cards match if they represent the same fraction.
- 2 If the cards match, collect them and take another turn. If the cards do not match, flip them over facedown, and your turn is over. If you collect 2 matches in a row, your turn is over.
- 3 Draw each match on the Recording Sheet.
- 4 Take turns.
- 5 After all the matches have been found, play again using the cards for Round 2.



How to Win


- The player who collects more cards wins.

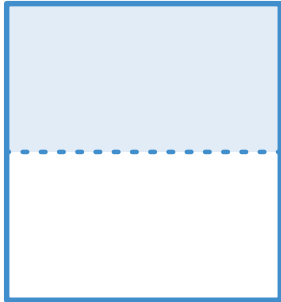


Fraction Match, Round 1

Stage 3

CENTER
Cards

 **Directions:** Make 1 copy per pair of students. Pre-cut the cards and distribute them so that each pair receives one set of cards.



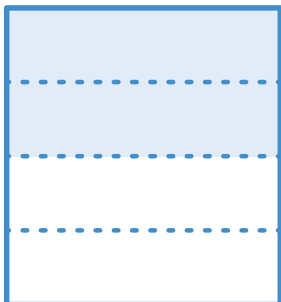
Fraction Match Stage 3, Round 1



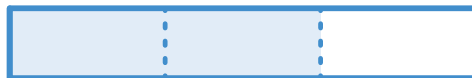
Fraction Match Stage 3, Round 1



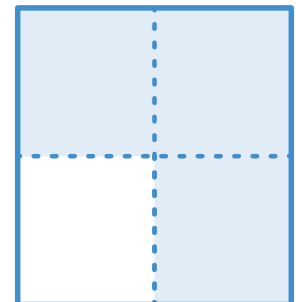
Fraction Match Stage 3, Round 1



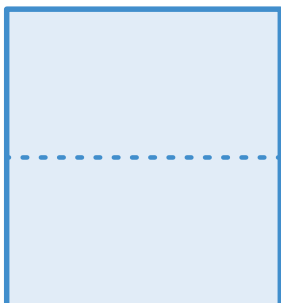
Fraction Match Stage 3, Round 1



Fraction Match Stage 3, Round 1



Fraction Match Stage 3, Round 1



Fraction Match Stage 3, Round 1



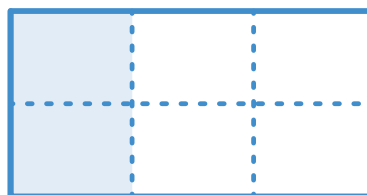
Fraction Match Stage 3, Round 1



Fraction Match Stage 3, Round 1



Fraction Match Stage 3, Round 1



Fraction Match Stage 3, Round 1




Fraction Match Stage 3, Round 1



Fraction Match, Round 2

Stage 3

CENTER
Cards
(p. 1 of 2)

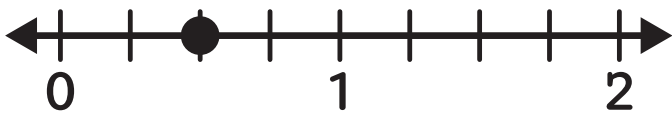
 **Directions:** Make 1 copy per pair of students. Pre-cut the cards and distribute them so that each pair receives one set of cards.



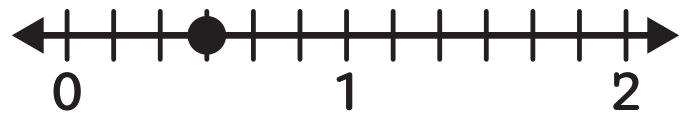
Fraction Match Stage 3, Round 2



Fraction Match Stage 3, Round 2



Fraction Match Stage 3, Round 2



Fraction Match Stage 3, Round 2



Fraction Match Stage 3, Round 2



Fraction Match Stage 3, Round 2



Fraction Match Stage 3, Round 2



Fraction Match Stage 3, Round 2



Fraction Match, Round 2

Stage 3

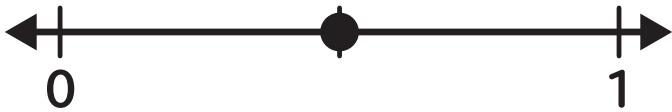
CENTER
Cards
(p. 2 of 2)



Fraction Match Stage 3, Round 2



Fraction Match Stage 3, Round 2



Fraction Match Stage 3, Round 2



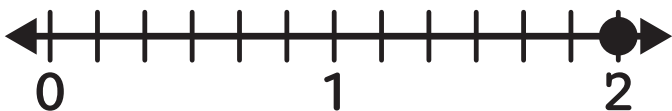
Fraction Match Stage 3, Round 2



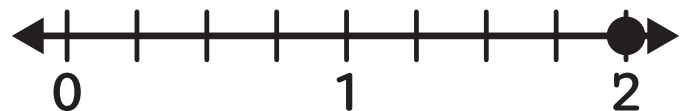
Fraction Match Stage 3, Round 2



Fraction Match Stage 3, Round 2



Fraction Match Stage 3, Round 2



Fraction Match Stage 3, Round 2

Name _____ Date _____



Fraction Match

Stage 3

Model	Model



Fraction Match

Let's match equivalent fractions.

Pairs

You'll need . . .



Fraction Match Cards



Recording Sheet



Set-up

- Arrange the cards facedown in an array.



How to Play

- 1 On each turn, flip over 2 cards. Two cards match if they represent equivalent fractions.
- 2 If the cards match, collect them and take another turn. If the cards do not match, flip them over facedown, and your turn is over. If you collect 2 matches in a row, your turn is over.
- 3 Record the numbers for each match.
- 4 Take turns.



How to Win


- After all the matches have been found, the player who collected more cards wins.



Fraction Match

Stage 4

CENTER
Cards
(p. 1 of 2)

 **Directions:** Make one copy per pair. Pre-cut the cards and distribute them so that each pair of students receives one set of cards. This set of cards will be used throughout the year.

$$\frac{4}{5}$$

Fraction Match Stage 4

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

Fraction Match Stage 4

$$\frac{6}{12}$$

Fraction Match Stage 4

$$\frac{8}{10}$$

Fraction Match Stage 4

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

Fraction Match Stage 4

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

Fraction Match Stage 4

$$\frac{3}{12}$$

Fraction Match Stage 4

$$\frac{1}{10}$$

Fraction Match Stage 4

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

Fraction Match Stage 4

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

Fraction Match Stage 4

$$\frac{10}{100}$$

Fraction Match Stage 4

$$\frac{4}{6}$$

Fraction Match Stage 4



Fraction Match

Stage 4

CENTER
Cards
(p. 2 of 2)

$$\frac{4}{12}$$

Fraction Match Stage 4

$$\frac{5}{4}$$

Fraction Match Stage 4

$$\frac{10}{4}$$

Fraction Match Stage 4

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

Fraction Match Stage 4

$$\frac{125}{100}$$

Fraction Match Stage 4

$$\frac{5}{2}$$

Fraction Match Stage 4

$$\frac{4}{10}$$

Fraction Match Stage 4

$$\frac{3}{5}$$

Fraction Match Stage 4

$$\frac{10}{6}$$

Fraction Match Stage 4

$$\frac{2}{5}$$

Fraction Match Stage 4

$$\frac{6}{10}$$

Fraction Match Stage 4

$$\frac{5}{3}$$

Fraction Match Stage 4

Name _____ Date _____



Fraction Match

Stage 4

Fraction	Fraction



Fraction Match

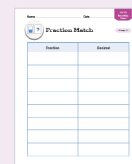
Let's match fractions and decimals.

Pairs

You'll need . . .



Fraction Match Cards



Recording Sheet



Set-up

- Arrange the cards facedown in an array.



How to Play

- 1 On each turn, flip over 2 cards. Two cards match if they represent the same value.
- 2 If the cards match, collect them and take another turn. If the cards do not match, flip them over facedown, and your turn is over. If you collect 2 matches in a row, your turn is over.
- 3 Record each match.
- 4 Take turns.



How to Win


- After all the matches have been found, the player who collected more cards wins.



Fraction Match

Stage 5

CENTER
Cards
(p. 1 of 2)

 **Directions:** Make one copy per pair. Pre-cut the cards and distribute them so that each pair of students receives one set of cards. This set of cards will be used throughout the year.

$$\frac{8}{10}$$

Fraction Match Stage 5

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

Fraction Match Stage 5

$$\frac{70}{100}$$

Fraction Match Stage 5

0.8

Fraction Match Stage 5

1.5

Fraction Match Stage 5

0.7

Fraction Match Stage 5

$$\frac{1}{10}$$

Fraction Match Stage 5

$$\frac{1}{5}$$

Fraction Match Stage 5

$$\frac{3}{10}$$

Fraction Match Stage 5

0.1

Fraction Match Stage 5

0.2

Fraction Match Stage 5

0.30

Fraction Match Stage 5



Fraction Match

Stage 5

CENTER
Cards
(p. 2 of 2)

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

Fraction Match Stage 5

$$\frac{40}{100}$$

Fraction Match Stage 5

$$\frac{90}{100}$$

Fraction Match Stage 5

0.5

Fraction Match Stage 5

0.4

Fraction Match Stage 5

0.9

Fraction Match Stage 5

$$\frac{10}{10}$$

Fraction Match Stage 5

$$\frac{6}{10}$$

Fraction Match Stage 5

$$\frac{110}{100}$$

Fraction Match Stage 5

1.0

Fraction Match Stage 5

0.6

Fraction Match Stage 5

1.1

Fraction Match Stage 5

Name _____ Date _____



Fraction Match

Stage 5

Fraction	Decimal



Get Your Numbers in Order

Let's order fractions from least to greatest.

Pairs

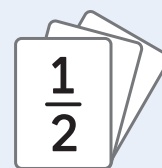
You'll need . . .



dry-erase markers



sheet protectors



Fraction Cards, Denominators of 2, 3, 4, and 6



Gameboard



Set-up

- Shuffle the Fraction Cards and place them in a stack facedown.



How to Play

- On your turn, draw a Fraction Card.
- You will order fractions from least to greatest. The player who starts the game records their fraction in any space on the Gameboard.
- You cannot move a fraction once it is on the Gameboard. Take turns ordering and recording fractions until all the spaces are filled. If your fraction is equivalent to a fraction already on the Gameboard, you can record it in the same box.
- If your fraction cannot be recorded on the Gameboard, you must say "pass," and you get 1 point.




How to Win

- The player with fewer points at the end of the game wins.



Fraction Cards, Denominators of 2, 3, 4, and 6

 **Directions:** Make one copy per pair. Pre-cut the cards and distribute them so that each pair of students receives one set of cards. This set of cards will be used throughout the year.

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

Fraction Cards

$$\frac{2}{4}$$

Fraction Cards

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

Fraction Cards

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

Fraction Cards

$$\frac{5}{4}$$

Fraction Cards

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

Fraction Cards

$$\frac{2}{6}$$

Fraction Cards

$$\frac{3}{6}$$

Fraction Cards

$$\frac{4}{6}$$

Fraction Cards

$$\frac{5}{6}$$

Fraction Cards

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

Fraction Cards

$$\frac{7}{6}$$

Fraction Cards



Fraction Cards, Denominators of 2, 3, 4, and 6

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

Fraction Cards

$$\frac{2}{2}$$

Fraction Cards

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

Fraction Cards

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

Fraction Cards

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

Fraction Cards

$$\frac{6}{3}$$

Fraction Cards

$$\frac{4}{2}$$

Fraction Cards

$$\frac{16}{6}$$

Fraction Cards

$$\frac{6}{2}$$

Fraction Cards

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

Fraction Cards

$$\frac{5}{3}$$

Fraction Cards

$$\frac{13}{4}$$

Fraction Cards



Get Your Numbers in Order

Stage 3

Least

Greatest

--	--	--	--	--	--	--

Points

Player A	Player B



Get Your Numbers in Order

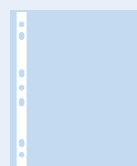
Let's order fractions from least to greatest.

Pairs

You'll need . . .



dry-erase
markers



sheet
protectors



Fraction Cards,
Denominators
2, 3, 4, and 6



Fraction Cards,
Denominators
of 5, 8, 10, 12,
and 100



Gameboard



Set-up

- Shuffle the Fraction Cards and place them in a stack facedown.



How to Play

- 1 On your turn, draw a Fraction Card.
- 2 You will order fractions from least to greatest. The player who starts the game records their fraction in any space on the Gameboard.
- 3 You cannot move a fraction once it is on the Gameboard. Take turns ordering and recording fractions until all the spaces are filled. If your fraction is equivalent to a fraction already on the Gameboard, you can record it in the same box.
- 4 If your fraction cannot be recorded on the Gameboard, you must say "pass," and you get 1 point.



How to Win

- The player with fewer points at the end of the game wins.



Get Your Numbers in Order

Stage 4

Least

Greatest

--	--	--	--	--	--	--

Points

Player A	Player B



Greatest of Them All

Stage 4

Let's make
and compare
six-digit numbers.

Pairs

You'll need . . .



Number Cards, 0–9



Recording Sheet,
one per pair



Set-up

- Decide who will be Player A and who will be Player B.
- Shuffle the Number Cards and place them in a stack facedown.



How to Play

- 1 Each player draws a Number Card and records it in one of the boxes.
- 2 Repeat until each player has a six-digit number.
- 3 Write a comparison using $<$, $>$, or $=$. The player with the greater number earns 1 point.



How to Win

- When the Recording Sheet is full, the player who earns more points wins.



Name _____ Date _____

Greatest of Them All

Stage 4

Player A	Compare using <, >, or =	Player B	Winner?
<div style="border: 1px dashed black; padding: 5px;"> </div>		<div style="border: 1px dashed black; padding: 5px;"> </div>	
<div style="border: 1px dashed black; padding: 5px;"> </div>		<div style="border: 1px dashed black; padding: 5px;"> </div>	
<div style="border: 1px dashed black; padding: 5px;"> </div>		<div style="border: 1px dashed black; padding: 5px;"> </div>	
<div style="border: 1px dashed black; padding: 5px;"> </div>		<div style="border: 1px dashed black; padding: 5px;"> </div>	
<div style="border: 1px dashed black; padding: 5px;"> </div>		<div style="border: 1px dashed black; padding: 5px;"> </div>	



Greatest of Them All

Stage 5

Let's round six-digit numbers.

Pairs 

You'll need . . .



Number Cards, 0–9



Recording Sheets A–C



Set-up

- Choose a Recording Sheet. This sheet will tell you which place value you will round to.
- Shuffle the Number Cards and place them in a stack facedown.



How to Play

- 1 Each player draws a Number Card and records it in one of the boxes.
- 2 Repeat until each player has a six-digit number.
- 3 Round your number.
- 4 The player with the greater rounded number earns 1 point.



How to Win

- When the Recording Sheet is full, the player who earns more points wins.



Name _____ Date _____

Greatest of Them All

Stage 5

Number	Round to the nearest thousand	My partner's rounded number	Winner?
<div style="border: 1px dotted black; padding: 5px;"> , </div>			
<div style="border: 1px dotted black; padding: 5px;"> , </div>			
<div style="border: 1px dotted black; padding: 5px;"> , </div>			
<div style="border: 1px dotted black; padding: 5px;"> , </div>			
<div style="border: 1px dotted black; padding: 5px;"> , </div>			



Name _____ Date _____

Greatest of Them All

Stage 5

Number	Round to the nearest ten thousand	My partner's rounded number	Winner?
<div style="border: 1px dotted black; padding: 5px; display: flex; justify-content: space-between;"> </div>			
<div style="border: 1px dotted black; padding: 5px; display: flex; justify-content: space-between;"> </div>			
<div style="border: 1px dotted black; padding: 5px; display: flex; justify-content: space-between;"> </div>			
<div style="border: 1px dotted black; padding: 5px; display: flex; justify-content: space-between;"> </div>			
<div style="border: 1px dotted black; padding: 5px; display: flex; justify-content: space-between;"> </div>			



Name _____ Date _____

Greatest of Them All

Stage 5

Number	Round to the nearest hundred thousand	My partner's rounded number	Winner?
<div style="border: 1px dotted black; padding: 5px;"> </div>			
<div style="border: 1px dotted black; padding: 5px;"> </div>			
<div style="border: 1px dotted black; padding: 5px;"> </div>			
<div style="border: 1px dotted black; padding: 5px;"> </div>			
<div style="border: 1px dotted black; padding: 5px;"> </div>			



Greatest of Them All

Stage 6

Let's make and compare decimal numbers.

Pairs 

You'll need . . .



Number Cards, 0–9



Recording Sheet,
one per pair



Set-up

- Choose who will be Player A and who will be Player B.
- Shuffle the Number Cards and place them in a stack facedown.



How to Play

- 1 Each player draws a Number Card and records it in one of the boxes.
- 2 Repeat until each player has a number to the hundredths place.
- 3 Write a comparison using $<$, $>$, or $=$. The player with the greater number earns 1 point.



How to Win

- When the Recording Sheet is full, the player who earns more points wins.

Name _____ Date _____



Greatest of Them All


Stage 6

Player A	Compare using <, >, or =	Player B	Winner?



How Are They the Same?

Let's draw shapes that have shared attributes.

Groups of 4 

You'll need . . .



straightedges



Shape Cards,
Grade 4



Recording Sheet



Set-up

- Place the cards facedown in a pile. Draw the top 6 cards and lay them out faceup.



How to Play

- One player chooses 2 of the faceup cards that have an attribute in common. Name the common attribute.
- All players draw these shapes and write the shared attribute on their own Recording Sheet. All players draw another shape that has the same attribute.
- Compare and discuss the shapes drawn in the third column. Each player earns 1 point if everyone agrees their shape shares the correct attribute. Decide which shapes are the same and which are different. Each player earns 1 additional point if they drew a shape that is different.
- Play 5 rounds, with 6 new cards each time. Take turns choosing 2 cards.



How to Win

- The player who earns the most points wins.

Name _____ Date _____



How Are They the Same?

Stage 4

Shape 1	Shape 2	Shared attribute	My shape drawing	Points



How Close?

Let's multiply numbers within 3,000.

Pairs

You'll need . . .



Number Cards, 0–9



Recording Sheet



Set-up

- Shuffle the Number Cards and place them in a stack facedown.



How to Play

- Each player draws 6 cards.
- Choose 4 cards to write a multiplication expression. Determine the product. You can multiply a one-digit number and a three-digit number or a two-digit number and a two-digit number.
- Your score is the difference between your product and 3,000.
- Draw 6 new cards and play again until the Recording Sheet is full.



How to Win

- The player who earns fewer points wins.

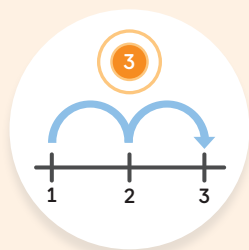
Name _____ Date _____



How Close?

Stage 7

Multiplication expression	Product	Points

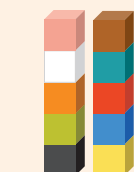


Jump the Line

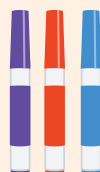
Let's add and subtract fractions on a number line.

Pairs

You'll need . . .



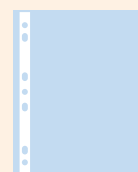
6 base-ten units



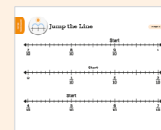
dry-erase markers



paper clips



sheet protectors



Gameboard, Spinners



Set-up

- With your partner, choose a target number for each number line. Mark the 3 target numbers using your dry-erase marker.
- Place a cube on the start number on each number line.



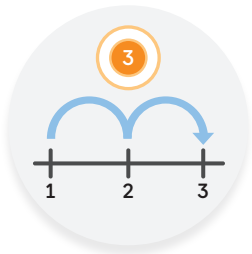
How to Play

- 1 Player A:** Spin both Spinners. Add and subtract in one of these two ways as you move the distance you spun:
 - Use your spins from both Spinners to move one cube on one number line.
 - Use each spin to move a different cube. You may not be able to use both spins if your cube would land off of the number line. If you land on *Wild*, you may add or subtract any number less than $\frac{1}{10}$.
- 2** Mark where you landed on the number line with your cube.
- 3** Take turns spinning and moving on the number line.



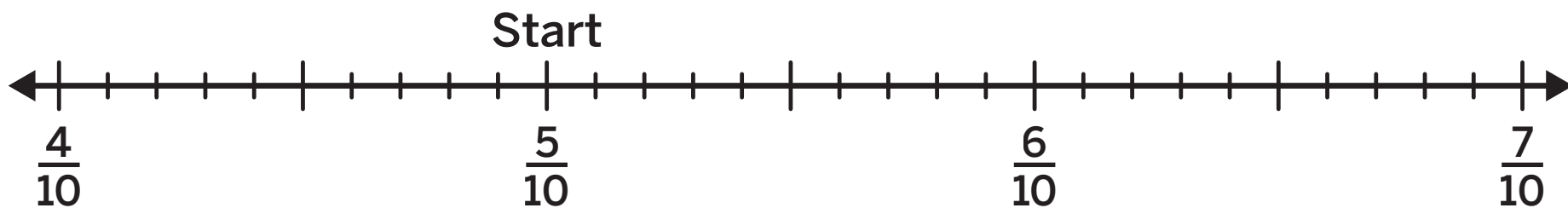
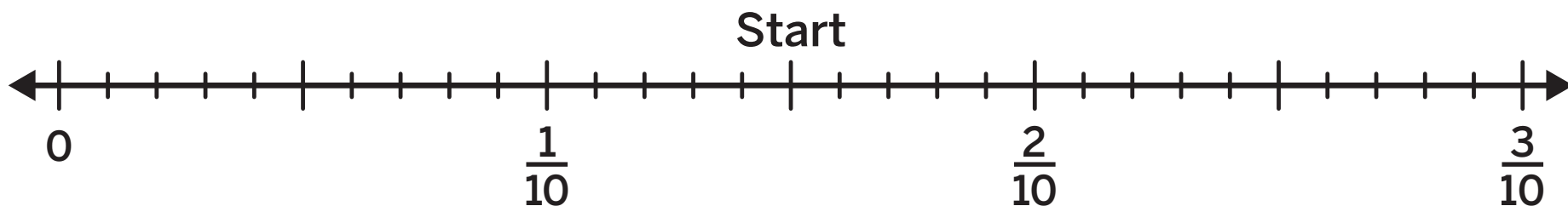
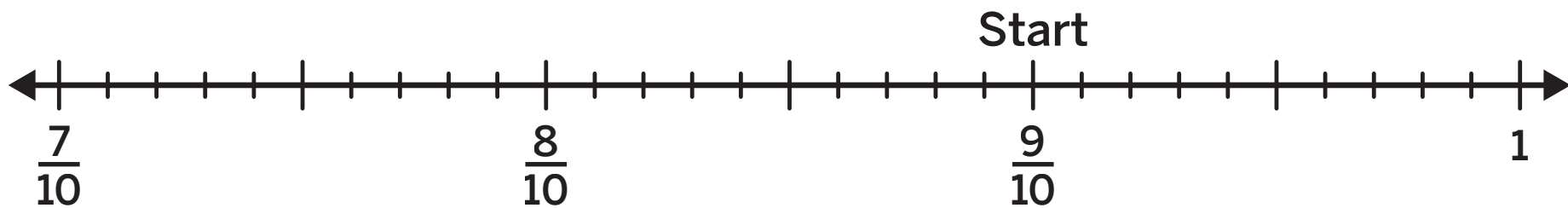
How to Win

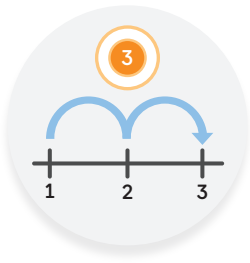
- Landing on a target number earns 1 point with that number line now out of play. The first player to land on two target numbers wins.



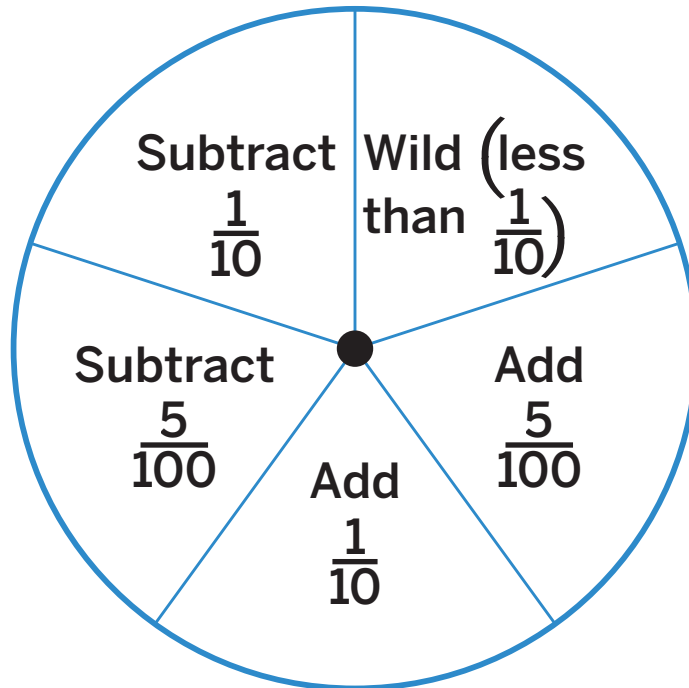
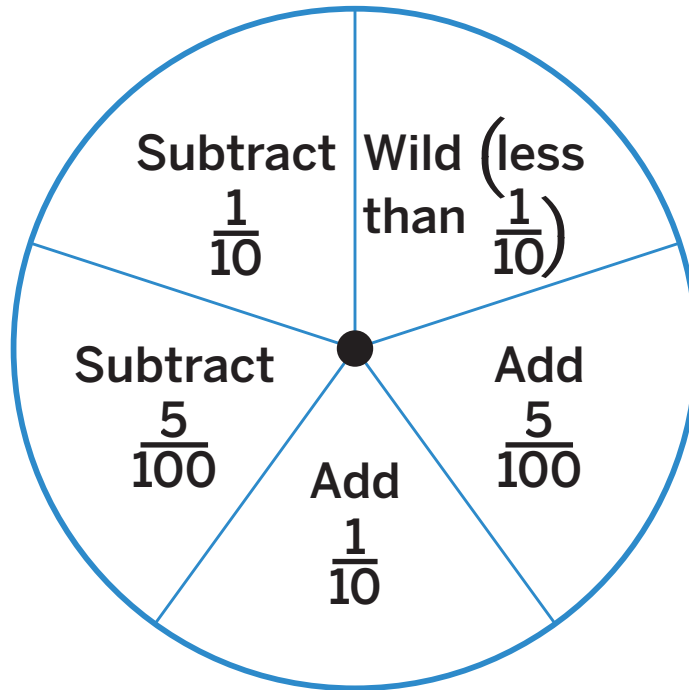
Jump the Line

Stage 2





Jump the Line





Match It

Stage 3

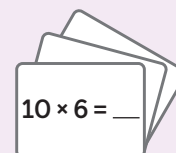
Let's use multiplication and division to solve word problems.

Pairs 

You'll need . . .



Recording Sheet



Situation Cards



Set-up

- Arrange the cards facedown in an array.



How to Play

- 1 On each turn, flip over two cards. Two cards match if they represent the same situation.
- 2 If the cards match, collect them and take another turn. If the cards do not match, flip them over facedown and your turn is over. If you collect two matches in a row, your turn is over.
- 3 For each match, solve the problem on the Recording Sheet. Make sure to label your answer.
- 4 Take turns.



How to Win

- After all the matches have been found, the player who collected more cards wins.

Name _____ Date _____



Match It

Stage 3

Solve each problem. Make sure to label your answer.



Match It Stage 3

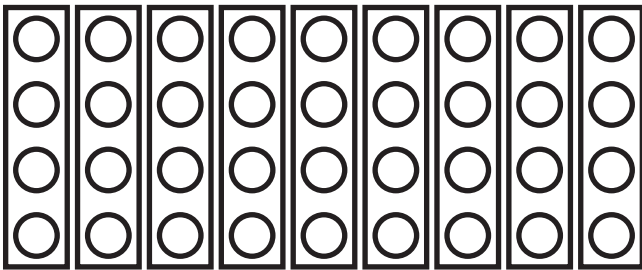
Directions: Make one copy per pair of students. Pre-cut the cards and distribute them so that each pair of students receives one set of cards.

$$56 \div 8 = \underline{\hspace{2cm}}$$

Match It Stage 3

Shawn baked a batch of 56 muffins. If Shawn arranged the muffins into 8 rows, how many muffins are in each row?

Match It Stage 3



Match It Stage 3

The classroom library has 36 science books sorted equally into 9 bins. How many books are in each bin?

Match It Stage 3

$$10 \times 6 = \underline{\hspace{2cm}}$$

Match It Stage 3

A teacher used 10 paper bags and put 6 cubes inside each bag. How many cubes did the teacher use?

Match It Stage 3

$$88 \div \underline{\hspace{2cm}} = 8$$

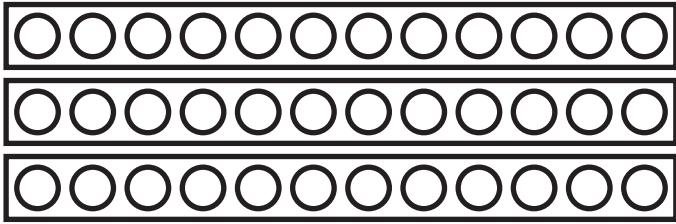
Match It Stage 3

A carpet has an area of 88 square feet. If one side of the carpet is 8 feet long, what is the length of the side next to it?

Match It Stage 3



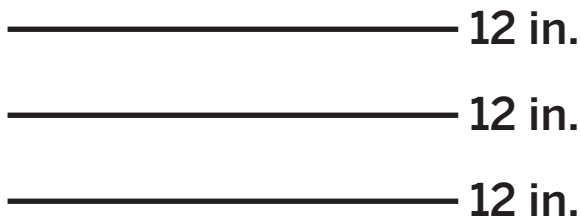
Match It Stage 3



Match It Stage 3

A large carton of 36 eggs is arranged in an array with 3 rows. How many eggs are in each row?

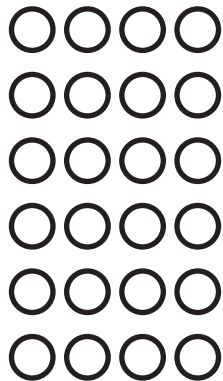
Match It Stage 3



Match It Stage 3

Han needs 3 lengths of string, each 12 inches long, to make a bracelet. How many inches of string does Han need altogether?

Match It Stage 3



Match It Stage 3

A phone screen shows 6 rows of apps, with 4 apps in each row. How many apps are shown on the screen?

Match It Stage 3

$$24 \div 4 = \underline{\quad}$$

Match It Stage 3

Priya sorts her 24 markers by putting 4 markers in each cup. How many cups does Priya have for her markers?

Match It Stage 3



Match It Stage 3

$$6 \times \underline{\quad\quad} = 42$$

Match It Stage 3

A rectangle has an area of 42 square inches. If one side of the rectangle is 6 inches long, how long is the side next to it?

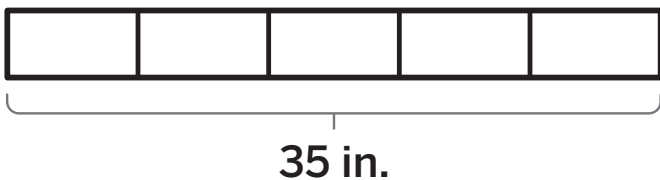
Match It Stage 3

$$9 \times 8 = \underline{\quad\quad}$$

Match It Stage 3

What is the area of a rectangular room that is 9 meters long and 8 meters wide?

Match It Stage 3



Match It Stage 3

Diego has to cut 35 inches of rope into 5 equal pieces for a project. How long should he cut each piece of rope?

Match It Stage 3

$$18 \div \underline{\quad\quad} = 6$$

Match It Stage 3

Clare has 18 inches of ribbon, which she cuts into pieces that are 6 inches long. How many pieces of ribbon does she have?

Match It Stage 3



Match It

Let's match situations to their elapsed time.

Pairs 

You'll need . . .



Elapsed Time Cards



Recording Sheet



Set-up

- Arrange the cards facedown in an array.



How to Play

- 1 On each turn, flip over two cards. Two cards match if they represent the same amount of elapsed time.
- 2 If the cards match, collect them and take another turn. If the cards do not match, flip them over facedown, and your turn is over. If you collect two matches in a row, your turn is over.
- 3 Record the situation and the amount of elapsed time.
- 4 Take turns.



How to Win

- After all the matches have been found, the player who collected more cards wins.



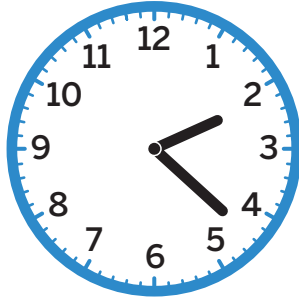
Match It Stage 4

Directions: Make 1 copy per pair of students. Pre-cut the cards and distribute them so that each pair receives one set.

Diego left for the grocery store:



Diego returned home:



Match It Stage 4

68 minutes

Match It Stage 4

Clare started reading:



Clare finished the chapter:

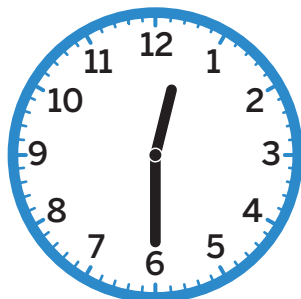


Match It Stage 4

25 minutes

Match It Stage 4

The baby was put down for a nap:



The baby woke up:



Match It Stage 4

2 hours 13 minutes

Match It Stage 4



Match It Stage 4

Priya's math class starts:



Match It Stage 4

Priya's math class ends:



Match It Stage 4

75 minutes

You started cleaning your room:



Match It Stage 4

You finished cleaning your room:



Match It Stage 4

24 minutes

Shawn put a pizza in the oven:



Match It Stage 4

Shawn took the pizza out of the oven:



Match It Stage 4

18 minutes



Match It

Stage 4

CENTER
Elapsed Time
Cards

(p. 3 of 4)

There was a rainstorm on Saturday from 6:54 until 9:03.

2 hours 9 minutes

Match It Stage 4

Match It Stage 4

Han left to walk his dog at 4:25.
Han returned home at 5:08.

43 minutes

Match It Stage 4

Match It Stage 4

Jada's music class started at 3:30 and ended at 4:15.

45 minutes

Match It Stage 4

Match It Stage 4



Match It

Stage 4

CENTER
Elapsed Time
Cards

(p. 4 of 4)

The movie started at 1:30.

The movie ended at 3:11.

1 hour 41 minutes

Match It Stage 4

Match It Stage 4

The class went outside for recess at 10:44 and returned to the classroom at 11:01.

17 minutes

Match It Stage 4

Match It Stage 4

You played outside from 10:27 a.m. to 12:19 p.m.

112 minutes

Match It Stage 4

Match It Stage 4

Name _____ Date _____



Match It

Stage 4

Situation	Amount of elapsed time

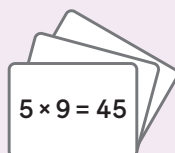


Match It

Let's match multiplication equations to statements.

Pairs 

You'll need . . .



Multiplication
Comparison Cards



Recording Sheet



Set-up

- Arrange the cards facedown in an array.



How to Play

- 1 On each turn, flip over two cards. Two cards match if the equation represents the statement.
- 2 If the cards match, collect them and take another turn. If the cards do not match, flip them over facedown, and your turn is over. If you collect two matches in a row, your turn is over.
- 3 Record the representations for each match.
- 4 Take turns.



How to Win

- After all the matches have been found, the player who collected more cards wins.




Match It

Stage 5

CENTER
Multiplication
Comparison Cards

(p. 1 of 2)

 **Directions:** Make one copy per pair of students. Pre-cut the cards and distribute them so that each pair receives one set of cards.

$$5 \times 9 = 45$$

Match It Stage 5

9 times as many as 5 is 45.

Match It Stage 5

$$7 \times 11 = 77$$

Match It Stage 5

11 times as many as 7 is 77.

Match It Stage 5

$$35 = 5 \times 7$$

Match It Stage 5

35 is 7 times as many as 5.

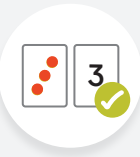
Match It Stage 5

$$18 = 3 \times 6$$

Match It Stage 5

18 is 6 times as many as 3.

Match It Stage 5



Match It

Stage 5

CENTER
Multiplication
Comparison Cards
(p. 2 of 2)

$$48 = 8 \times 6$$

Match It Stage 5

48 is 6 times as many as 8.

Match It Stage 5

$$12 = 2 \times 6$$

Match It Stage 5

12 is 6 times as many as 2.

Match It Stage 5

$$12 = 4 \times 3$$

Match It Stage 5

12 is 3 times as many as 4.

Match It Stage 5

$$10 \times 8 = 80$$

Match It Stage 5

10 times as many as 8 is 80.

Match It Stage 5

Name _____ Date _____



Match It

Stage 5

Representation	Representation

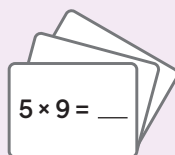


Match It

Let's match multiplication equations to problems.

Pairs 

You'll need . . .



Multiplication
Equation Cards



Recording Sheet



Set-up

- Arrange the cards facedown in an array.



How to Play

- 1 On each turn, flip over two cards. Two cards match if the equation represents the problem.
- 2 If the cards match, collect them and take another turn. If the cards do not match, flip them over facedown, and your turn is over. If you collect two matches in a row, your turn is over.
- 3 For each match, record the equation and determine the product on the Recording Sheet.
- 4 Take turns.



How to Win

- After all the matches have been found, the player who collected more cards wins.



Match It

Stage 6

Directions: Make one copy per pair of students. Pre-cut the cards and distribute them so that each pair receives one set of cards.

$$5 \times 9 = \underline{\hspace{2cm}}$$

Match It Stage 6

Clare had 5 pretzels. Her sister had 9 times as many as Clare. How many pretzels did her sister have?

Match It Stage 6

$$7 \times 11 = \underline{\hspace{2cm}}$$

Match It Stage 6

Diego got 7 balloons. Han got 11 times as many as Diego. How many balloons does Han have?

Match It Stage 6

$$\underline{\hspace{2cm}} = 5 \times 7$$

Match It Stage 6

Jada ate 5 blueberries. Her friend ate 7 times as many blueberries. How many blueberries did her friend eat?

Match It Stage 6

$$\underline{\hspace{2cm}} = 3 \times 6$$

Match It Stage 6

Priya found 3 rocks. Her brother found 6 times as many rocks. How many rocks did he find?

Match It Stage 6



Match It

Stage 6

$$\underline{\hspace{2cm}} = 8 \times 6$$

Match It Stage 6

Shawn has \$8. Han has 6 times as much money as Shawn. How much money does Han have?

Match It Stage 6

$$\underline{\hspace{2cm}} = 2 \times 6$$

Match It Stage 6

Jada's basketball team won 2 games this season. Clare's basketball team won 6 times as many games. How many games did Clare's team win?

Match It Stage 6

$$4 \times 3 = \underline{\hspace{2cm}}$$

Match It Stage 6

Diego has 4 erasers. Shawn has 3 times as many erasers. How many erasers does Shawn have?

Match It Stage 6

$$10 \times 8 = \underline{\hspace{2cm}}$$

Match It Stage 6

Priya has \$10. Shawn has 8 times as much money as Priya. How much money does Shawn have?

Match It Stage 6



Match It

Stage 6

$$2 \times 3 = \underline{\hspace{2cm}}$$

Match It Stage 6

Priya's soccer team won 2 games this season. Clare's team won 3 times as many games. How many games did Clare's team win?

Match It Stage 6

$$6 \times 2 = \underline{\hspace{2cm}}$$

Match It Stage 6

Han has 6 strawberries. Shawn has twice as many strawberries as Han. How many strawberries does Shawn have?

Match It Stage 6

$$6 \times 3 = \underline{\hspace{2cm}}$$

Match It Stage 6

Jada has 6 cubes. Priya has 3 times as many cubes. How many cubes does Priya have?

Match It Stage 6

$$5 \times 5 = \underline{\hspace{2cm}}$$

Match It Stage 6

Shawn has \$5. Diego has 5 times as much money. How much money does Diego have?

Match It Stage 6

Name _____ Date _____



Match It

Stage 6

Equation	Product



Mystery Number

Stage 4

Let's ask questions to guess the mystery fraction.

Pairs

You'll need . . .



counters



sticky notes



Gameboard



Recording Sheet



How to Play

- 1 Player A:** Choose a fraction on the Gameboard and record it on a sticky note. Do not show your partner your fraction.
- 2 Player B:** Ask as many *yes* or *no* questions as you need to help you identify the mystery fraction. Consider using words such as *numerator*, *denominator*, *greater than*, *less than*, *equivalent*, or *whole* when you ask your questions. Record each question and your partner's response.
- 3 Player B:** Cover up fractions as you determine they are *not* the mystery fraction. When you are ready, you have one guess to identify the mystery fraction. Record the fraction you guess on your Recording Sheet. If you are correct, you earn 1 point.
- 4** Switch roles and repeat to complete Round 1.



How to Win

- Play 3 rounds. The player who earns more points wins.

11



Mystery Number

$\frac{1}{100}$	$\frac{3}{8}$	$\frac{105}{100}$	$\frac{132}{12}$
$\frac{2}{8}$	$\frac{5}{5}$	$\frac{42}{100}$	$\frac{15}{8}$
$\frac{16}{10}$	$\frac{100}{10}$	$\frac{16}{100}$	$\frac{18}{8}$
$\frac{11}{12}$	$\frac{4}{8}$	$\frac{2}{12}$	$\frac{45}{8}$
$\frac{13}{5}$	$\frac{15}{10}$	$\frac{60}{100}$	$\frac{9}{8}$



Name _____ Date _____

Mystery Number

Stage 4

		Round 1		Round 2		Round 3	
Questions							
Number	My guess:	Correct number:	My guess:	Correct number:	My guess:	Correct number:	

11

Mystery Number

Stage 5

Let's use place value to guess the mystery number.

Pairs 

You'll need . . .



counters



sticky notes

Mystery Number			
426,406	78,866	124,142	478,811
5404	63,053	345,034	5,135
38,212	765,387	6,202	794,321
405,281	913,875	603,146	56,350
38,402	8,493	761,230	334,621

Gameboard
A or B

Mystery Number			
Question	Answer	Points	Notes

Recording
Sheet



Set-up

- Choose a Gameboard.



How to Play

- 1 Player A:** Choose a number on the Gameboard and record it on a sticky note. Do not show your partner your number.
- 2 Player B:** Ask as many *yes* or *no* place-value questions as you need to help you identify the mystery number. Consider using words such as *ones*, *tens*, *thousands*, *ten thousands*, *hundred thousands*, *greater than*, *less than*, *between*, *10 times as much*, *multiple*, and *factor* when you ask your questions. Record each question and your partner's response.
- 3 Player B:** Cover up numbers as you determine they are *not* the mystery number. When you are ready, you have one guess to identify the mystery number. Record the number you guess. If you are correct, you earn 1 point.
- 4** Switch roles and repeat to complete Round 1.



How to Win

- Play 3 rounds. The player who earns more points wins.

11



Mystery Number

Stage 5

505,505	23,849	329,192	878,830
7,404	63,053	149,834	2,139
38,513	262,987	6,535	784,936
409,281	919,675	603,146	56,350
31,452	8,493	591,230	334,621



Mystery Number

Stage 5

2,958	457,592	137,004	98,670
89,067	72,540	3,587	154,239
753,402	662,193	1,376	982,415
123,456	1,938	158,678	21,109
873,751	43,820	999,999	6,537



Name _____ Date _____

Mystery Number

Stage 5


		Round 1		Round 2		Round 3	
Questions							
Number	My guess:	Correct number:	My guess:	Correct number:	My guess:	Correct number:	



Mystery Shape

Stage 6

Let's find the mystery shape.

Pairs 

You'll need . . .



sticky notes



Recording Sheet



Shape Cards, Grade 4



Set-up

- Organize the Shape Cards faceup in rows.



How to Play

- 1 Player A:** Choose a mystery shape and draw it on a sticky note. Do not show your partner.
- 2 Player B:** Ask *yes* or *no* questions and flip cards facedown as you determine they are not the mystery shape. Record each question and your partner's response.
- 3 Player B:** When you are ready, you have one guess to identify the mystery shape. Draw the shape you guess on your Recording Sheet. If you are correct, you earn 1 point.
- 4** Switch roles and repeat. Play 3 rounds.



How to Win

- The player who earns more points wins.

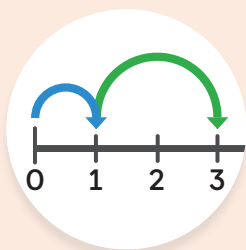


Name _____ Date _____

Mystery Shape

Stage 6


		Round 1		Round 2		Round 3	
Questions							
Shapes	My guess:	Correct shape:	My guess:	Correct shape:	My guess:	Correct shape:	



Number Line Scoot

Stage 2

Let's use number lines to count by halves, thirds, and fourths.

Pairs 

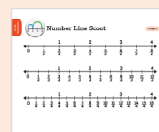
You'll need . . .



12 base-ten units



paper clip



Gameboard



Spinner



Set-up

- Place a cube on 0 on each number line.



How to Play

- When it is your turn, spin the Spinner.
- Move the distance you spun on one or more number lines. You may use your whole spin on one number line or split it between multiple number lines. If your spin lands on *Wild*, you may choose any fraction less than 1 to move your cube.
- Take turns spinning and moving the cube. When a cube lands *exactly* on the last tick mark of a number line, that player keeps the cube and places a new one at 0.



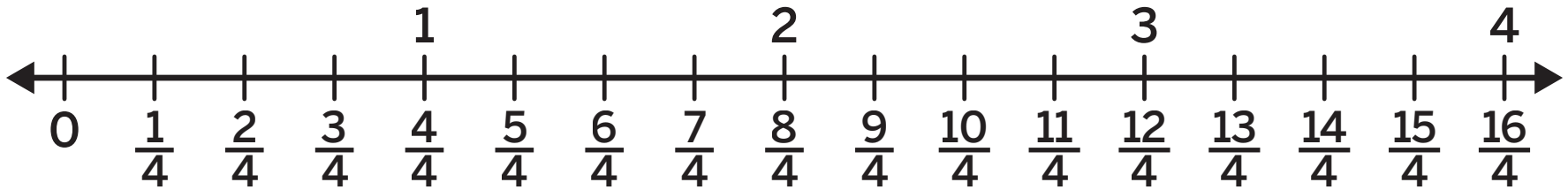
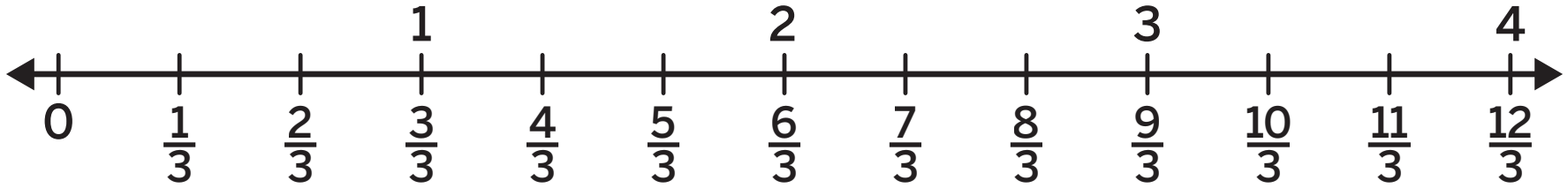
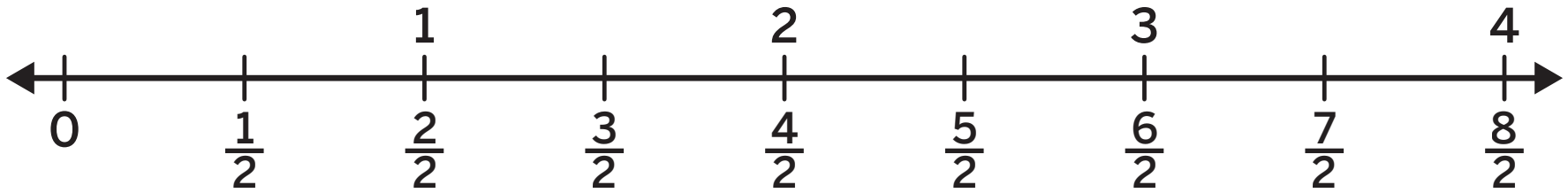
How to Win

- The first player to collect 5 cubes wins.



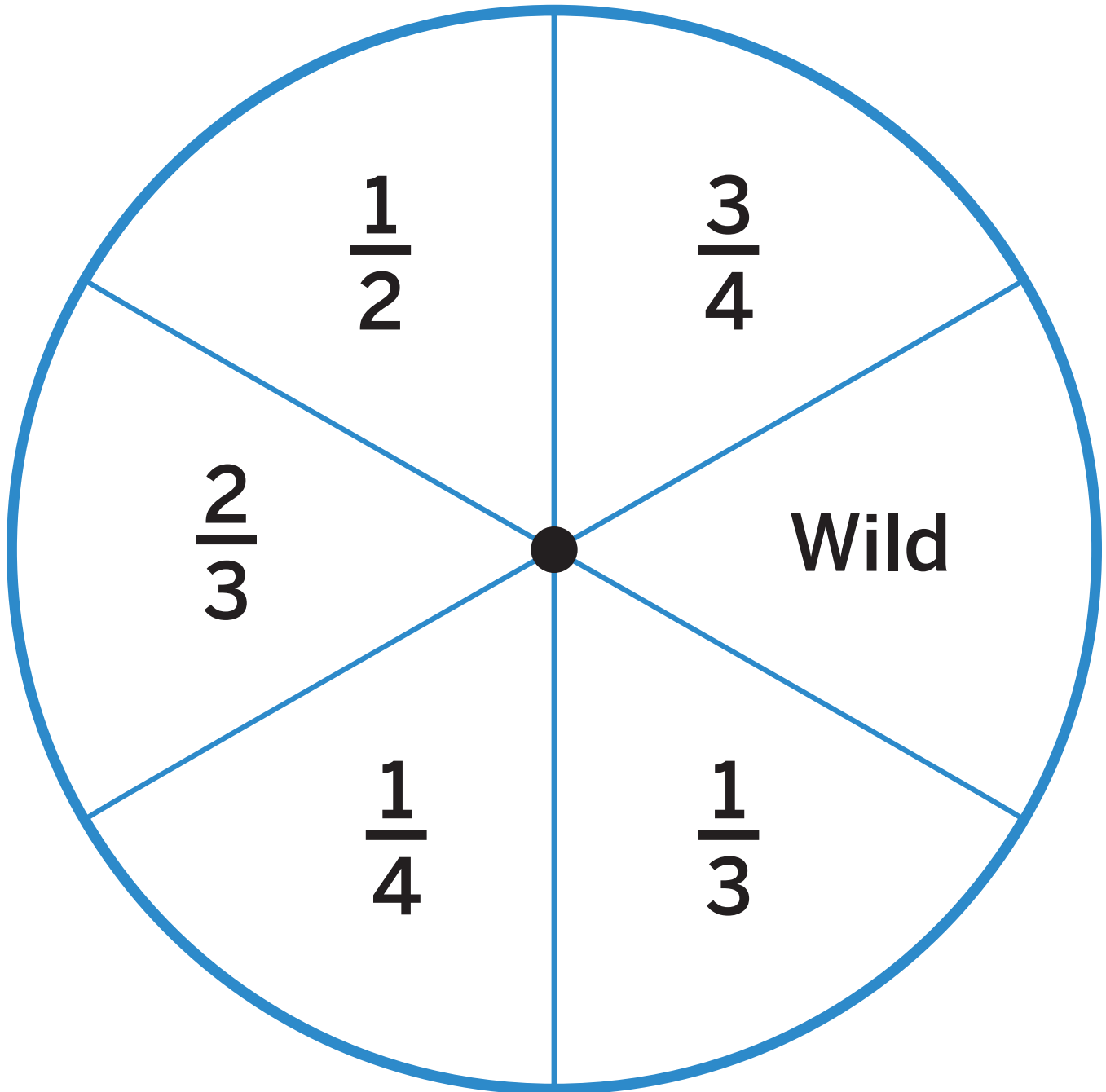
Number Line Scoot

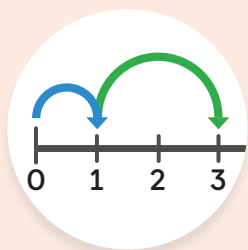
Stage 2





Number Line Scoot





Number Line Scoot

Let's use number lines to count by halves, thirds, fourths, and sixths.

Pairs 

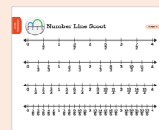
You'll need . . .



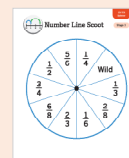
12 base-ten units



paper clip



Gameboard



Spinner



Set-up

- Place a cube on 0 on each number line.



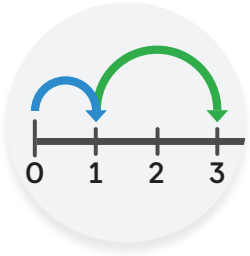
How to Play

- When it is your turn, spin the Spinner.
- Move the distance you spun on one or more number lines. You may use your whole spin on one number line or split it between multiple number lines. If your spin lands on *Wild*, you may choose any fraction less than 1 to move your cube.
- Take turns spinning and moving the cube. When a cube lands *exactly* on the last tick mark of a number line, that player keeps the cube and places a new one at 0.



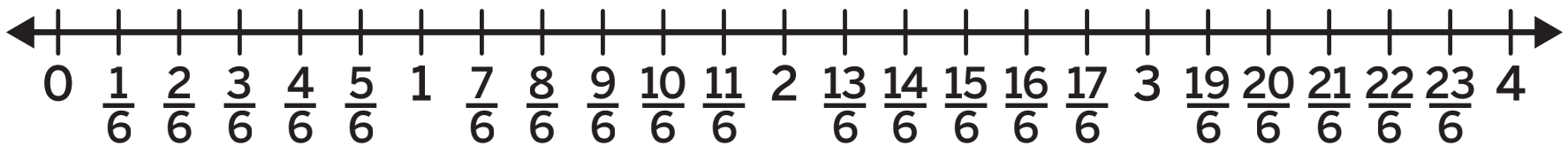
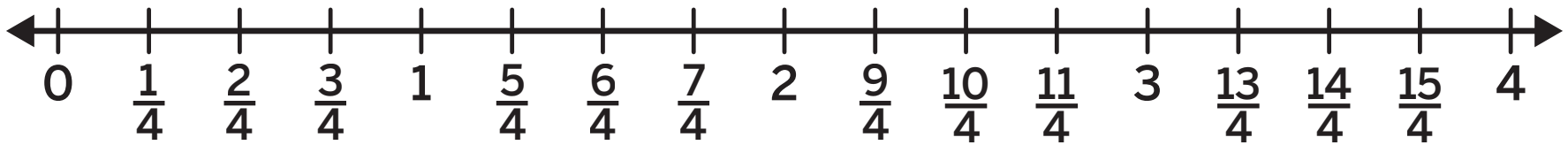
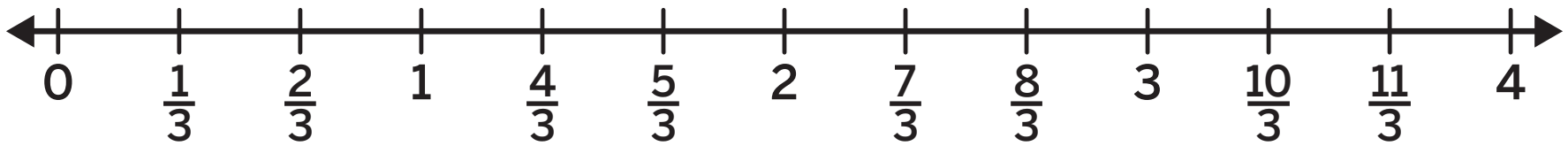
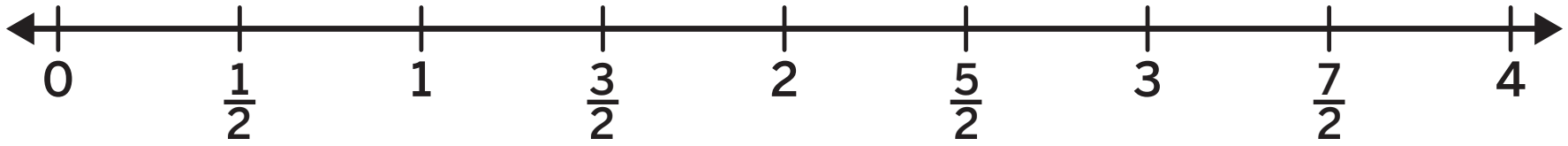
How to Win

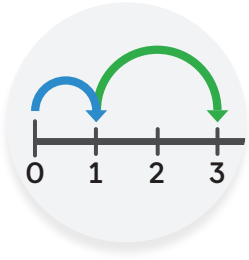
- The first player to collect 5 cubes wins.



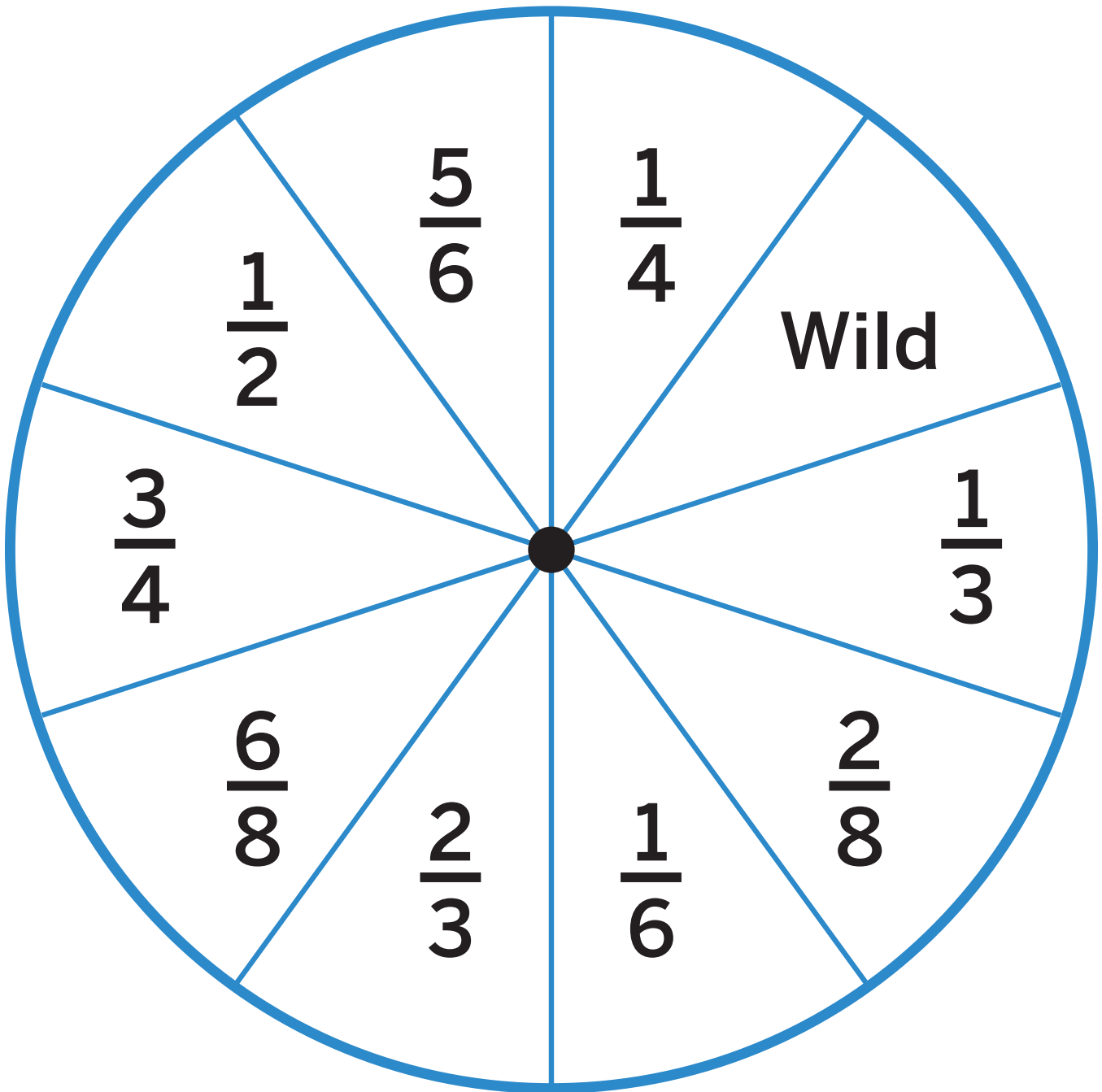
Number Line Scoot

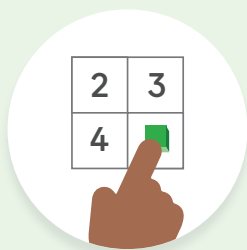
Stage 3






Number Line Scoot





Related Numbers

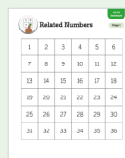
Let's find factors for a given number.

Pairs 

You'll need . . .



36 base-ten units



Gameboard



Recording Sheet



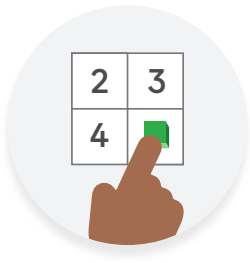
How to Play

- 1 **Player A:** Cover up a number. That is your score for this turn. Record your score.
- 2 **Player B:** Cover up all the factors of Player A's number. The sum of the factors is your score for this turn. Record your score.
- 3 Take turns choosing numbers and determining factors.
- 4 If a player chooses a number with no uncovered factors remaining, that player loses a turn and does not get any points for the round.
- 5 The game ends when there are no numbers left with uncovered factors.



How to Win

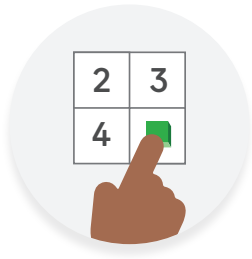
- The player with the higher score wins.



Related Numbers

1	2	3	4	5	6
7	8	9	10	11	12
13	14	15	16	17	18
19	20	21	22	23	24
25	26	27	28	29	30
31	32	33	34	35	36

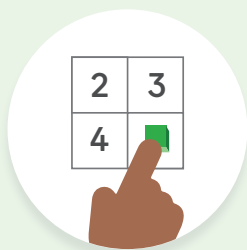
Name _____ Date _____



Related Numbers

Stage 1

Round	Player A's score	Player B's score
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
Total		



Related Numbers

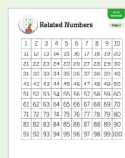
Let's find factors and multiples for a given number.

Pairs 

You'll need . . .



100 base-ten units



Gameboard



Recording Sheet



Set-up

- Each player chooses 50 cubes.



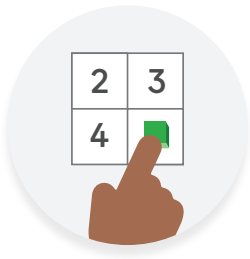
How to Play

- 1 Player A:** Cover up an even number that is less than 50.
- 2 Player B:** Cover up a factor or multiple of the number your partner covered.
- 3** Take turns covering numbers that are factors or multiples of the number your partner last covered. The round ends when there are no more factors or multiples of the number remaining.
- 4** The last player to cover a number in each round earns 1 point. Record your scores.



How to Win

- The player with more points after 10 rounds wins.

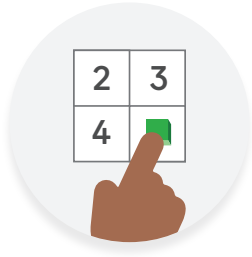


Related Numbers

Stage 2

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

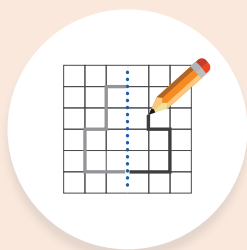
Name _____ Date _____



Related Numbers

Stage 2

Round	Player A's score	Player B's score
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
Total		



Symmetrical Designs

Stage 1

Let's complete designs across a line of symmetry.

Pairs 

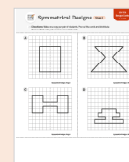
You'll need . . .



coloring tools



Recording Sheet A or B



Design Cards



Set-up

- Choose Recording Sheet A or Recording Sheet B.



How to Play

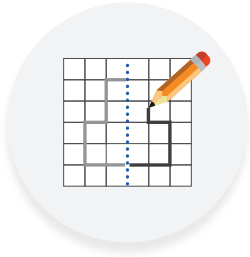
- Each player chooses a Design Card. Do not show your card to your partner.
- Draw *only half* of the design and the line of symmetry on the Recording Sheet.
- Trade papers with your partner. Complete each other's designs.
- Compare your completed drawings to the full designs shown on the cards. If your completed drawing matches, you earn 1 point.



How to Win

- Repeat until you have earned 3 points.

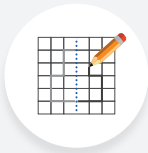
Name _____ Date _____



Symmetrical Designs

Stage 1


A large grid of 20 columns and 20 rows of small black dots, intended for creating symmetrical designs.

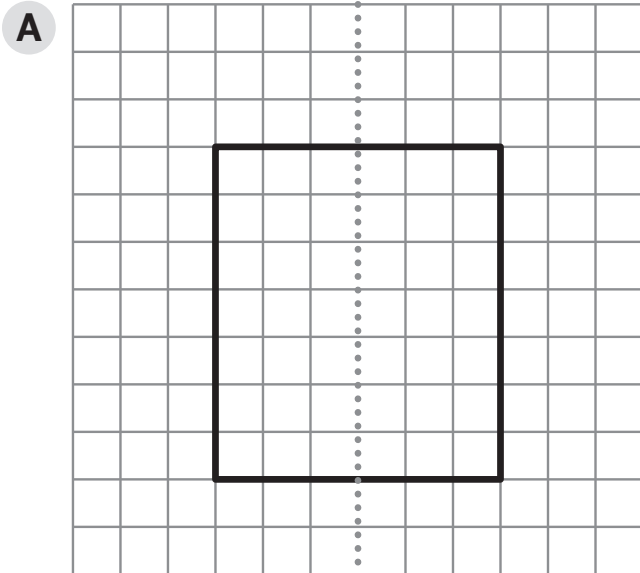


Symmetrical Designs

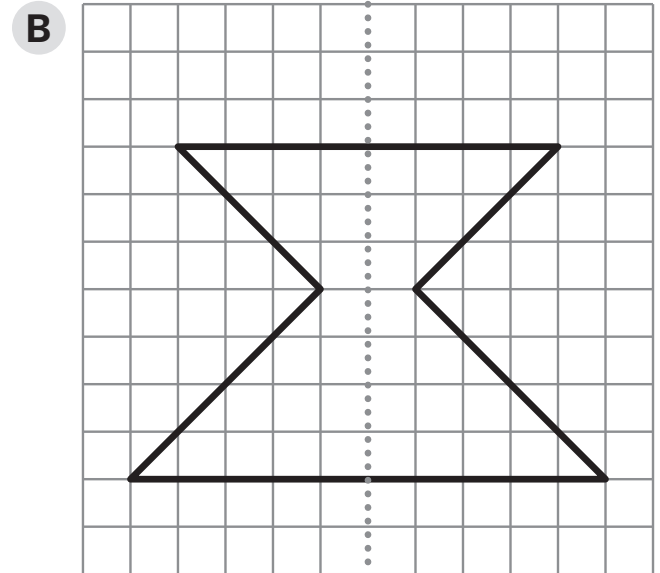
Stage 1

CENTER
Design Cards
(p. 1 of 2)

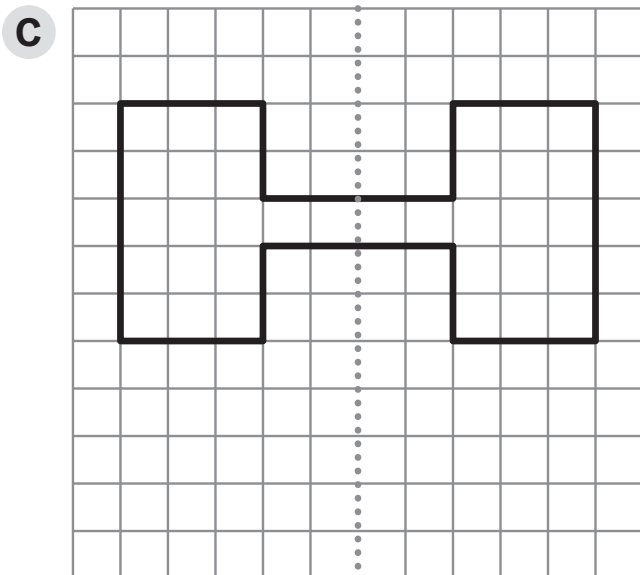
 **Directions:** Make one copy per pair of students. Pre-cut the cards and distribute them so that each pair receives one set of cards.



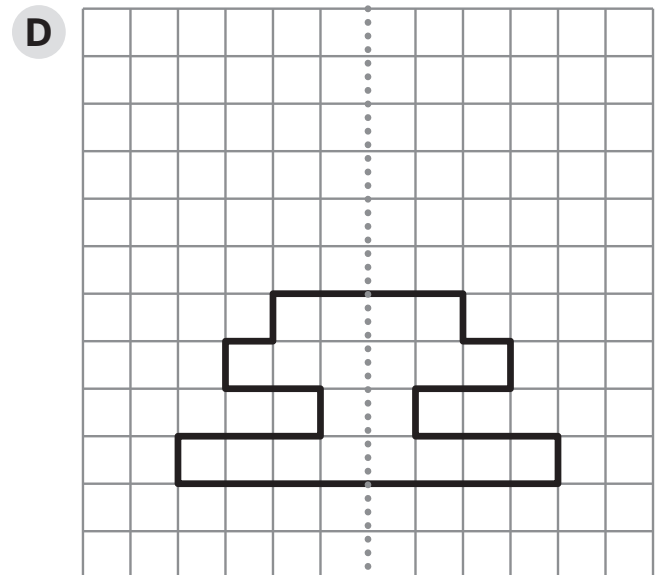
Symmetrical Designs, Stage 1



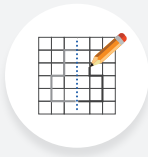
Symmetrical Designs, Stage 1



Symmetrical Designs, Stage 1



Symmetrical Designs, Stage 1

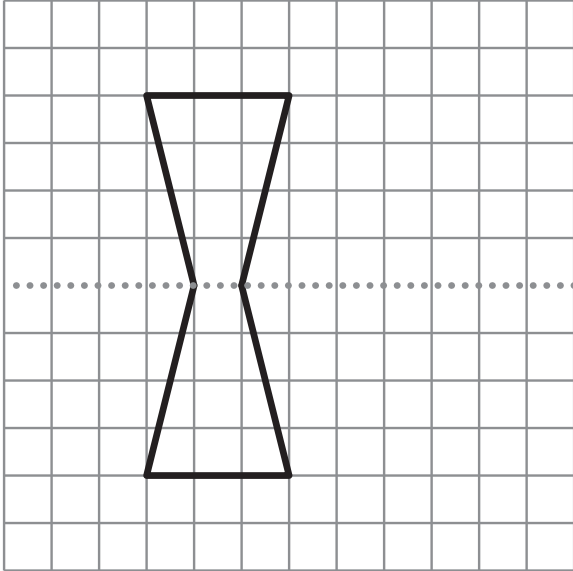


Symmetrical Designs

Stage 1

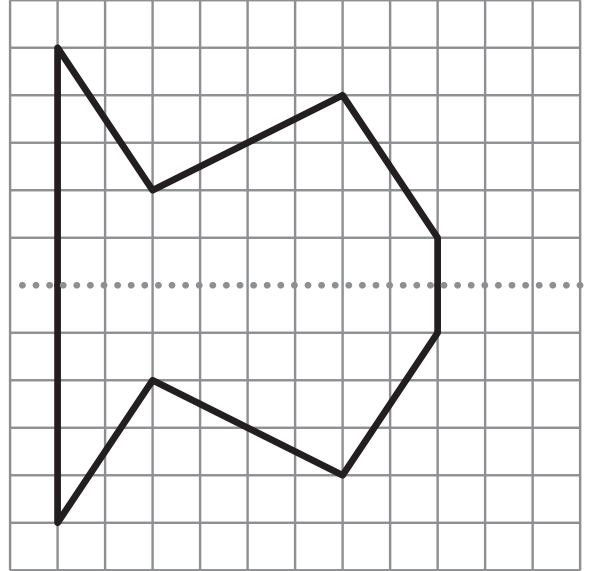
CENTER
Design Cards
(p. 2 of 2)

E



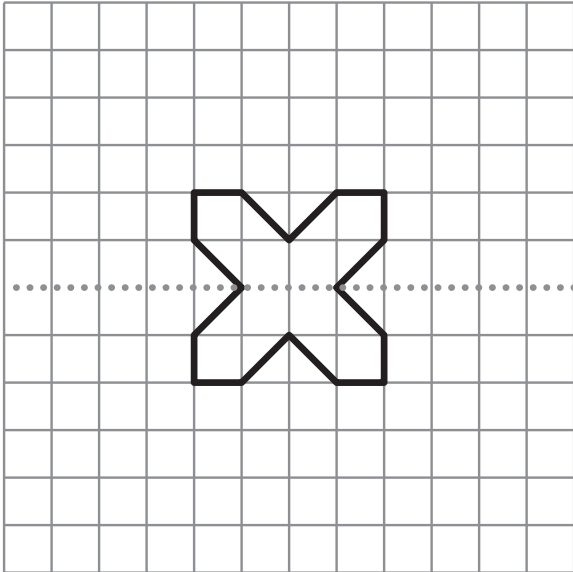
Symmetrical Designs, Stage 1

F



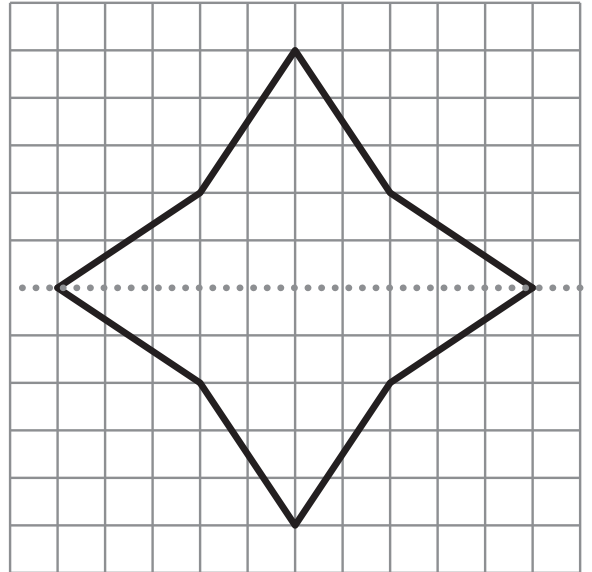
Symmetrical Designs, Stage 1

G

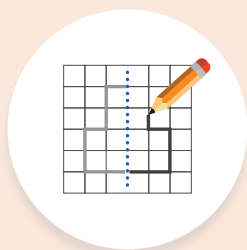


Symmetrical Designs, Stage 1

H



Symmetrical Designs, Stage 1



Symmetrical Designs

Stage 2

Let's complete designs across a line of symmetry.

Pairs

You'll need . . .



coloring tools



Recording Sheet A or B



Design Cards



Set-up

- Choose Recording Sheet A or Recording Sheet B.



How to Play

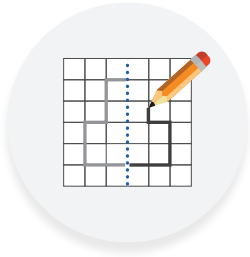
- Each player chooses a card with a grid that shows a line of symmetry and draws a symmetrical design. Do not show your drawing to your partner.
- Draw *only half* of the design and the line of symmetry on the Recording Sheet.
- Trade papers with your partner. Complete each other's designs.
- Compare your completed drawings to the full designs shown on the cards. If your completed drawing matches, you earn 1 point.



How to Win

- Repeat until you have earned 3 points.

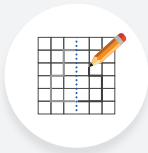
Name _____ Date _____



Symmetrical Designs

Stage 2


A large grid of 20 columns and 20 rows of dots, intended for drawing symmetrical designs.

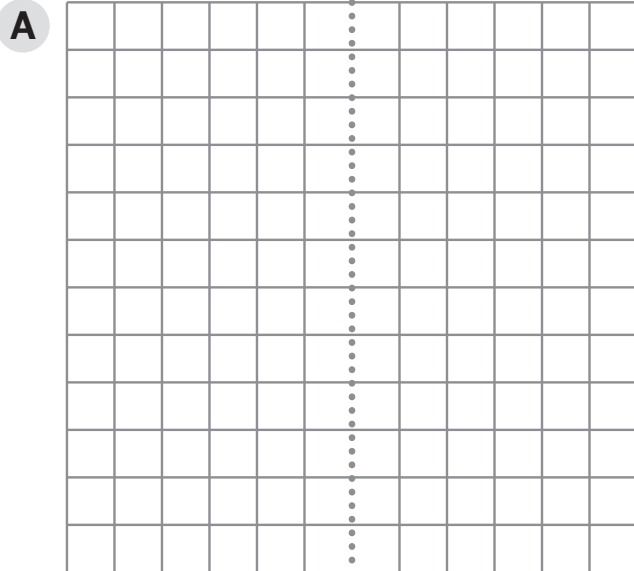


Symmetrical Designs

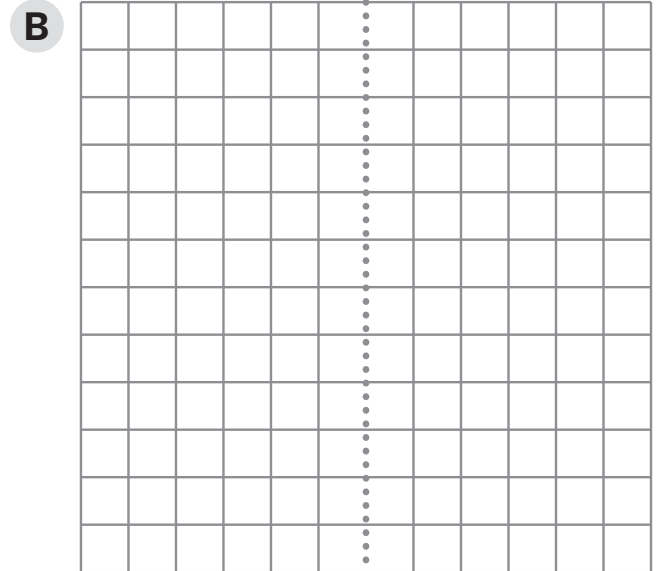
Stage 2

CENTER
Design Cards
(p. 1 of 2)

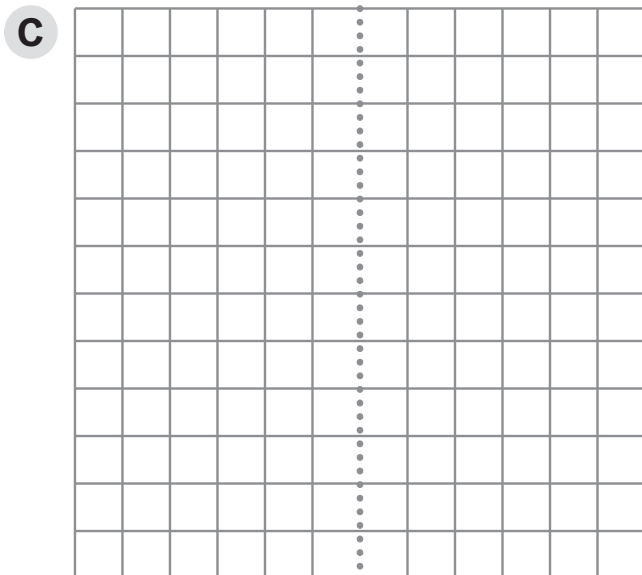
 **Directions:** Make one copy per pair of students. Pre-cut the cards and distribute them so that each pair receives one set of cards.



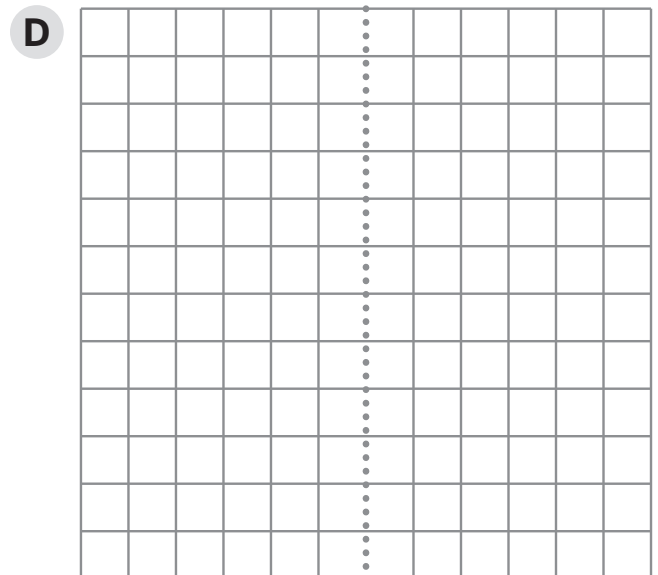
Symmetrical Designs, Stage 2



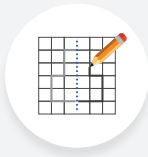
Symmetrical Designs, Stage 2



Symmetrical Designs, Stage 2



Symmetrical Designs, Stage 2

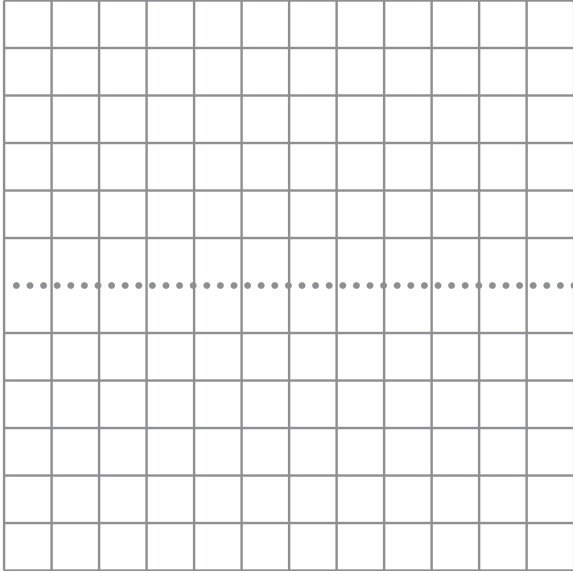


Symmetrical Designs

Stage 2

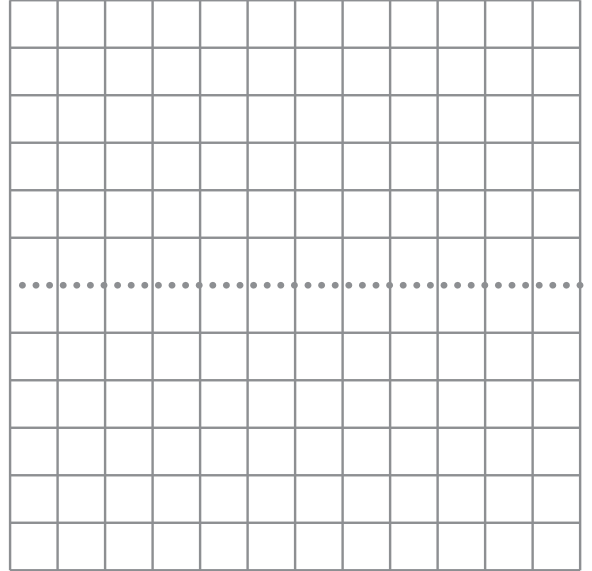
CENTER
Design Cards
(p. 2 of 2)

E



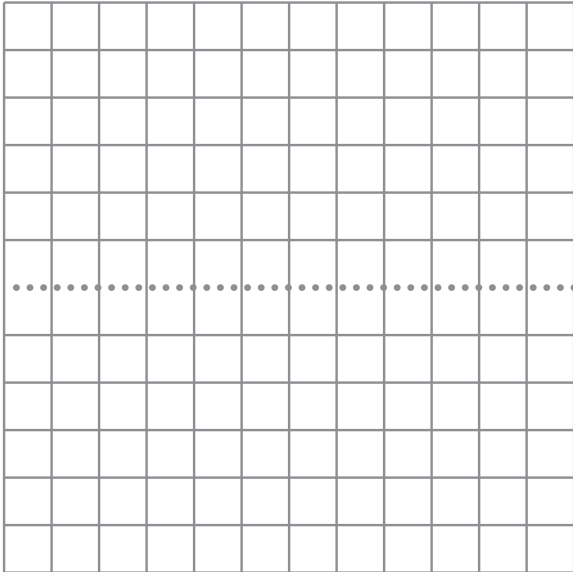
Symmetrical Designs, Stage 2

F



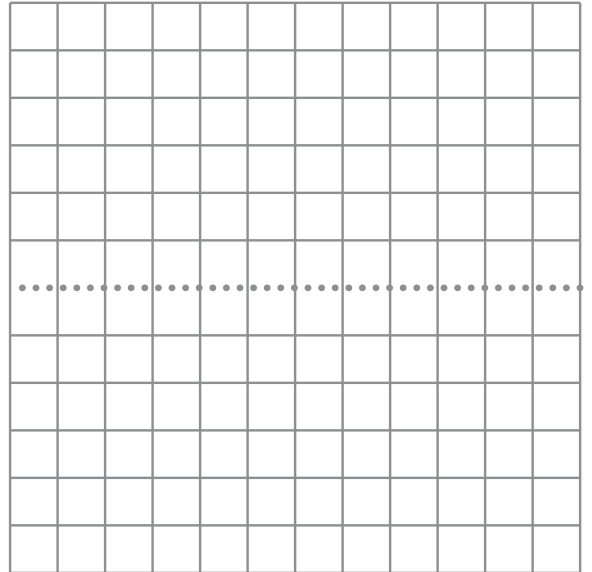
Symmetrical Designs, Stage 2

G



Symmetrical Designs, Stage 2

H



Symmetrical Designs, Stage 2



Target Measurements

Stage 4

Let's estimate and measure angles.

Pairs

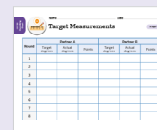
You'll need . . .



protractor



Circle Tool PDF



Recording Sheet



How to Play

- 1 **Player A:** Choose a target angle measure and record it.
- 2 **Player A:** Align the circles so only the white circle is showing. Pull the gray circle through the opening and begin to rotate it around.
- 3 **Player B:** Say, "Stop!" when you think the measure of the angle represented by the gray is equal to the target measurement.
- 4 **Player B:** Measure the angle with the protractor. Record the measurement.
- 5 Determine the difference in degrees between the actual angle and the target angle. The difference is Player B's score for the round.
- 6 Switch roles and take turns until each player's Recording Sheet is full.



How to Win

- The player with the lower score wins.



Name _____ Date _____

Target Measurements

Stage 4

Round	Partner A			Partner B		
	Target degrees	Actual degrees	Points	Target degrees	Actual degrees	Points
1						
2						
3						
4						
5						
6						
7						
8						



Watch Your Remainder

Let's create division expressions with the smallest remainder.

Pairs

You'll need . . .



paper clip



Number
Cards, 0–9



Recording
Sheet



Spinner



Set-up

- Place the Number Cards facedown in a pile.
- Spin the Spinner to determine a one-digit divisor that both players will use for Round 1.



How to Play

- 1 Each player draws 6 Number Cards. Use 3 or 4 of the cards to make your dividend.
- 2 Write a division expression using your dividend and the divisor.
- 3 Write a multiplication expression to represent the quotient and remainder. For example, for $109 \div 9$, you would write $(9 \times 12) + 1$. Check your partner's work to make sure you agree.
- 4 Record your remainder as your score.
- 5 Shuffle all the Number Cards. Spin for a new divisor and play the next round.



How to Win

- Play until the Recording Sheet is full. The player who earns fewer points wins.

Name _____ Date _____



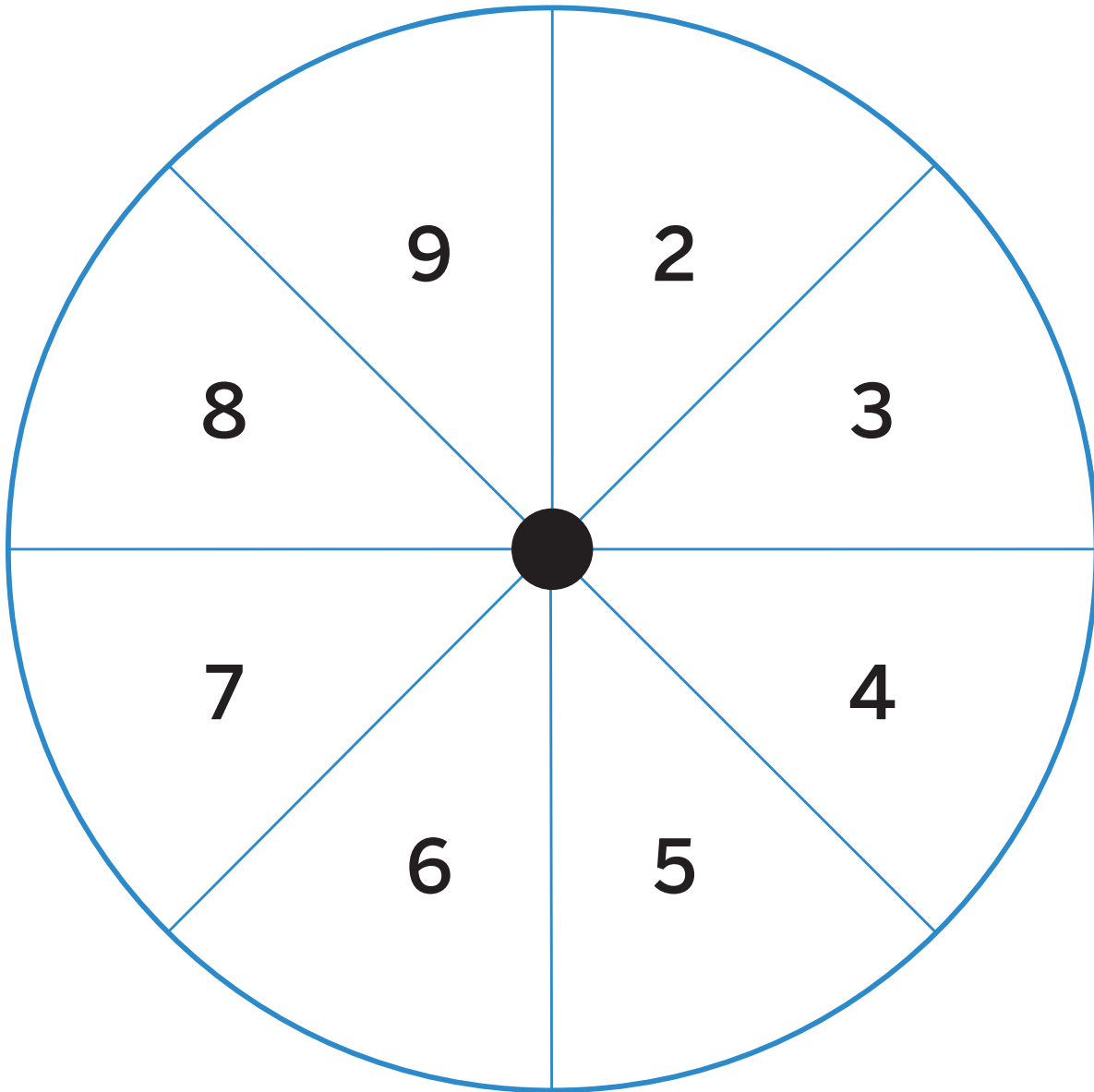
Watch Your Remainder

Stage 1

Round	Division expression	Multiplication expression	Points
1			
2			
3			
4			
5			
6			



Watch Your Remainder





Would You Rather?

Stage 1

Let's compare smaller measurements.

Pairs

You'll need . . .



number cube



paper clip



Recording Sheet



Spinner



How to Play

- 1 **Player A:** Spin the Spinner to determine the units. Roll the number cube to determine how many of that unit.
- 2 **Player A:** Choose a *smaller* unit of measurement and a number of those units. Ask your partner a question comparing the measurements.
Sample question: Would you rather have 2 feet or 20 inches?
- 3 **Player B:** Record the units and number of units for each part of the question.
- 4 **Player B:** Answer your partner's question, paying attention to whether you want *more* (Rounds 1–3) or *less* (Rounds 4–6). Explain your choice. If both players agree that your answer is correct, you earn 1 point.
- 5 Take turns until each player's Recording Sheet is full.



How to Win

- The player who earns more points wins.

Name _____ Date _____



Would You Rather?

Stage 1

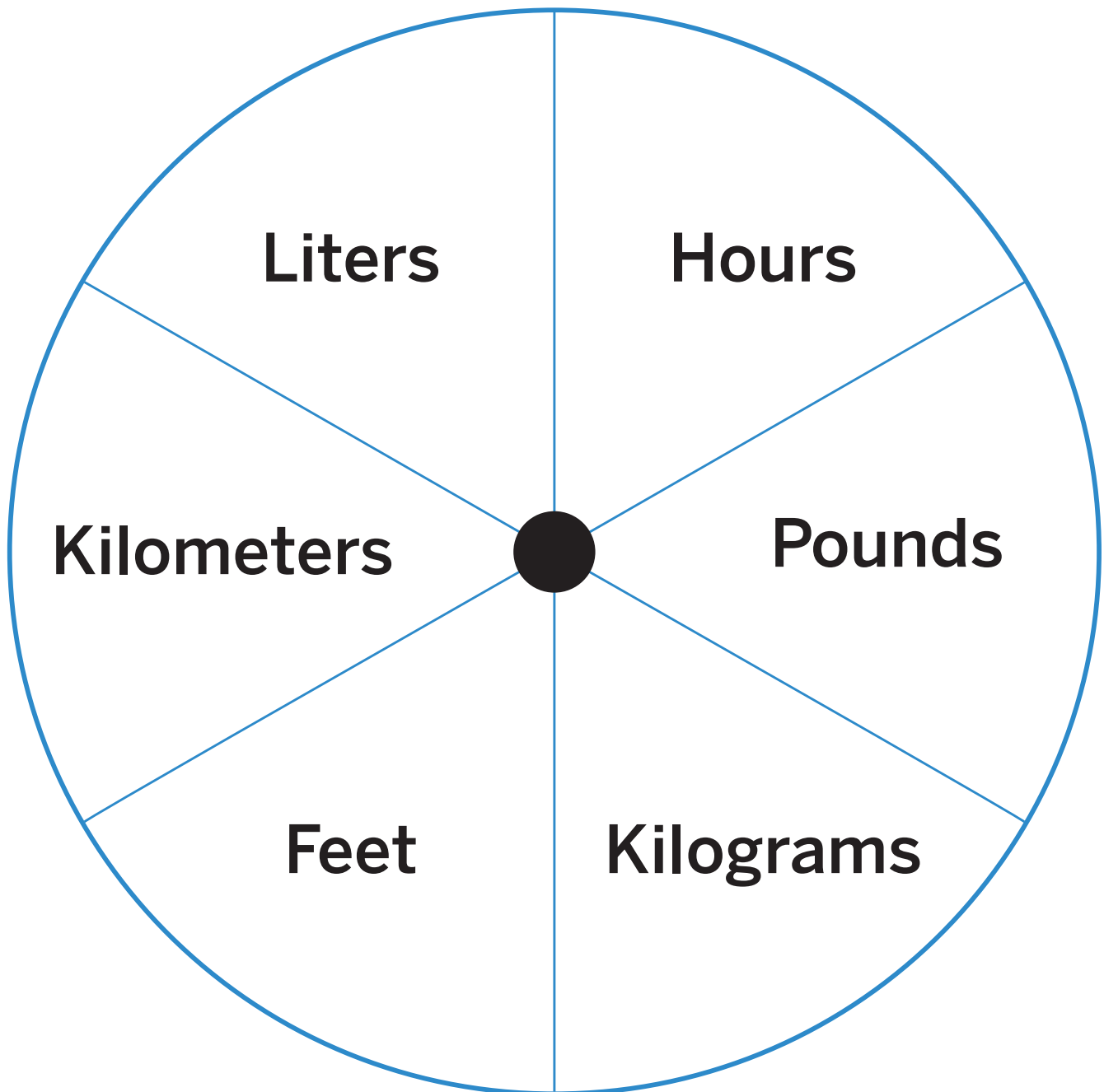
You want <i>more</i>		
Would you rather have ____	or ____?	Points
You want <i>less</i>		
Would you rather have ____	or ____?	Points



Would You Rather?


Stage 1

<p>hours – minutes – seconds kilometers – meters – centimeters feet – inches</p>	<p>liters – milliliters pounds – ounces kilograms – grams</p>
--	---



Work Mats, Cards, and Grids

Number Cards, 0–10

 **Directions:** Make as many copies as are needed; four copies of this page creates one set of cards. Cut out the cards to create a set of cards that will be used throughout the year.

1

Number Cards, 0–10

2

Number Cards, 0–10

3

Number Cards, 0–10

4

Number Cards, 0–10

5

Number Cards, 0–10

6

Number Cards, 0–10

7

Number Cards, 0–10

8

Number Cards, 0–10

9

Number Cards, 0–10


10

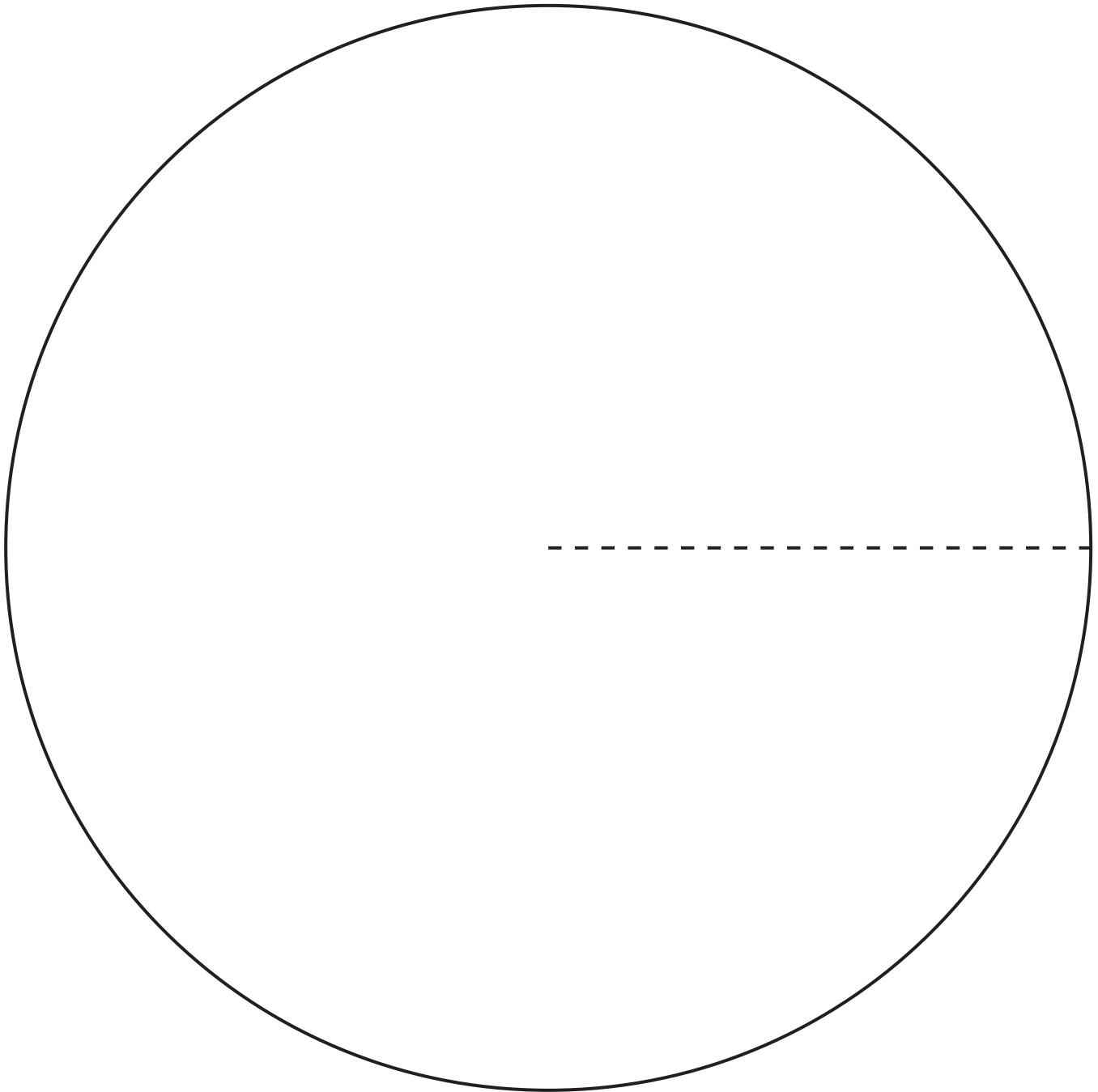
Number Cards, 0–10

0

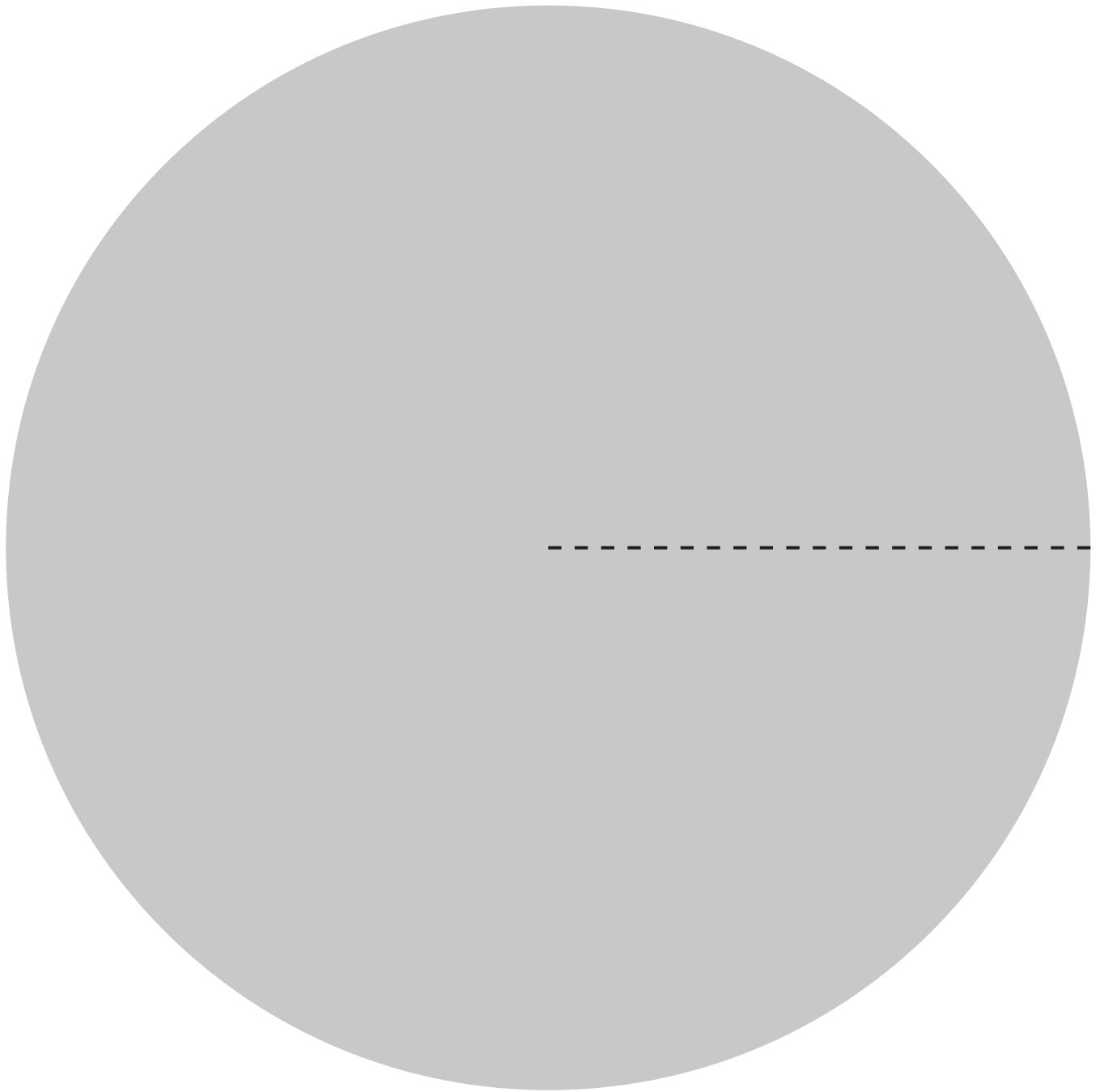
Number Cards, 0–10

Circle Tool

 **Directions:** Cut out each circle, and cut a slit along the dashed line. Place the white circle on top of the gray circle with the slits lined up, and pull the gray circle through to rotate.



Circle Tool



Fraction Cards, Denominators of 5, 8, 10, 12, and 100

✂ - **Directions:** Make one copy per pair. Pre-cut the cards and distribute them so that each pair of students receives one set of cards. This set of cards will be used throughout the year.

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

Fraction Cards

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

Fraction Cards

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

Fraction Cards

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

Fraction Cards

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

Fraction Cards

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

Fraction Cards

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

Fraction Cards

$$\frac{8}{8}$$

Fraction Cards

$$\frac{1}{5}$$

Fraction Cards

$$\frac{2}{5}$$

Fraction Cards

$$\frac{3}{5}$$

Fraction Cards

$$\frac{4}{5}$$

Fraction Cards

$$\frac{5}{5}$$

Fraction Cards

$$\frac{6}{5}$$

Fraction Cards

$$\frac{1}{10}$$

Fraction Cards

$$\frac{2}{10}$$

Fraction Cards

Fraction Cards, Denominators of 5, 8, 10, 12, and 100

$$\frac{3}{10}$$

Fraction Cards

$$\frac{4}{10}$$

Fraction Cards

$$\frac{5}{10}$$

Fraction Cards

$$\frac{6}{10}$$

Fraction Cards

$$\frac{7}{10}$$

Fraction Cards

$$\frac{8}{10}$$

Fraction Cards

$$\frac{9}{10}$$

Fraction Cards

$$\frac{10}{10}$$

Fraction Cards

$$\frac{11}{10}$$

Fraction Cards

$$\frac{19}{10}$$

Fraction Cards

$$\frac{1}{12}$$

Fraction Cards

$$\frac{3}{12}$$

Fraction Cards

$$\frac{4}{12}$$

Fraction Cards

$$\frac{7}{12}$$

Fraction Cards

$$\frac{9}{12}$$

Fraction Cards

$$\frac{10}{12}$$

Fraction Cards

Fraction Cards, Denominators of 5, 8, 10, 12, and 100

$$\frac{13}{12}$$

Fraction Cards

$$\frac{15}{12}$$

Fraction Cards

$$\frac{1}{100}$$

Fraction Cards

$$\frac{5}{100}$$

Fraction Cards

$$\frac{10}{100}$$

Fraction Cards

$$\frac{20}{100}$$

Fraction Cards

$$\frac{49}{100}$$

Fraction Cards

$$\frac{50}{100}$$

Fraction Cards

$$\frac{51}{100}$$

Fraction Cards

$$\frac{75}{100}$$

Fraction Cards

$$\frac{51}{100}$$

Fraction Cards

$$\frac{99}{100}$$

Fraction Cards

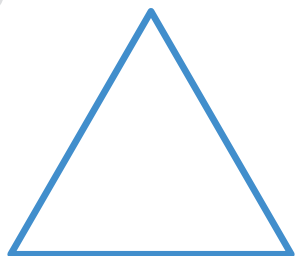
$$\frac{200}{100}$$

Fraction Cards

Shape Cards, Grade 4

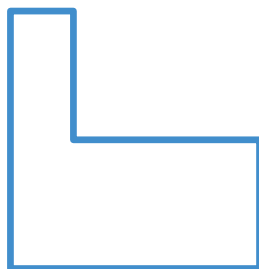
✂️ **Directions:** Make one copy per pair. Pre-cut the cards and distribute them so that each pair of students receives one set of cards.

A



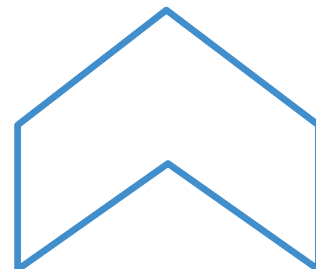
Shape Cards, Grade 4

B



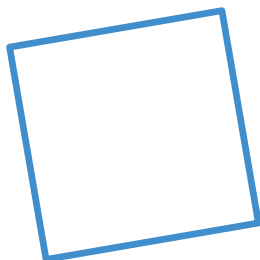
Shape Cards, Grade 4

C



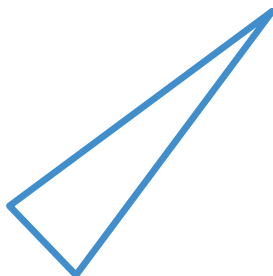
Shape Cards, Grade 4

D



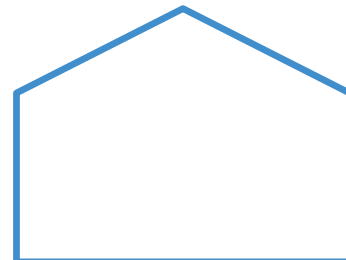
Shape Cards, Grade 4

E



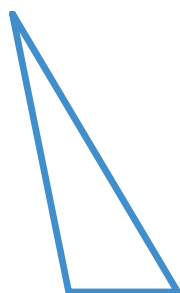
Shape Cards, Grade 4

F



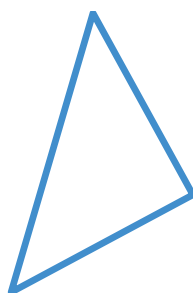
Shape Cards, Grade 4

G



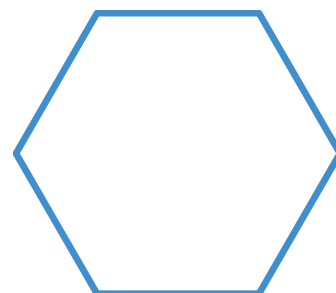
Shape Cards, Grade 4

H



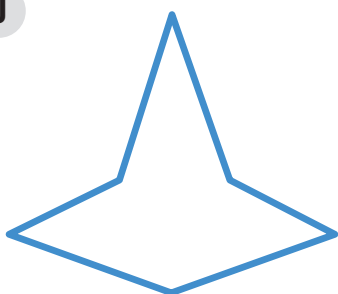
Shape Cards, Grade 4

I



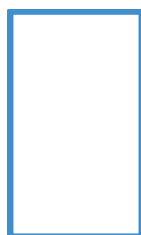
Shape Cards, Grade 4

J



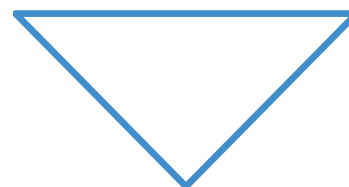
Shape Cards, Grade 4

K



Shape Cards, Grade 4

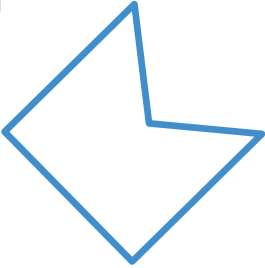
L



Shape Cards, Grade 4

Shape Cards, Grade 4

M



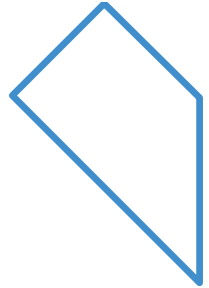
Shape Cards, Grade 4

N



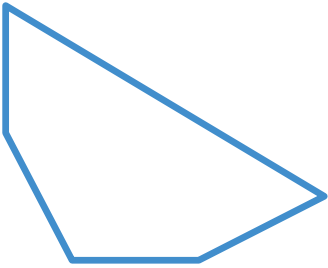
Shape Cards, Grade 4

O



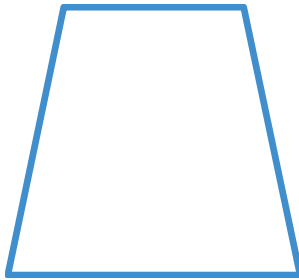
Shape Cards, Grade 4

P



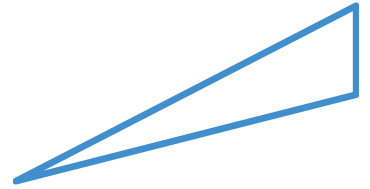
Shape Cards, Grade 4

Q



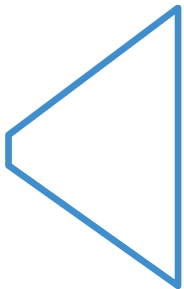
Shape Cards, Grade 4

R



Shape Cards, Grade 4

S



Shape Cards, Grade 4

T



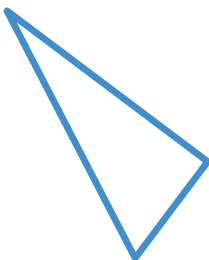
Shape Cards, Grade 4

U



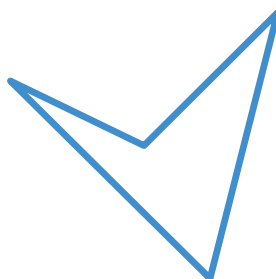
Shape Cards, Grade 4

V



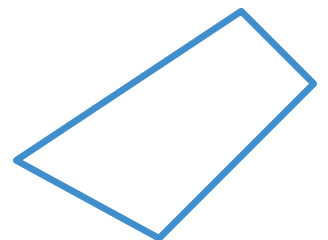
Shape Cards, Grade 4

W



Shape Cards, Grade 4

X

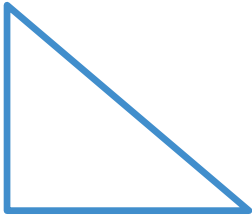


Shape Cards, Grade 4

Shape Cards, Grade 4

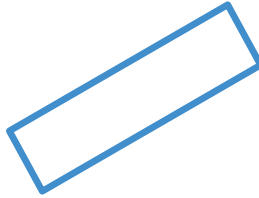
CENTER
Cards
(p. 3 of 3)

Y



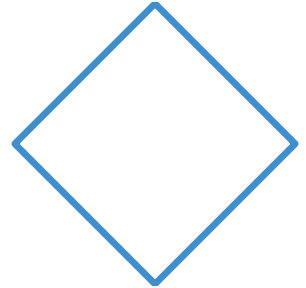
Shape Cards, Grade 4

Z



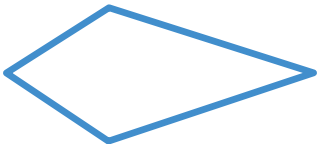
Shape Cards, Grade 4

AA



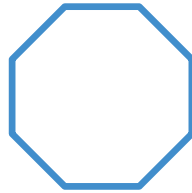
Shape Cards, Grade 4

BB



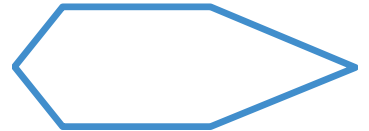
Shape Cards, Grade 4

CC



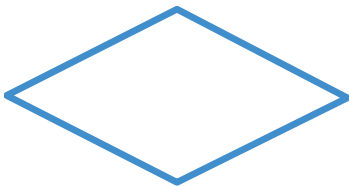
Shape Cards, Grade 4

DD



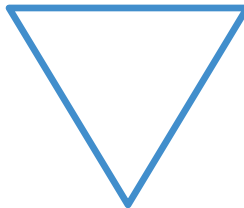
Shape Cards, Grade 4

EE



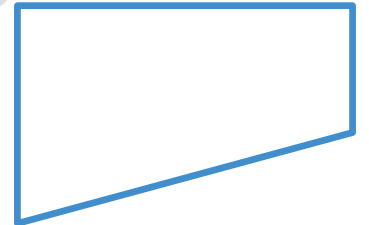
Shape Cards, Grade 4

FF



Shape Cards, Grade 4

GG



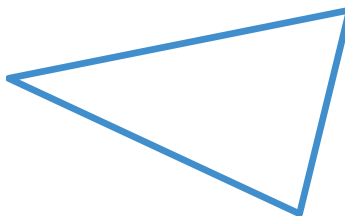
Shape Cards, Grade 4

HH



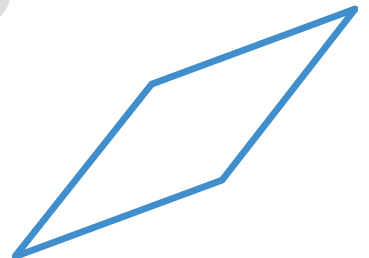
Shape Cards, Grade 4

II



Shape Cards, Grade 4

JJ



Shape Cards, Grade 4

