Amplify Desmos Math

Grade 3

Centers Resources

CENTER
Directions

Capture Squares

Stage 5

Let's multiply numbers (2, 5, and 10).

Pairs

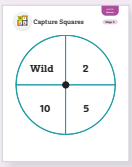
You'll need . . .


2 crayons or colored pencils


number cube


paper clip


Gameboard



Spinner

How to Play

1. Roll the number cube and spin the Spinner. Determine the product.
2. Draw 1 line connecting any 2 dots around the product. If you cannot draw a line, roll the number cube and spin again.
3. If you complete a square, shade the box with your color.
4. Take turns.

How to Win

- The first player to shade 3 boxes wins.

Capture Squares

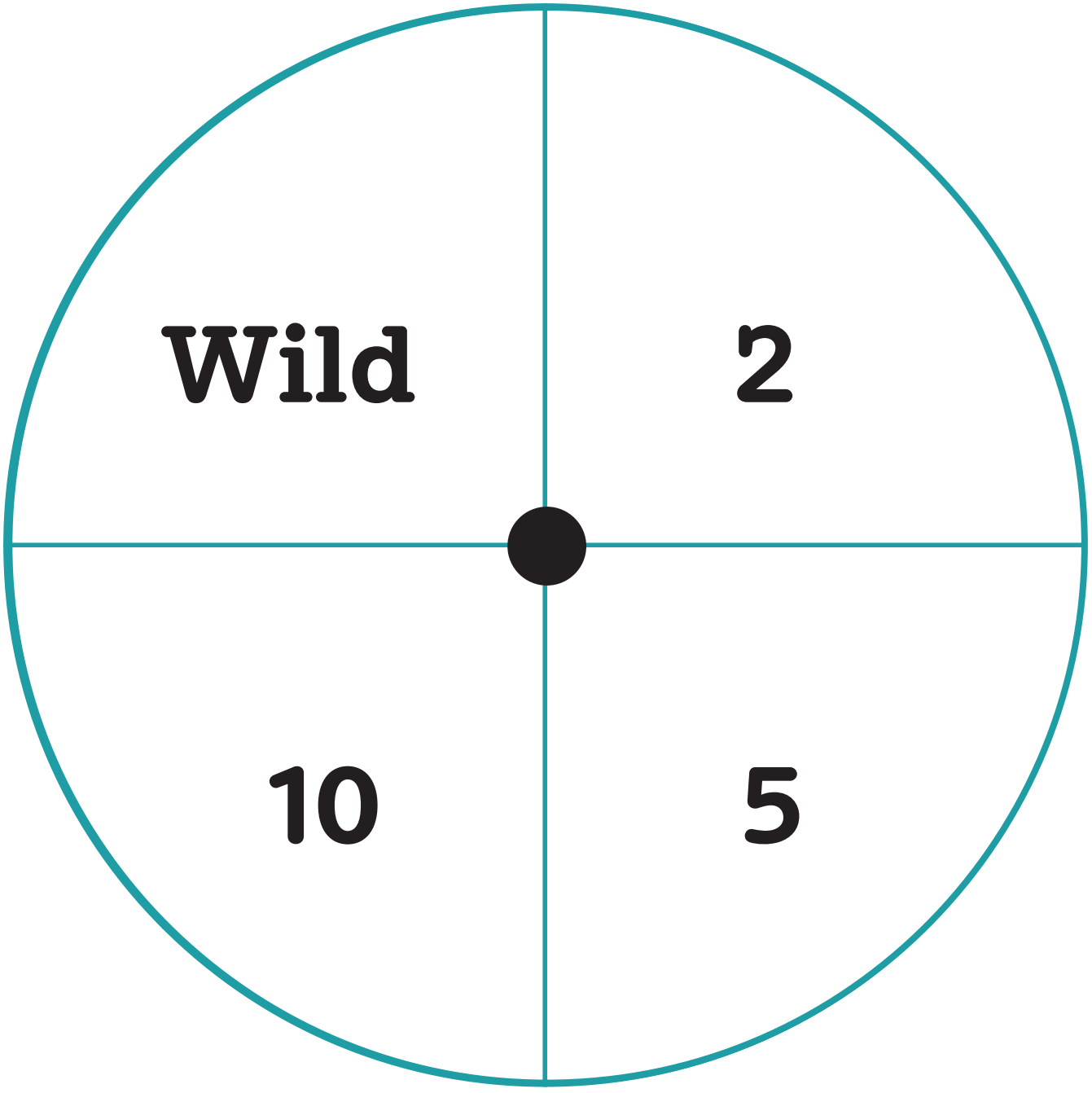
Stage 5

25	2	10, 20, 30, 40, 50, 60	40
8	50	20	15
12	30	5	6
4	10, 20, 30, 40, 50, 60	60	10

CENTER
Spinner

Capture Squares

Stage 5



CENTER
Directions

Capture Squares

Stage 6

Let's multiply numbers (2–5).

Pairs

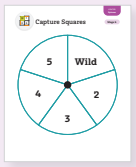
You'll need . . .


2 crayons or colored pencils


number cube


paper clip


Gameboard



Spinner

How to Play

1. Roll the number cube and spin the Spinner. Determine the product.
2. Draw 1 line connecting any 2 dots around the product. If you cannot draw a line, roll the number cube and spin again.
3. If you complete a square, shade the box with your color.
4. Take turns.

How to Win

- The first player to shade 3 boxes wins.

CENTER
Gameboard

Capture Squares

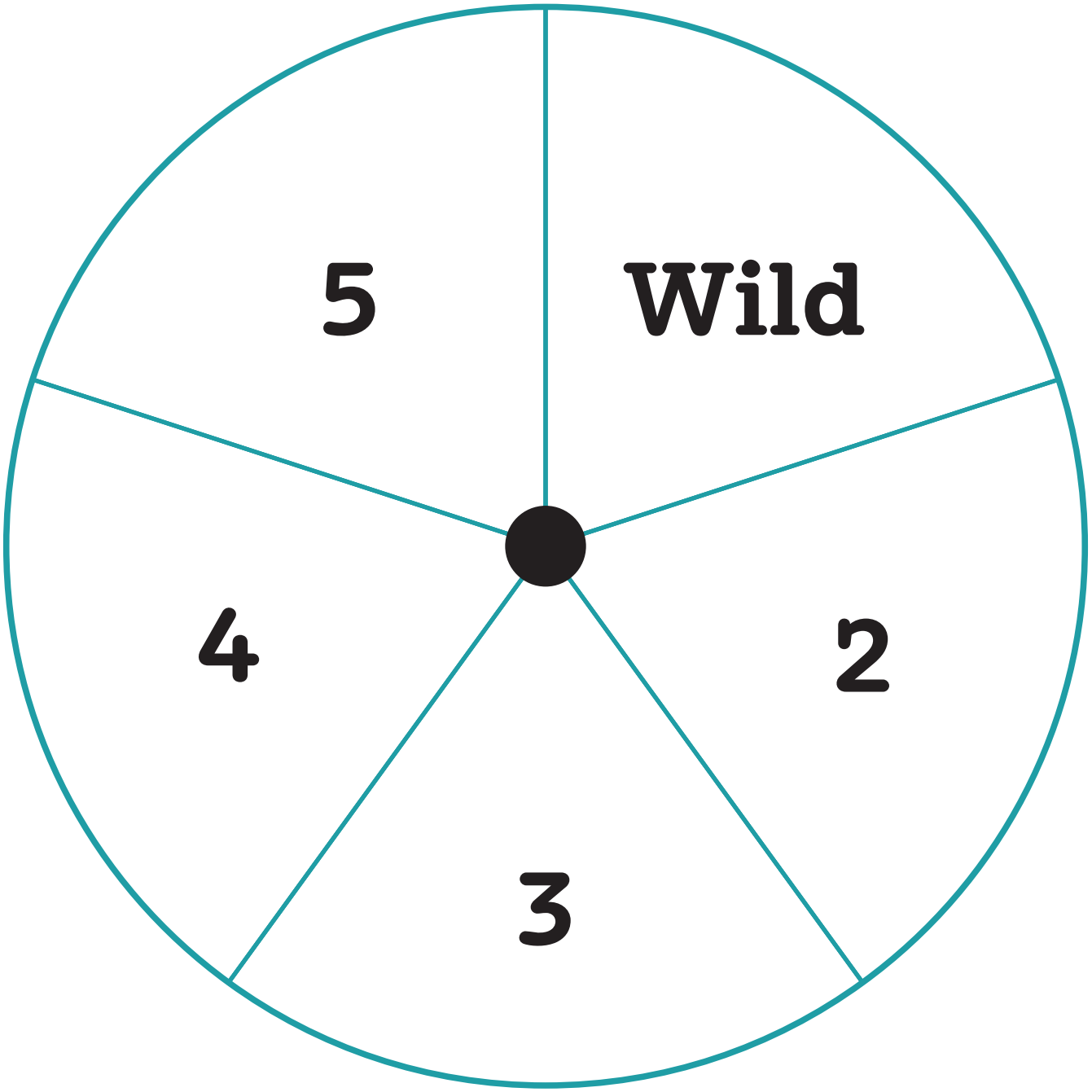
Stage 6

25	12	6	15	8
12	5	10	4	20
6	18	multiple of 4, 5, or 6	20	16
24	8	10	30	12
9	2	15	4	3

CENTER
Spinner

Capture Squares

Stage 6



CENTER
Directions

Capture Squares

Stage 7

Let's multiply numbers (6–9).

Pairs

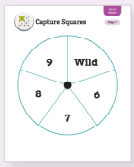
You'll need . . .


2 crayons or colored pencils


number cube


paper clip


Gameboard



Spinner

How to Play

1. Roll the number cube and spin the Spinner. Determine the product.
2. Draw 1 line connecting any 2 dots around the product. If you cannot draw a line, roll the number cube and spin again.
3. If you complete a square, shade the box with your color.
4. Take turns.

How to Win

- The first player to shade 3 boxes wins.

Capture Squares

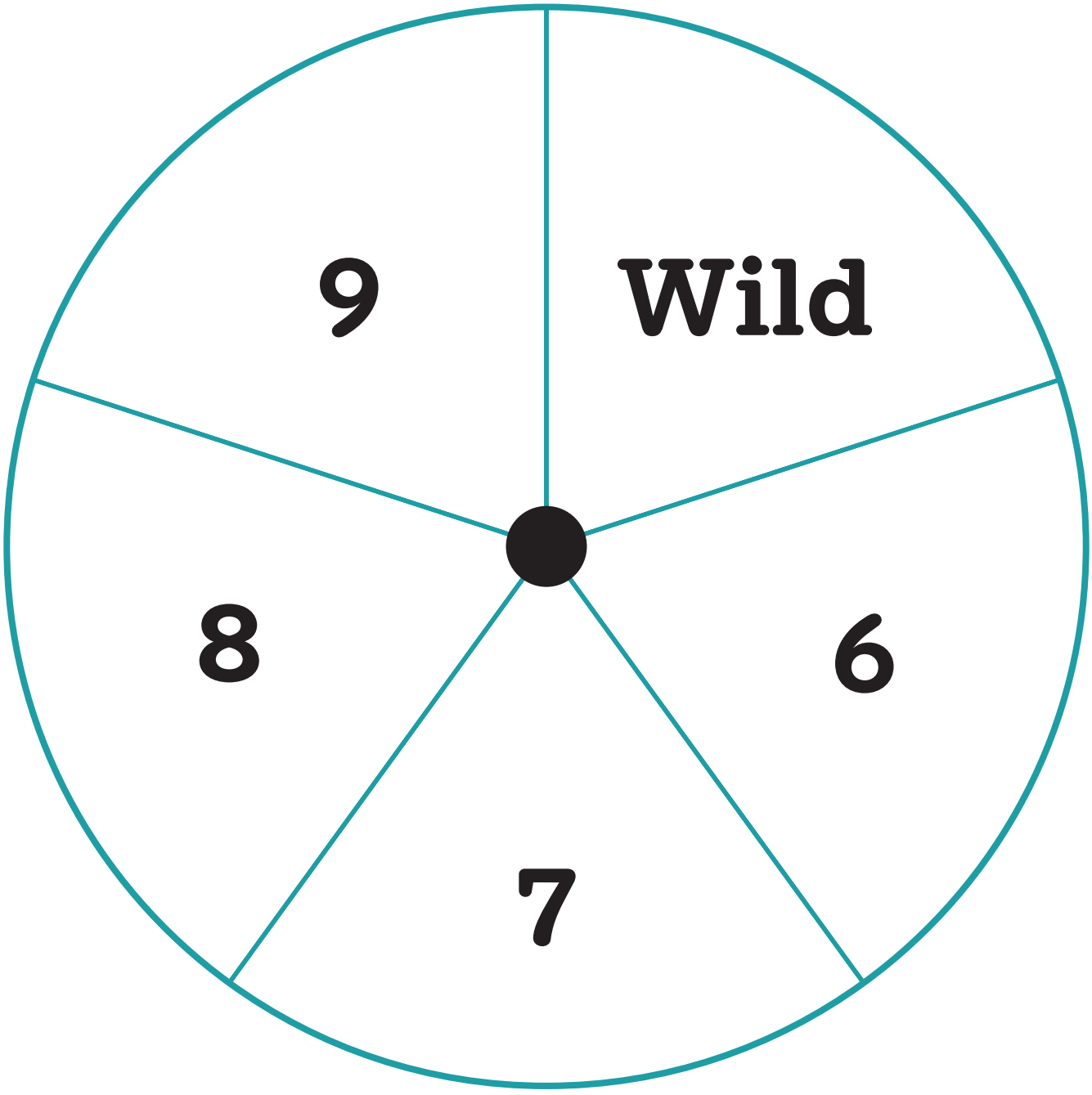
Stage 7

24	32	36	9	14
42	18	35	54	30
7	28	multiple of 9	6	16
24	12	8	27	48
36	45	21	40	18

CENTER
Spinner

Capture Squares

Stage 7



Stage 3

Compare

Let's compare the areas of different rectangles.

Pairs

You'll need . . .

Areas of Rectangles Cards

Set-up

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

How to Play

1. Each player flips over a card. Compare the areas. One □ is 1 square unit.
2. The player with the greater area keeps both cards. Place the cards you win faceup in another pile.
3. If the areas are equivalent, each player flips over 1 more card. The player with the greater area 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.

Compare

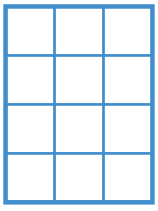
Stage 3

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.

One ☐ is 1 square unit.

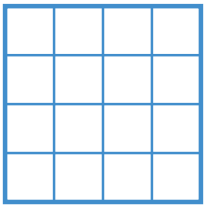
Compare Stage 3

One ☐ is 1 square unit.



Compare Stage 3

One ☐ is 1 square unit.

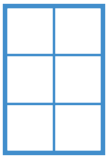


Compare Stage 3

One ☐ is 1 square unit.

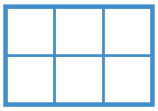
Compare Stage 3

One ☐ is 1 square unit.



Compare Stage 3

One ☐ is 1 square unit.

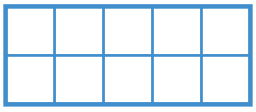


Compare Stage 3

Compare

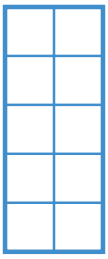
Stage 3

One ☐ is 1 square unit.



Compare Stage 3

One ☐ is 1 square unit.



Compare Stage 3

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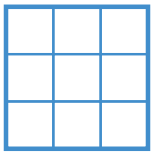

Compare Stage 3

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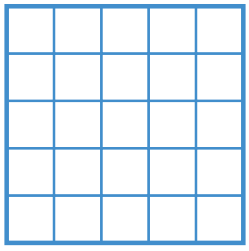

Compare Stage 3

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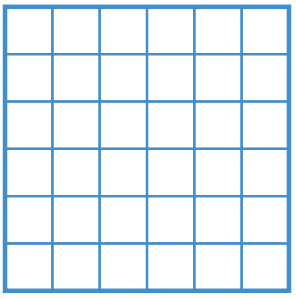

Compare Stage 3

Compare

Stage 3

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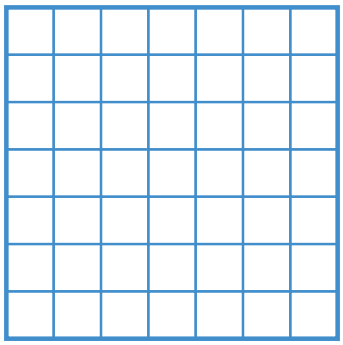

Compare Stage 3

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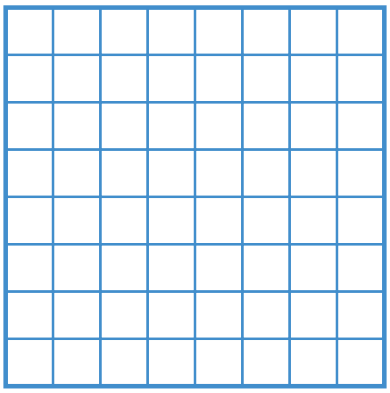

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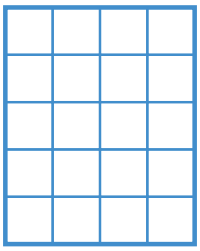

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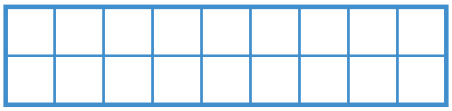
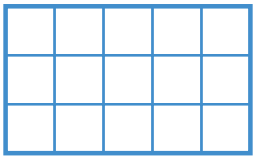


Compare Stage 3

One ☐ is 1 square unit.

Compare Stage 3

One ☐ is 1 square unit.



Compare Stage 3

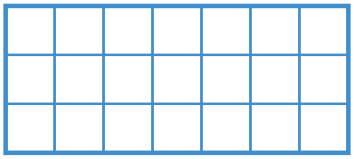
Compare

Stage 3

One ☐ is 1 square unit.

Compare Stage 3

One ☐ is 1 square unit.



Compare Stage 3

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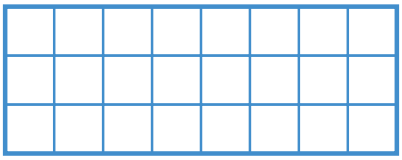

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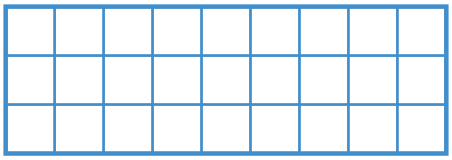

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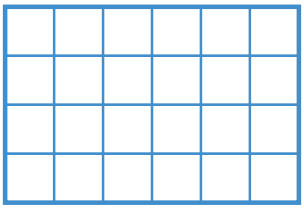

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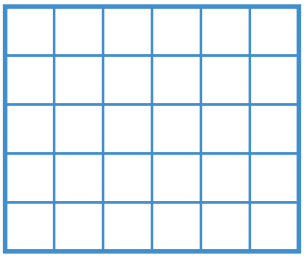


Compare Stage 3

Compare

Stage 3

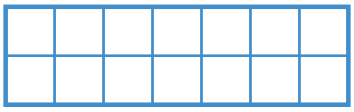
One ☐ is 1 square unit.

Compare Stage 3

One ☐ is 1 square unit.

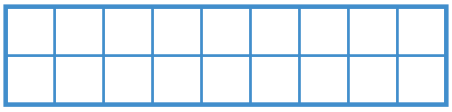
Compare Stage 3

One ☐ is 1 square unit.



Compare Stage 3

One ☐ is 1 square unit.



Compare Stage 3

One ☐ is 1 square unit.

Compare Stage 3

One ☐ is 1 square unit.

Compare Stage 3

Compare

Stage 3

One ☐ is 1 square unit.

Compare Stage 3

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Compare Stage 3

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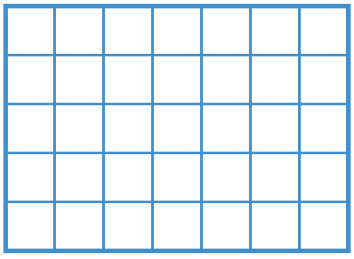
Compare Stage 3

One ☐ is 1 square unit.

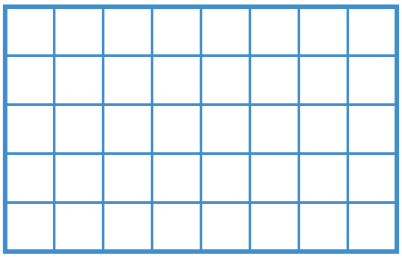
Compare Stage 3

One ☐ is 1 square unit.



Compare Stage 3

One ☐ is 1 square unit.

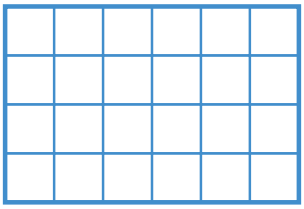


Compare Stage 3

Compare

Stage 3

One ☐ is 1 square unit.



Compare Stage 3

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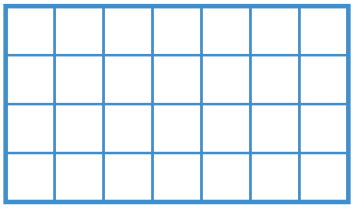

Compare Stage 3

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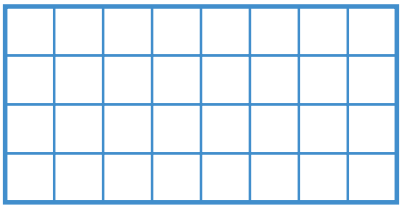
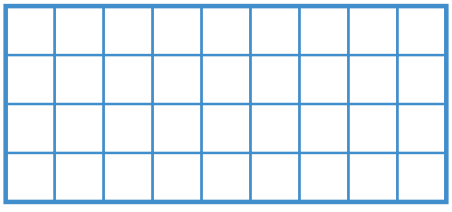


Compare Stage 3

One ☐ is 1 square unit.



Compare Stage 3

Stage 4

Compare

Let's compare products.

Pairs

You'll need . . .

Multiplication Cards

Set-up

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

How to Play

1. Each player flips over a card. Compare the products.
2. The player with the greater product keeps both cards. Place the cards you win faceup in another pile.
3. If the products are equivalent, each player flips over 1 more card. The player with the greater product 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.

Compare

Stage 4

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

12 × 9 Compare Stage 4	12 × 7 Compare Stage 4	13 × 7 Compare Stage 4
14 × 6 Compare Stage 4	15 × 6 Compare Stage 4	10 × 20 Compare Stage 4
21 × 4 Compare Stage 4	19 × 5 Compare Stage 4	18 × 5 Compare Stage 4
17 × 4 Compare Stage 4	16 × 6 Compare Stage 4	14 × 7 Compare Stage 4
31 × 3 Compare Stage 4	20 × 4 Compare Stage 4	8 × 9 Compare Stage 4

Compare

Stage 4

9×7	12×5	13×4
Compare Stage 4	Compare Stage 4	Compare Stage 4
15×3	9×5	9×12
Compare Stage 4	Compare Stage 4	Compare Stage 4
7×12	7×13	6×14
Compare Stage 4	Compare Stage 4	Compare Stage 4
6×15	20×10	4×21
Compare Stage 4	Compare Stage 4	Compare Stage 4
5×19	5×18	4×17
Compare Stage 4	Compare Stage 4	Compare Stage 4

Compare

Stage 4

5 × 19 Compare Stage 4	5 × 18 Compare Stage 4	4 × 17 Compare Stage 4
6 × 16 Compare Stage 4	7 × 14 Compare Stage 4	3 × 31 Compare Stage 4
4 × 20 Compare Stage 4	9 × 8 Compare Stage 4	7 × 9 Compare Stage 4
5 × 12 Compare Stage 4	4 × 13 Compare Stage 4	3 × 15 Compare Stage 4
5 × 9 Compare Stage 4		

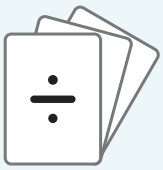
Compare

Stage 5

Let's compare quotients.

Pairs

You'll need . . .



One-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

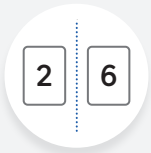
- The player with more cards at the end of the game wins.

Compare

Stage 5

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

48 ÷ 6 Compare, Stage 5	56 ÷ 7 Compare, Stage 5	36 ÷ 6 Compare, Stage 5
45 ÷ 5 Compare, Stage 5	28 ÷ 4 Compare, Stage 5	45 ÷ 3 Compare, Stage 5
57 ÷ 3 Compare, Stage 5	72 ÷ 4 Compare, Stage 5	52 ÷ 4 Compare, Stage 5
84 ÷ 7 Compare, Stage 5	42 ÷ 6 Compare, Stage 5	56 ÷ 8 Compare, Stage 5
72 ÷ 8 Compare, Stage 5	49 ÷ 7 Compare, Stage 5	92 ÷ 2 Compare, Stage 5



Compare

Stage 5

81 ÷ 9 Compare, Stage 5	72 ÷ 6 Compare, Stage 5	84 ÷ 2 Compare, Stage 5
36 ÷ 3 Compare, Stage 5	90 ÷ 3 Compare, Stage 5	52 ÷ 2 Compare, Stage 5
63 ÷ 9 Compare, Stage 5	50 ÷ 5 Compare, Stage 5	63 ÷ 3 Compare, Stage 5
48 ÷ 8 Compare, Stage 5	24 ÷ 6 Compare, Stage 5	24 ÷ 3 Compare, Stage 5
68 ÷ 4 Compare, Stage 5	65 ÷ 5 Compare, Stage 5	42 ÷ 7 Compare, Stage 5

Compare

Stage 5

90 ÷ 9 Compare, Stage 5	80 ÷ 8 Compare, Stage 5	72 ÷ 9 Compare, Stage 5
42 ÷ 3 Compare, Stage 5	36 ÷ 2 Compare, Stage 5	54 ÷ 9 Compare, Stage 5
54 ÷ 6 Compare, Stage 5	54 ÷ 3 Compare, Stage 5	64 ÷ 4 Compare, Stage 5
32 ÷ 2 Compare, Stage 5		

Cover Up

Stage 10

Let's add within 1,000 without composing.

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:

- Put each cube on a number in the gray boxes.
- Add the numbers. Cover the sum with a counter.
- Record the addition expression and sum.

2 Player B:

- Move one of the cubes. Add the numbers.
- If the sum is not already covered with a counter, cover it.
- Record the addition expression and sum.

3 Take turns. Record each addition expression and sum, even if you were unable to cover the sum.

How to Win

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

Cover Up

Stage 10

47	59	68	76	85	97
328	336	345	353	357	365
366	357	374	384	386	395
447	464	476	485	519	536
548	557	634	655	663	745
753	774	817	825	846	936

44	15	32	53

342	432	504	313	321

Cover Up

Stage 10

237	315	341	349	375	409
418	436	445	457	453	484
514	523	546	562	547	573
556	595	617	626	651	653
656	665	684	731	745	754
764	793	825	834	873	962

243	105	352	210

441	132	304	313	521

Name _____ Date _____

CENTER
Recording Sheet

Cover Up

Stage 10

Addition expression	Sum

Cover Up

Stage 11

Let's add within 1,000 with composing.

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:**
   - Put each cube on a number in the gray boxes.
   - Add the numbers. Cover the sum with a counter.
   - Record the addition expression and sum.
2. **Player B:**
   - Move one of the cubes. Add the numbers.
   - If the sum is not already covered with a counter, cover it.
   - Record the addition expression and sum.
3. Take turns. Record each addition expression and sum, even if you were unable to cover the sum.

How to Win

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

Cover Up

Stage 11

123	132	139	147	154	163
344	351	360	366	373	375
382	397	415	431	446	422
477	484	493	508	594	620
627	636	643	651	665	705
727	776	848	870	919	981

58	65	74	89

562	357	308	419	286

Cover Up

Stage 11

414	455	513	533	550	564
577	591	605	628	632	642
655	669	683	683	696	724
727	731	741	754	778	782
791	805	809	819	833	846
850	908	945	959	972	1000

168	287	345	409

563	437	396	382	246

Name _____ Date _____

CENTER
Recording Sheet

Cover Up

Stage 11

Addition expression	Sum

Cover Up

Stage 12

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

Name _____ Date _____

CENTER
Recording Sheet

Cover Up

Stage 12

Multiplication expression	Product

Cover Up

Stage 13

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

Name _____ Date _____

CENTER
Recording Sheet

Cover Up

Stage 13

Multiplication expression	Product

CENTER
Directions

Equation Challenge

Stage 6

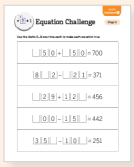
Let's use the digits 0–9 to make the equations true.

Pairs

You'll need . . .


dry-erase markers

sheet protectors

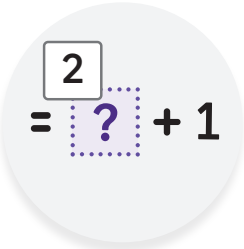

Gameboards A–H

Set-up

- Choose a Gameboard.

How to Play

1. Work together to write the digits 0–9 to make each equation true.
2. Each digit can only be written one time on each Gameboard.
3. Choose a new Gameboard, and start again.

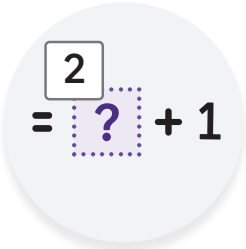


Equation Challenge

Stage 6

Use the digits 0–9 one time each to make each equation true.

□ 5 0 + □ 5 0 = 700
8 □ 2 − □ 2 1 = 371
□ 2 9 + 1 2 □ = 456
□ 0 0 − 1 5 □ = 442
3 5 □ − 1 0 □ = 251

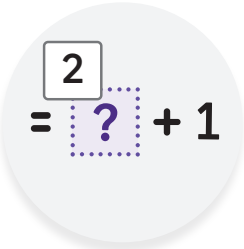


Equation Challenge

Stage 6

Use the digits 0–9 one time each to make each equation true.

150 + ☐ 0 ☐ = 759
☐ 0 0 – 187 = 5 1 ☐
5 2 ☐ + 1 4 ☐ = 668
6 ☐ ☐ – 531 = 111
4 ☐ ☐ + 322 = 773

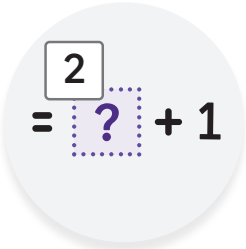


Equation Challenge

Stage 6

Use the digits 0–9 one time each to make each equation true.

$\square 40 + \square 60 = 800$
$\square 00 - \square 55 = 545$
$351 + 4\square\square = 818$
$541 - 2\square\square = 257$
$785 - 682 = \square\square 3$

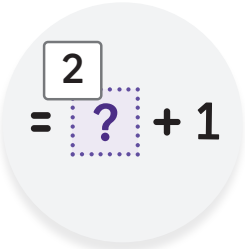


Equation Challenge

Stage 6

Use the digits 0–9 one time each to make each equation true.

$\square 05 + 1\square 7 = 912$
$\square 00 - 271 = 3\square 9$
$\square 28 + \square 56 = 484$
$\square 05 - 100 = 60\square$
$2\square 3 + 3\square 2 = 635$

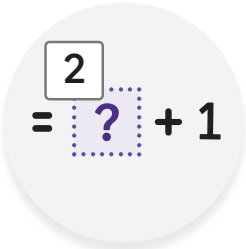


Equation Challenge

Stage 6

Use the digits 0–9 one time each to make each equation true.

$\square\square 4 + 2 4 \square = 850$
$900 - 3 \square \square = 542$
$429 + \square 0 \square = 638$
$\square\square 7 - 358 = 389$
$5 \square \square + 339 = 870$

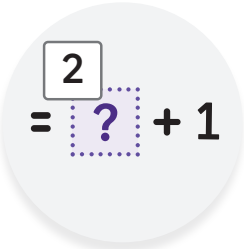


Equation Challenge

Stage 6

Use the digits 0–9 one time each to make each equation true.

□ 0 1 − 348 = 5 5 □
208 + □ 0 □ = 315
□ 5 7 − 129 = 5 □ 8
□ 3 8 + 277 = 7 1 □
7 0 □ − 4 □ 9 = 299

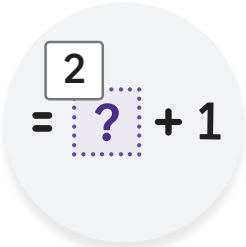


Equation Challenge

Stage 6

Use the digits 0–9 one time each to make each equation true.

436 – 159 = ☐☐7
☐00 – 35☐ = 245
408 – 20☐ = ☐99
176 + ☐82 = 65☐
75☐ + 55 = 8☐8



Equation Challenge

Stage 6

Use the digits 0–9 one time each to make each equation true.

6 ☐ 8 + 2 ☐ 3 = 871
☐ 6 5 + ☐ 9 3 = 858
2 ☐ 0 − 1 0 ☐ = 151
3 ☐ 8 + 5 6 ☐ = 938
5 3 ☐ − ☐ 8 9 = 249

CENTER
Directions

Equation Challenge

Stage 7

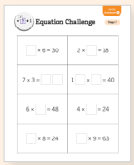
Let's use the digits 0–9 to make the equations true.

Pairs

You'll need . . .

scissors

Digit Cards

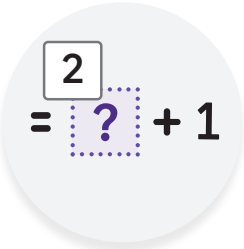

Gameboards A–I

Set-up

- Cut one number strip into digit cards.
- Choose a Gameboard.

How to Play

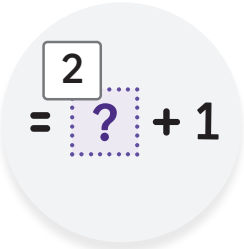
1. Work together to use the digit cards to make each equation true.
2. Each digit can only be used one time on each Gameboard.
3. Choose a new Gameboard, and start again.



Equation Challenge

Stage 7

$\square \times 6 = 30$	$2 \times \square = 18$
$7 \times 3 = \square\square$	$1\square \times \square = 40$
$6 \times \square = 48$	$4 \times \square = 24$
$\square \times 8 = 24$	$\square \times 9 = 63$

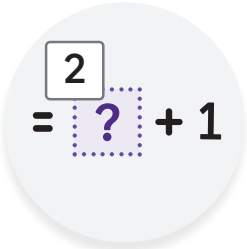


Equation Challenge

Stage 7

☐☐ × 7 = 84	☐ × 11 = 99
4 × 10 = ☐☐	12 × ☐ = 72
12 × 11 = 1☐2	11 × ☐ = 55
8 × ☐ = 64	☐ × 9 = 63

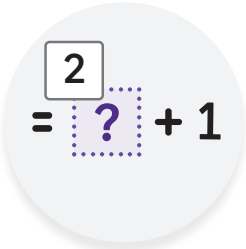
CENTER
Gameboard C



Equation Challenge

Stage 7

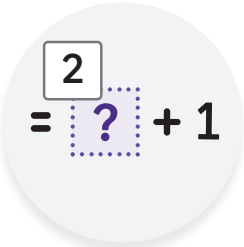
$\square \times 12 = 10\square$	$12 \times \square = 84$
$10 \times \square 0 = 200$	$5 \times 1\square = 65$
$\square \times 25 = 100$	$16 \times \square = 80$
$\square \times 15 = 90$	$7 \times \square\square = 70$



Equation Challenge

Stage 7

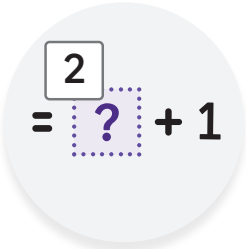
$45 \div 5 = \square$	$8 \square \div 10 = 8$
$15 \div \square = 5$	$\square \square \div 8 = 6$
$\square \square \div 9 = 8$	$2 \square \div 7 = 3$
$50 \div \square = 10$	$36 \div 6 = \square$



Equation Challenge

Stage 7

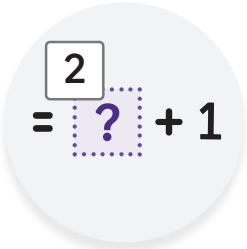
$28 \div 4 = \square$	$\square\square \div 10 = 6$
$20 \div \square = 10$	$\square 5 \div 7 = 5$
$\square\square \div 6 = 3$	$4\square \div 7 = 7$
$40 \div \square = 8$	$32 \div \square = 8$



Equation Challenge

Stage 7

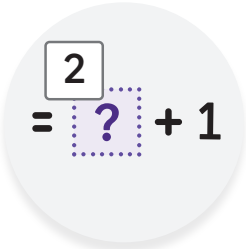
$120 \div \square\square = 10$	$\square\square \div 7 = 9$
$88 \div \square = 11$	$54 \div 6 = \square$
$60 \div \square = 12$	$11\square \div 10 = 11$
$14\square \div 12 = 12$	$\square 2 \div 12 = 6$



Equation Challenge

Stage 7

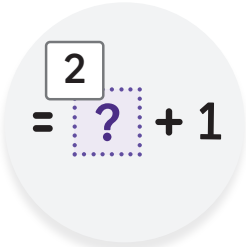
$\square \times \square = 21$	$54 \div \square = \square$
$4 \square \div 8 = 5$	$7 \times \square = 35$
$6 \times 4 = \square 4$	$\square 2 \div 6 = 7$
$72 \div 9 = \square$	$9 \times 2 = \square 8$



Equation Challenge

Stage 7

$\square 00 \div 5 = 20$	$1 \square \times 4 = 60$
$150 \div \square = 50$	$10 \times 6 = \square \square$
$25 \times \square = 200$	$100 \div \square = 25$
$108 \div 1 \square = \square$	$\square \times 11 = 77$

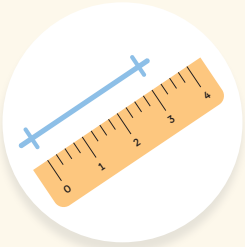


Equation Challenge

Stage 7

☐☐ × 10 = 200	☐0 ÷ 14 = 5
☐ 8 ÷ 14 = 7	☐ 0 × 7 = 280
1☐ 0 ÷ 13 = 10	4☐ ÷ 4 = 12
135 ÷ ☐☐ = 9	16 × 4 = ☐4

CENTER
Directions



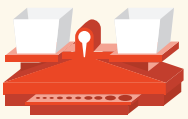
Estimate and Measure

Stage 6

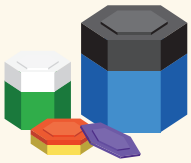
Let's estimate and measure the weights of different objects.

Pairs

You'll need . . .


balance


objects to measure


weights (grams)


Recording Sheet

How to Play

1. Each partner chooses an object to measure that is about the size of your hand.
2. Each partner estimates the weight of their own object to the nearest gram and records their estimate. *Think: A small paper clip is about 1 gram.*
3. **Partner A:** Measure the weight of your object and record the weight under Object A.
4. **Partner B:** Measure the weight of your object and record the weight under Object B.
5. Measure the weights of different objects until the Recording Sheet is full.

Discuss with your partner

- Which object has the greatest weight? The least weight?
- Do you notice any relationships between an object's size and its weight?
- How could you determine the difference in weight between two of your objects?

CENTER
Recording Sheet

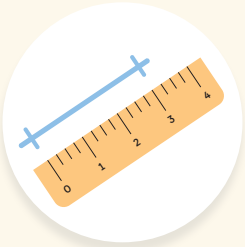
Name _____ Date _____

Estimate and Measure

Stage 6

Think: A small paper clip is about 1 gram.					
Object A	**Object A estimate**	**Object A weight**	**Object B**	**Object B estimate**	**Object B weight**
marker	70 grams	78 grams	pencil	30 grams	25 grams

CENTER
Directions



Estimate and Measure

Stage 7

Let's estimate and measure the lengths of different objects to the nearest fourth of an inch.

Independent

You'll need . . .

objects to measure

ruler (inch)

Recording Sheet

How to Play

1. Choose an object to measure.
2. Estimate the length of your object to the nearest fourth of an inch, and record your estimate.
3. Measure and record the actual measurement to the nearest fourth of an inch.
4. Measure different objects until the Recording Sheet is full.

Name _____ Date _____

CENTER
Recording Sheet

Estimate and Measure

Stage 7

Object	Estimate	Actual measurement
crayon	$3\frac{3}{4}$ inches	$3\frac{1}{4}$ inches

CENTER
Directions

Fraction Match

Stage 1

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

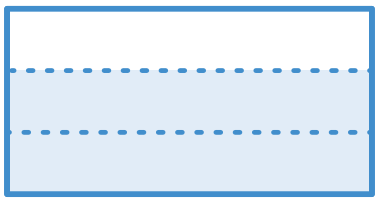
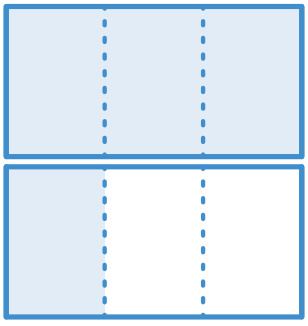
- After all the matches have been found, the player who collected more cards wins.

Fraction Match

Stage 1

CENTER
Cards
(p. 1 of 2)

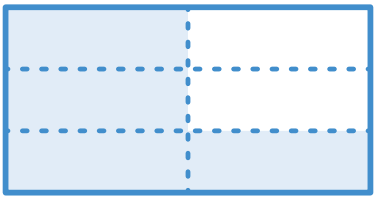
Directions: Make 1 copy per pair of students. Pre-cut the cards and distribute them so that each pair receives one set of cards.

$\frac{2}{2}$ 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

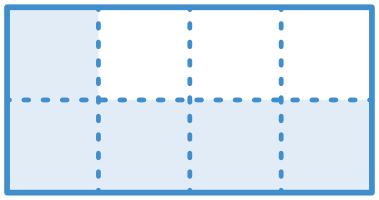
Fraction Match

Stage 1

Fraction Match Stage 1



Fraction Match Stage 1



Fraction Match Stage 1

Fraction Match Stage 1

seven-fourths

Fraction Match Stage 1

eight-eighths

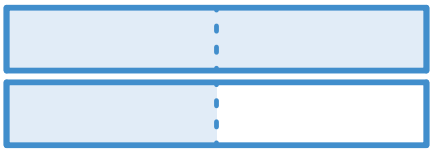
Fraction Match Stage 1

$\frac{3}{2}$

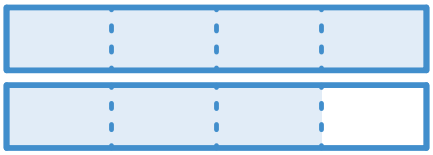
Fraction Match Stage 1

$\frac{9}{6}$

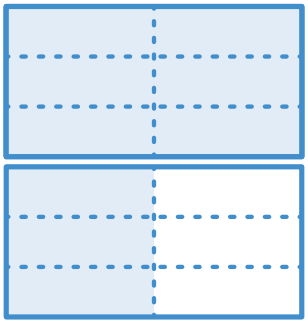
Fraction Match Stage 1



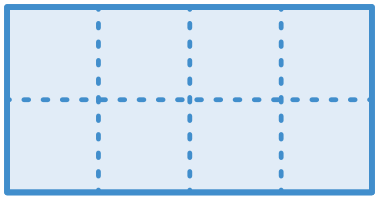
Fraction Match Stage 1



Fraction Match Stage 1



Fraction Match Stage 1



Fraction Match Stage 1

Name _____ Date _____

CENTER
Recording Sheet

Fraction Match

Stage 1

Numeric form or word form	Fraction diagram

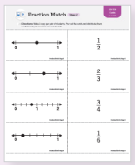
Fraction Match

Stage 2

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

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

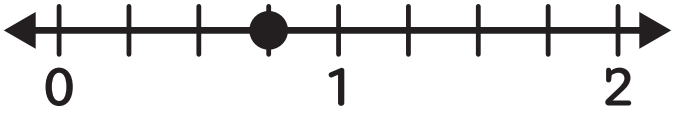
$\frac{1}{2}$

Fraction Match Stage 2

Fraction Match Stage 2

$\frac{2}{3}$

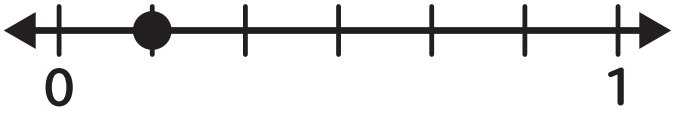
Fraction Match Stage 2



Fraction Match Stage 2

$\frac{3}{4}$

Fraction Match Stage 2



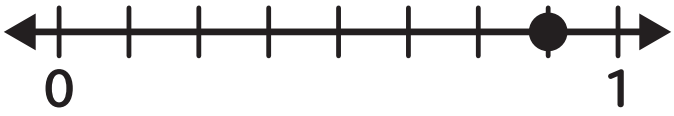
Fraction Match Stage 2

$\frac{1}{6}$

Fraction Match Stage 2

Fraction Match

Stage 2



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

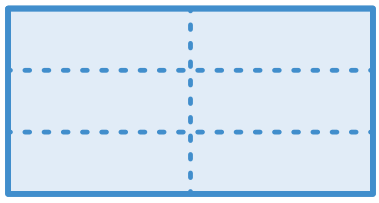
Stage 2

Fraction Match Stage 2

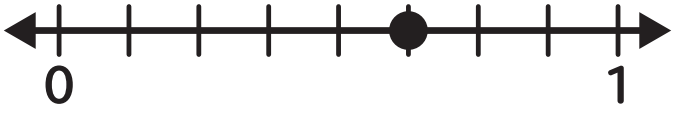
$\frac{7}{6}$

Fraction Match Stage 2

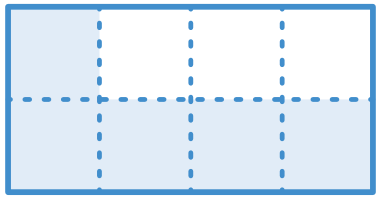
Fraction Match Stage 2



Fraction Match Stage 2

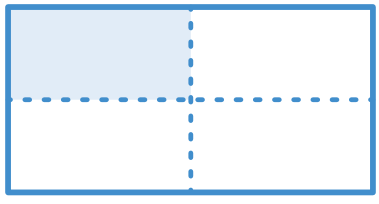


Fraction Match Stage 2



Fraction Match Stage 2

Fraction Match Stage 2



Fraction Match Stage 2

Name _____ Date _____

CENTER
Recording Sheet

Fraction Match

Stage 2

Fraction or diagram	Number Line

CENTER
Directions

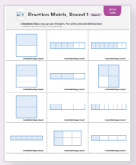
Fraction Match

Stage 3

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

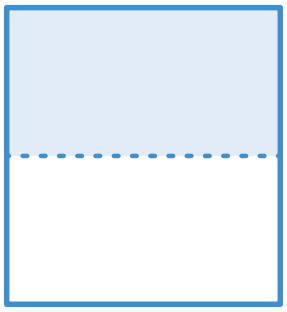
- The player who collects more cards wins.

CENTER
Cards

Fraction Match, Round 1

Stage 3

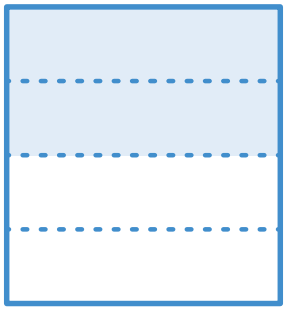
Directions: Make 1 copy per pair of students. Pre-cut the cards and distribute them so that each pair receives one set of cards.



Fraction Match Stage 3, Round 1

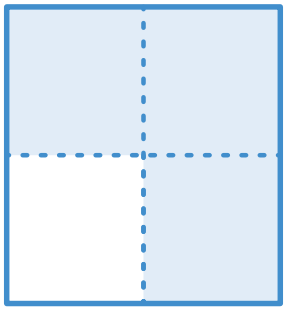
Fraction Match Stage 3, Round 1

Fraction Match Stage 3, Round 1

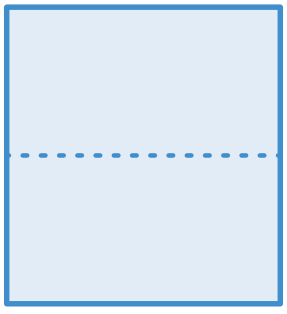


Fraction Match Stage 3, Round 1

Fraction Match Stage 3, Round 1



Fraction Match Stage 3, Round 1

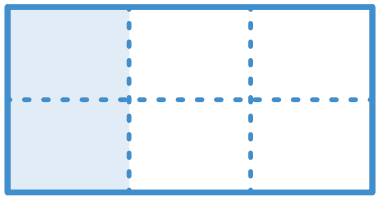


Fraction Match Stage 3, Round 1

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

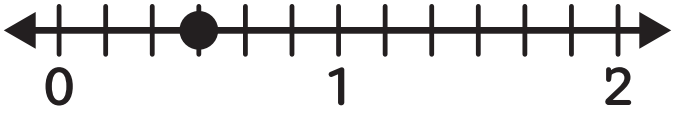
CENTER
Cards
(p. 1 of 2)

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)

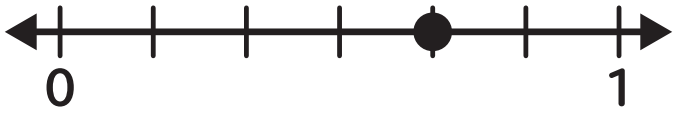
Fraction Match Stage 3, Round 2

Fraction Match Stage 3, Round 2

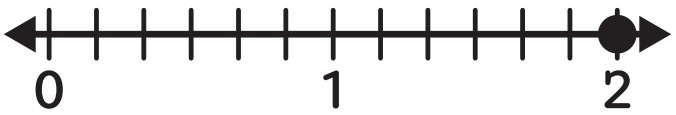
Fraction Match Stage 3, Round 2

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 _____

CENTER
Recording Sheet

Fraction Match

Stage 3

Model	Model

CENTER
Directions

Stage 3

How Are They the Same?

Let's draw shapes that have shared attributes.

Groups of 4

You'll need . . .

straightedges


Quadrilateral Cards, Grade 3


Triangle Cards, Grade 3


Recording Sheet

Set-up

- Choose a set of cards and place them facedown in a pile. Draw the top 6 cards and lay them out faceup.

How to Play

1. One player chooses 2 cards that have an attribute in common. Name the common attribute.
2. All players draw these shapes and write the shared attribute on their own Recording Sheet.
3. All players draw another shape that has the same attribute.
4. Compare and discuss the shapes drawn in the fourth column. You earn 1 point if everyone agrees your shape shares the correct attribute. Decide which shapes are the same and which are different. You earn 1 point if you drew a shape that is different.

How to Win

- After 5 rounds, the player who earns the most points wins.

Name _____ Date _____

CENTER
Recording Sheet

How Are They the Same?

Stage 3

Shape 1	Shape 2	Shared attribute	My shape drawing	Points

CENTER
Directions

Stage 5

How Close?

Let's add numbers within 1,000.

Pairs

You'll need . . .

Number Cards, 0–9

Recording Sheet

Set-up

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

How to Play

1. Each player draws 6 cards.
2. Arrange the cards to create 2 three-digit numbers to fill in the equation. Find the sum.
3. Use estimation to check the reasonableness of your sum.
4. Your score is the difference between your sum and 1,000.
5. 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 _____

CENTER
Recording Sheet

How Close?

Stage 5

Addition equation	Points
☐☐☐ + ☐☐☐ = ☐☐☐	
☐☐☐ + ☐☐☐ = ☐☐☐	
☐☐☐ + ☐☐☐ = ☐☐☐	
☐☐☐ + ☐☐☐ = ☐☐☐	
☐☐☐ + ☐☐☐ = ☐☐☐	

CENTER
Directions

How Close?

Stage 6

Let's multiply numbers within 100.

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

1. Each player draws 4 cards.
2. Choose 2 or 3 cards to write a multiplication expression. Determine the product. You can multiply a one-digit number and a one-digit number or a two-digit number and a one-digit number.
3. Your score is the difference between your product and 100.
4. Draw enough new cards to start the next round with 4 cards, and play again until the Recording Sheet is full.

How to Win

- The player who earns fewer points wins.

Name _____ Date _____

CENTER
Recording Sheet

How Close?

Stage 6

Multiplication expression	Product	Points

Last Number Wins

Stage 4

Let's count by 2, 5, and 10.

Pairs

You'll need . . .


dry-erase markers

sheet protectors


Gameboard

Set-up

- Choose a number that is less than or equal to 780, and record it in the first space on the Gameboard. This is your starting number.
- Choose whether to skip count by 2, 5, or 10.

How to Play

1. **Player A:** Record the next 1, 2, or 3 numbers on the Gameboard.
2. **Player B:** Record the next 1, 2, or 3 numbers on the Gameboard.
3. Take turns choosing how many numbers to record and recording them.

How to Win

- The player who records the last number on the Gameboard wins.

Last Number Wins

Stage 4

Choose if you will count by 2, 5, or 10.

start

end

CENTER
Directions

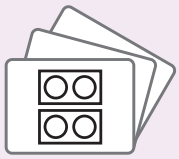
Match It

Stage 1

Let's match multiplication representations.

Pairs

You'll need . . .



Multiplication Representation 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 multiplication 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. 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

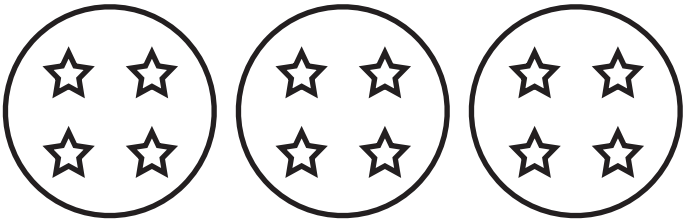
Stage 1

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

Match It Stage 1

3 groups of 5 objects

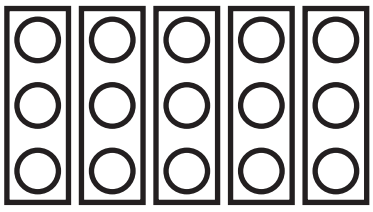
Match It Stage 1



Match It Stage 1

3 groups with 4 objects in each group

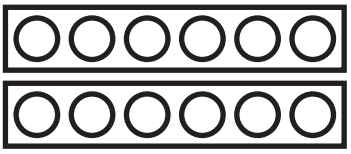
Match It Stage 1



Match It Stage 1

5 groups of 3

Match It Stage 1



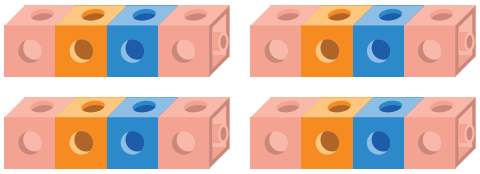
Match It Stage 1

2 groups of 6

Match It Stage 1

Match It

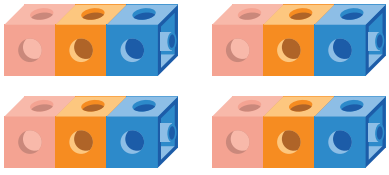
Stage 1



Match It Stage 1

4 groups of 4

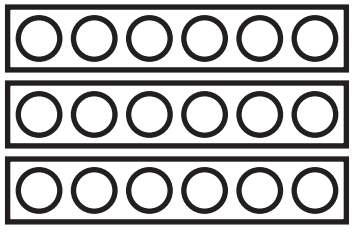
Match It Stage 1



Match It Stage 1

4 groups of 3

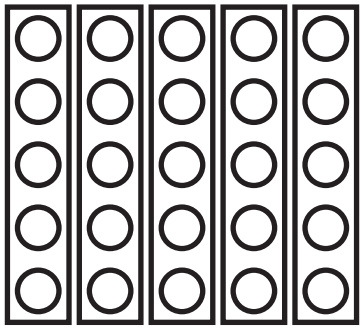
Match It Stage 1



Match It Stage 1

3 groups of 6

Match It Stage 1



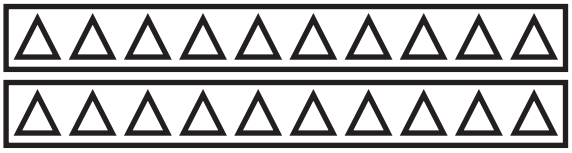
Match It Stage 1

5 groups of 5 objects

Match It Stage 1

Match It

Stage 1



Match It Stage 1

2×10

Match It Stage 1

Match It Stage 1

6×4

Match It Stage 1

Match It Stage 1

2×3

Match It Stage 1

Match It Stage 1

2×2

Match It Stage 1

Name _____ Date _____

CENTER
Recording Sheet

Match It

Stage 1

Representation	Representation

CENTER
Directions

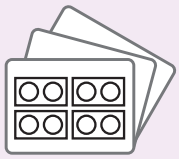
Match It

Stage 2

Let's match division representations.

Pairs

You'll need . . .



Division Representation 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 division 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. Record the representations for each match.
4. Take turns.

How to Win

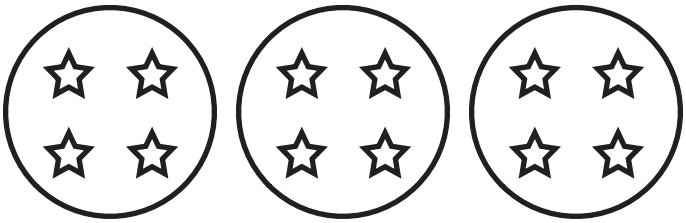
- After all the matches have been found, the player who collected more cards wins.

Match It

Stage 2

CENTER
Division Representation 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.



Match It Stage 2

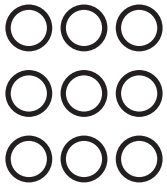
12 objects divided equally into 3 groups

Match It Stage 2

Match It Stage 2

15 objects divided equally into 3 groups

Match It Stage 2



Match It Stage 2

9 objects shared equally between 3 rows

Match It Stage 2

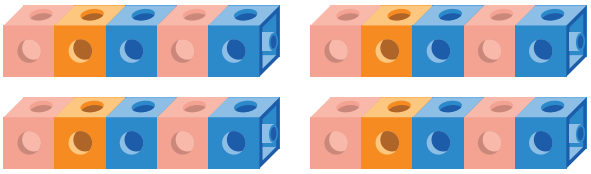
Match It Stage 2

14 objects shared equally between 2 rows

Match It Stage 2

Match It

Stage 2



Match It Stage 2

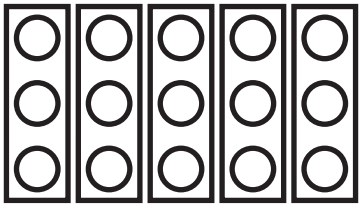
20 objects divided into 4 groups

Match It Stage 2

Match It Stage 2

10 objects divided into 1 group

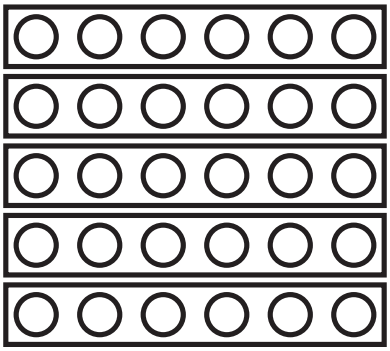
Match It Stage 2



Match It Stage 2

15 objects divided into 5 groups

Match It Stage 2



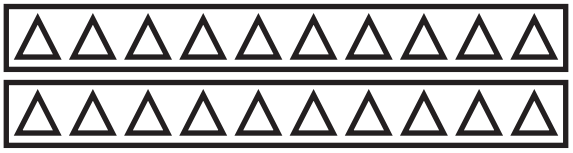
Match It Stage 2

30 objects divided into 5 groups

Match It Stage 2

Match It

Stage 2



Match It Stage 2

20 ÷ 2

Match It Stage 2

Match It Stage 2

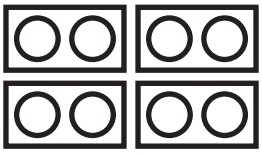
18 ÷ 6

Match It Stage 2

Match It Stage 2

10 ÷ 2

Match It Stage 2



Match It Stage 2

8 ÷ 4

Match It Stage 2

Name _____ Date _____

CENTER
Recording Sheet

Match It

Stage 2

Representation	Representation

CENTER
Directions

Match It

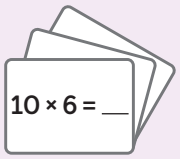
Stage 3

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 _____

CENTER
Recording Sheet

Match It

Stage 3

Solve each problem. Make sure to label your answer.

Match It

Stage 3

CENTER
Situation Cards
(p. 1 of 3)

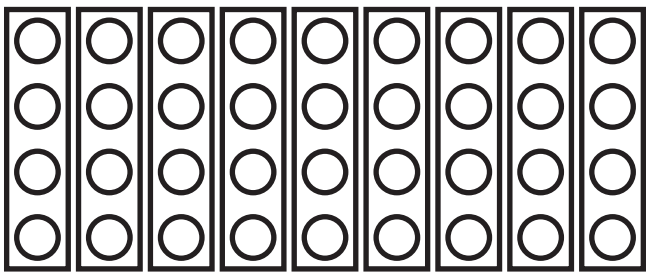
Directions: Make one copy per pair of students. Pre-cut the cards and distribute them so that each pair of students receives one set of cards.

$56 \div 8 = \_\_\_\_\_$

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

$10 \times 6 = \_\_\_\_\_$

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

$88 \div \_\_\_\_\_ = 8$

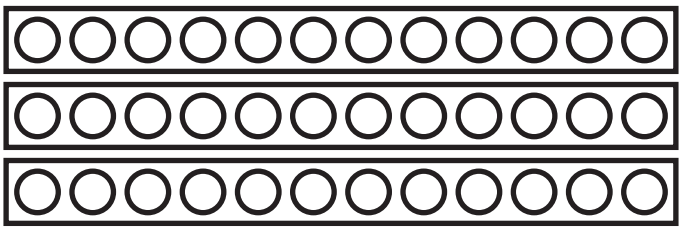
Match It Stage 3

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

12 in.

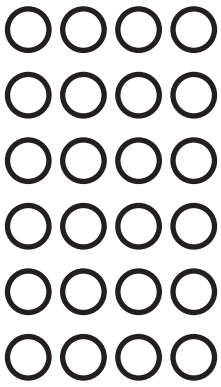
12 in.

12 in.

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

$24 \div 4 = \_\_\_\_$

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

$6 \times \_\_\_\_ = 42$

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?

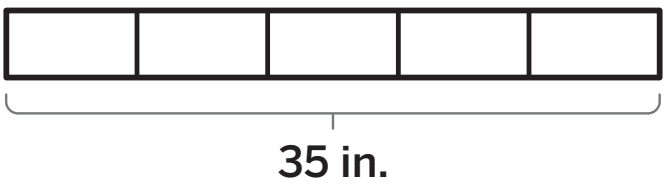
Match It Stage 3

$9 \times 8 = \_\_\_\_$

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

$18 \div \_\_\_\_ = 6$

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

CENTER
Directions

Match It

Stage 4

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:

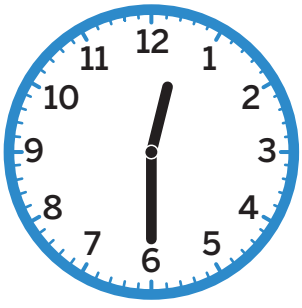
Clare finished the chapter:

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:

Priya's math class ends:

Match It Stage 4

75 minutes

Match It Stage 4

You started cleaning your room:

You finished cleaning your room:

Match It Stage 4

24 minutes

Match It Stage 4

Shawn put a pizza in the oven:

Shawn took the pizza out of the oven:

Match It Stage 4

18 minutes

Match It Stage 4

Match It

Stage 4

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

Match It Stage 4

2 hours 9 minutes

Match It Stage 4

Han left to walk his dog at 4:25.

Han returned home at 5:08.

Match It Stage 4

43 minutes

Match It Stage 4

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

Match It Stage 4

45 minutes

Match It Stage 4

Match It

Stage 4

The movie started at 1:30.

The movie ended at 3:11.

Match It Stage 4

1 hour 41 minutes

Match It Stage 4

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

Match It Stage 4

17 minutes

Match It Stage 4

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

Match It Stage 4

112 minutes

Match It Stage 4

Name _____ Date _____

CENTER
Recording Sheet

Match It

Stage 4

Situation	Amount of elapsed time

CENTER
Directions

Mystery Number

Stage 3

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 notes to help you remember 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. If you are correct, you earn 1 point.
4. Switch roles and repeat to complete Round 1.

How to Win

- Play 2 rounds. The player who earns more points wins.

Mystery Number

Stage 3

$\frac{1}{2}$	$\frac{4}{8}$	$\frac{4}{6}$	$\frac{5}{3}$
$\frac{2}{6}$	$\frac{7}{4}$	$\frac{3}{2}$	$\frac{5}{8}$
$\frac{1}{6}$	$\frac{5}{2}$	$\frac{6}{6}$	$\frac{18}{6}$
$\frac{3}{3}$	$\frac{1}{3}$	$\frac{2}{2}$	$\frac{1}{4}$
$\frac{13}{4}$	$\frac{15}{8}$	$\frac{3}{8}$	$\frac{4}{4}$

CENTER
Recording Sheet

Name _____ Date _____

Mystery Number

Stage 3

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

CENTER
Directions

Mystery Shape

Stage 5

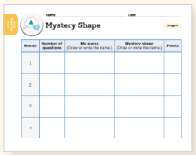
Let's find the mystery shape.

Pairs

You'll need . . .


sticky notes


Quadrilateral Cards, Grade 3


Recording Sheet

Set-up

- Organize the Quadrilateral Cards faceup in rows.

How to Play

1. **Player A:** Choose a mystery shape that is on a card 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 the number of questions you ask on your own Recording Sheet.
3. **Player B:** When you are ready, you have one guess to identify the mystery shape. Draw or write the shape you guess on your Recording Sheet. If you are correct, you earn 1 point.
4. Switch roles and repeat. Play 4 rounds.

How to Win

- The player who earns more points wins.

CENTER
Recording Sheet

Name _____ Date _____

Mystery Shape

Stage 5

Round	Number of questions	My guess (Draw or write the name.)	Mystery shape (Draw or write the name.)	Points
1				
2				
3				
4				

CENTER
Directions

Number Line Scoot

Stage 1

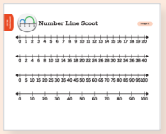
Let's use number lines to count by twos, fives, and tens.

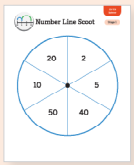
Pairs

You'll need . . .


12 base-ten units


paper clip


Gameboard


Spinner

Set-up

- Place a cube on 0 on each number line.

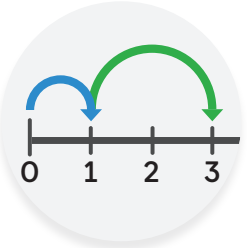
How to Play

1. When it is your turn, spin the Spinner.
2. Skip count aloud as you count up and 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.
3. Take turns spinning and moving the cube. If a cube lands *exactly* on the last tick mark of a number line, that player keeps the cube and puts a new one at 0.

How to Win

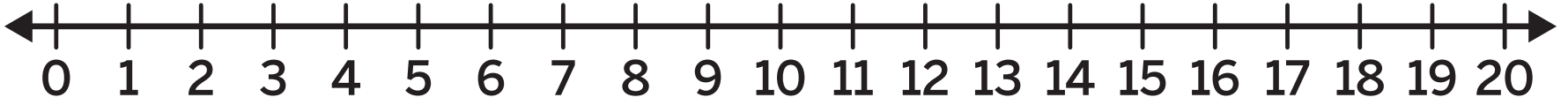
- The first player to collect 5 cubes wins.

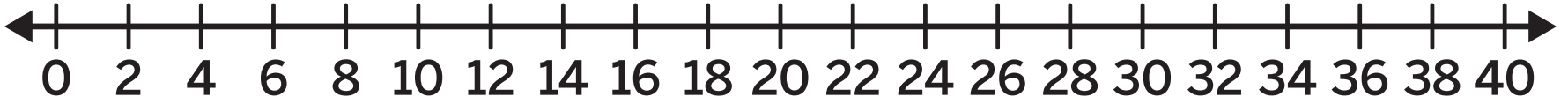
CENTER
Gameboard

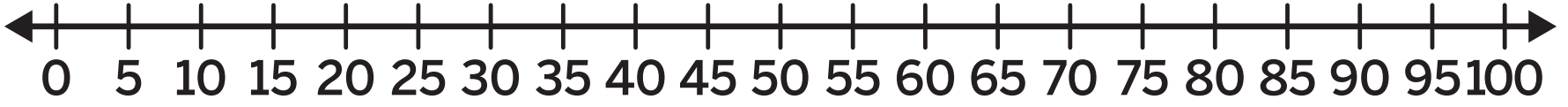


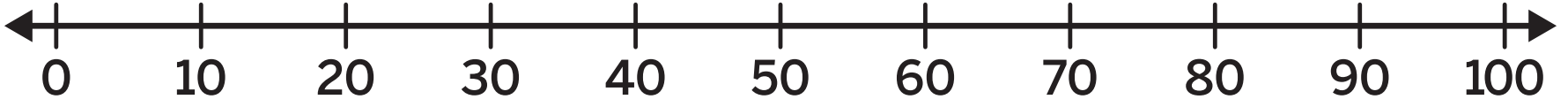
Number Line Scoot

Stage 1

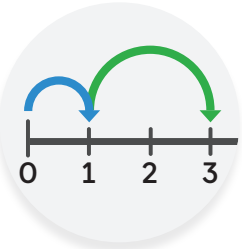






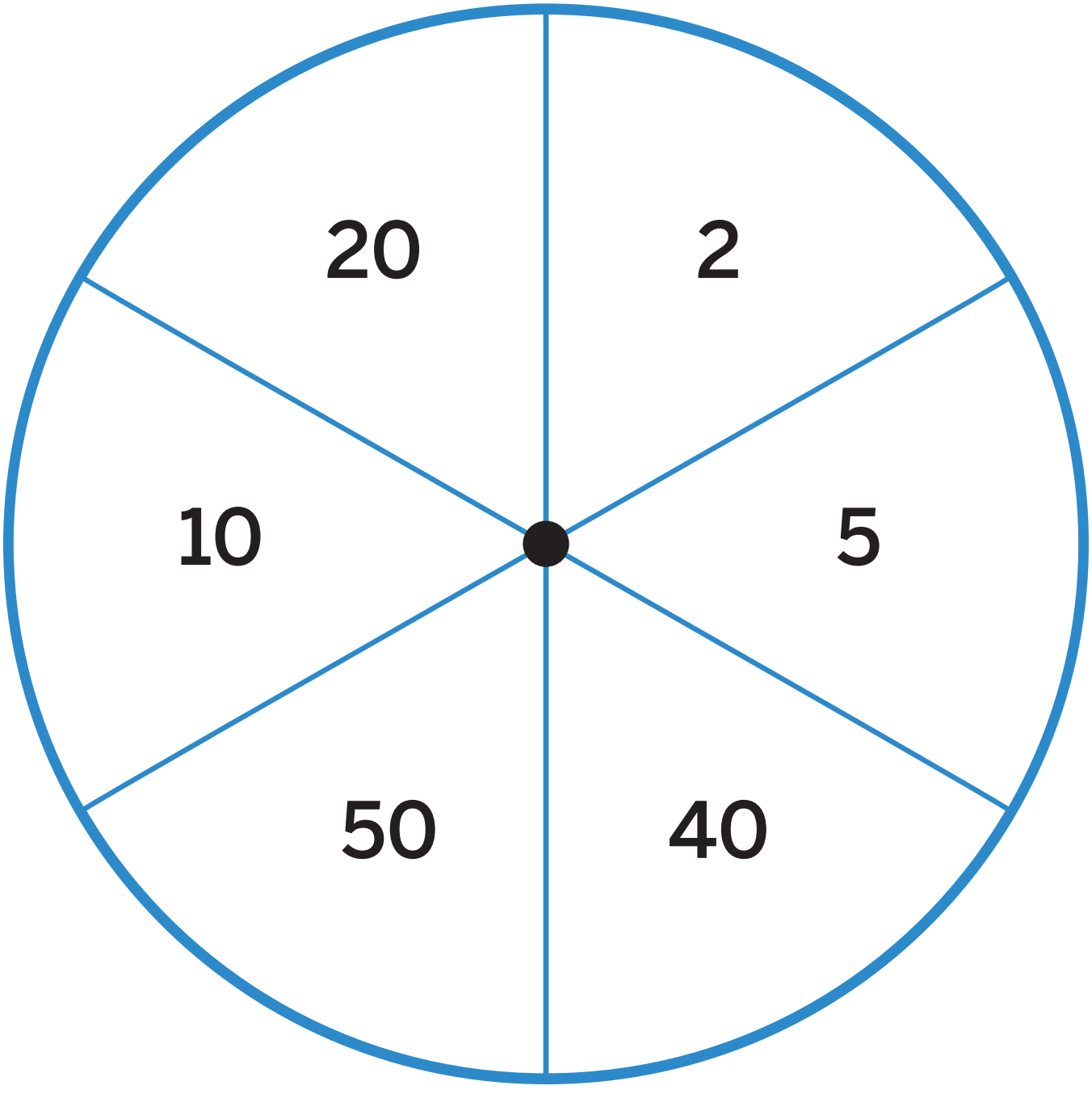


CENTER
Spinner



Number Line Scoot

Stage 1



CENTER
Directions

Number Line Scoot

Stage 2

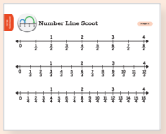
Let's use number lines to count by halves, thirds, and fourths.

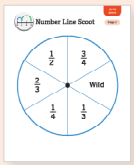
Pairs

You'll need . . .


12 base-ten units


paper clip


Gameboard



Spinner

Set-up

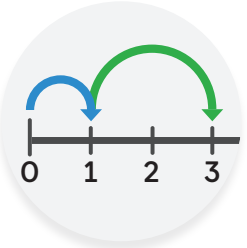
- Place a cube on 0 on each number line.

How to Play

1. When it is your turn, spin the Spinner.
2. 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.
3. 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.

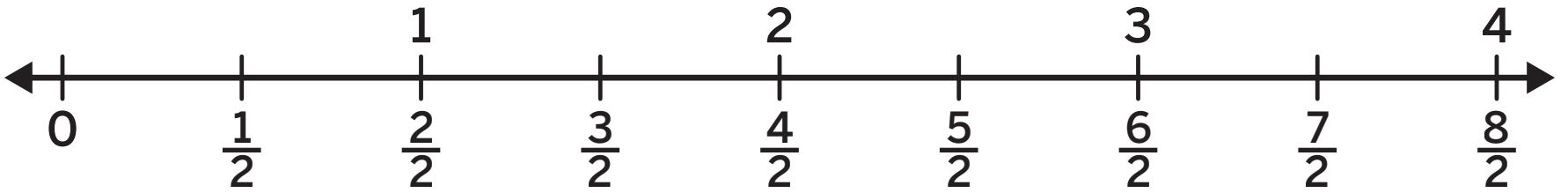
How to Win

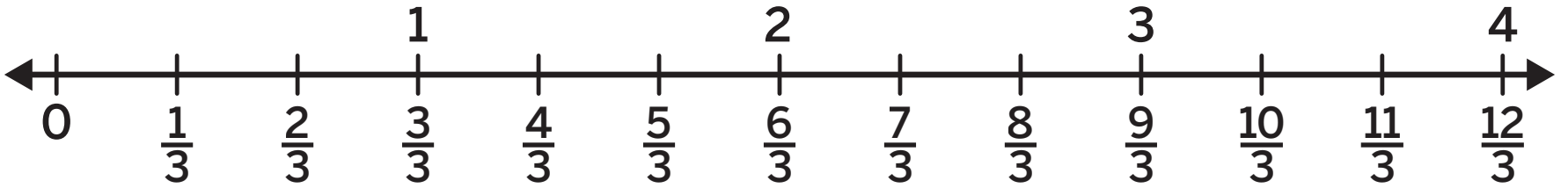
- The first player to collect 5 cubes wins.

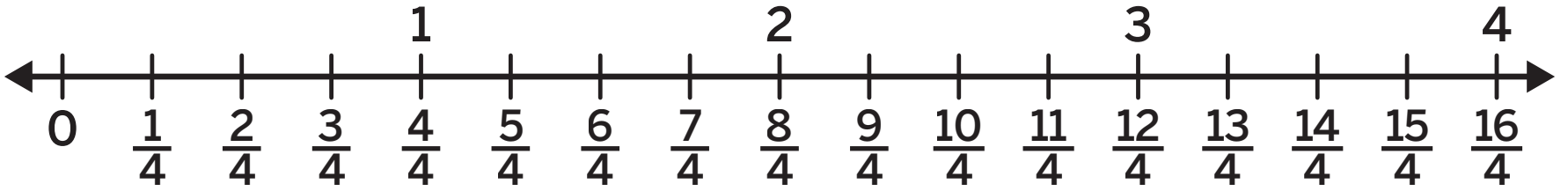


Number Line Scoot

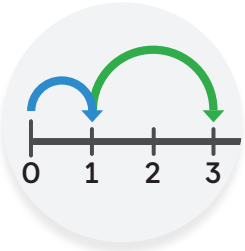
Stage 2





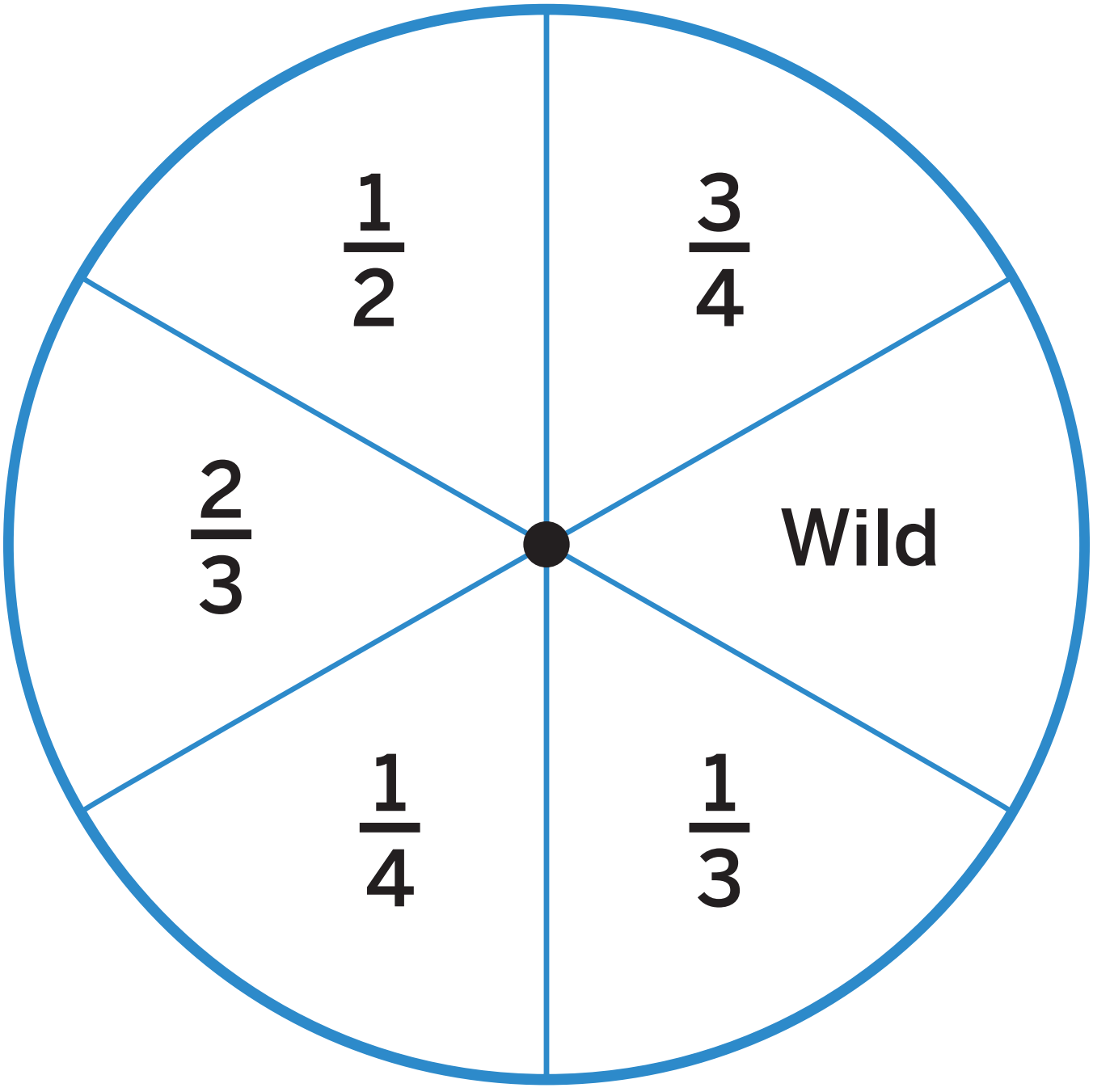


CENTER
Spinner



Number Line Scoot

Stage 2



CENTER
Directions

Number Line Scoot

Stage 3

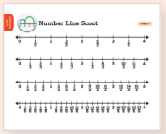
Let's use number lines to count by halves, thirds, fourths, and sixths.

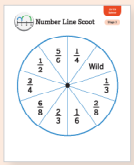
Pairs

You'll need . . .


12 base-ten units


paper clip


Gameboard


Spinner

Set-up

- Place a cube on 0 on each number line.

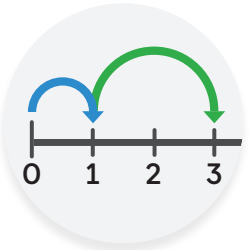
How to Play

1. When it is your turn, spin the Spinner.
2. 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.
3. 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

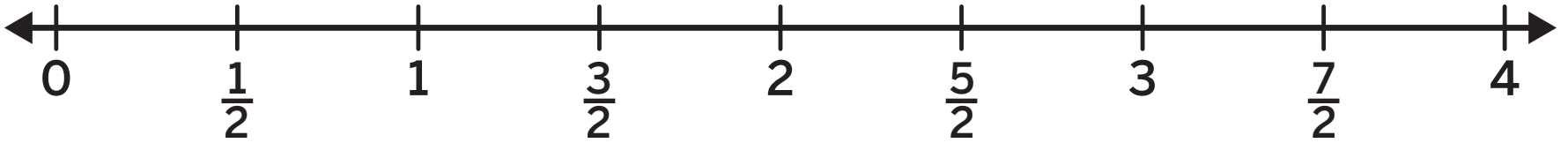
- The first player to collect 5 cubes wins.

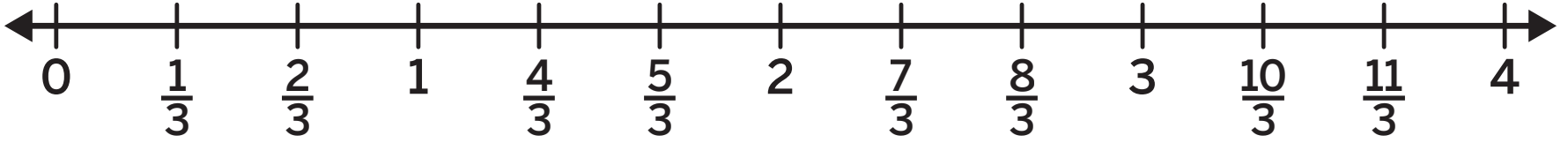
CENTER
Gameboard

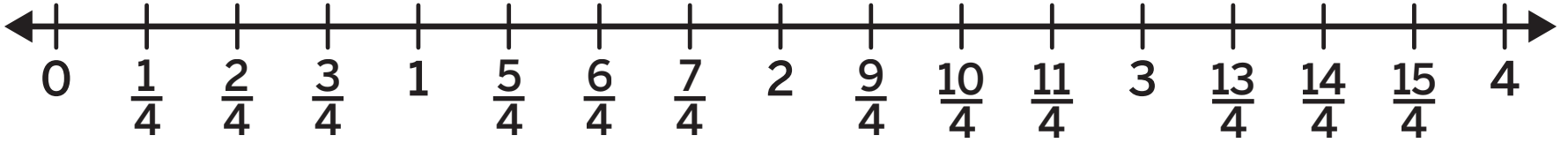


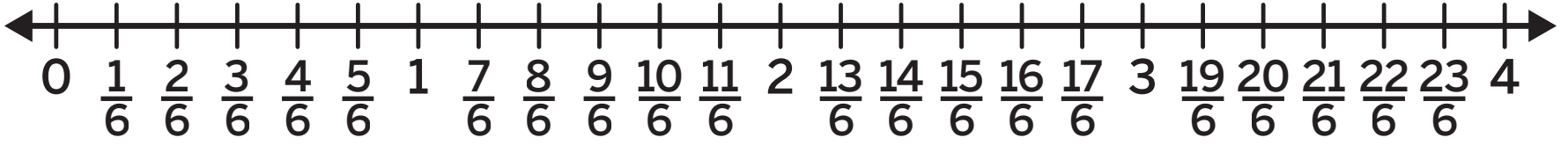
Number Line Scoot

Stage 3

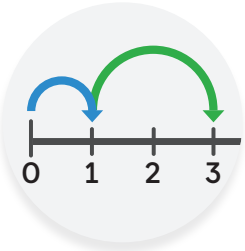






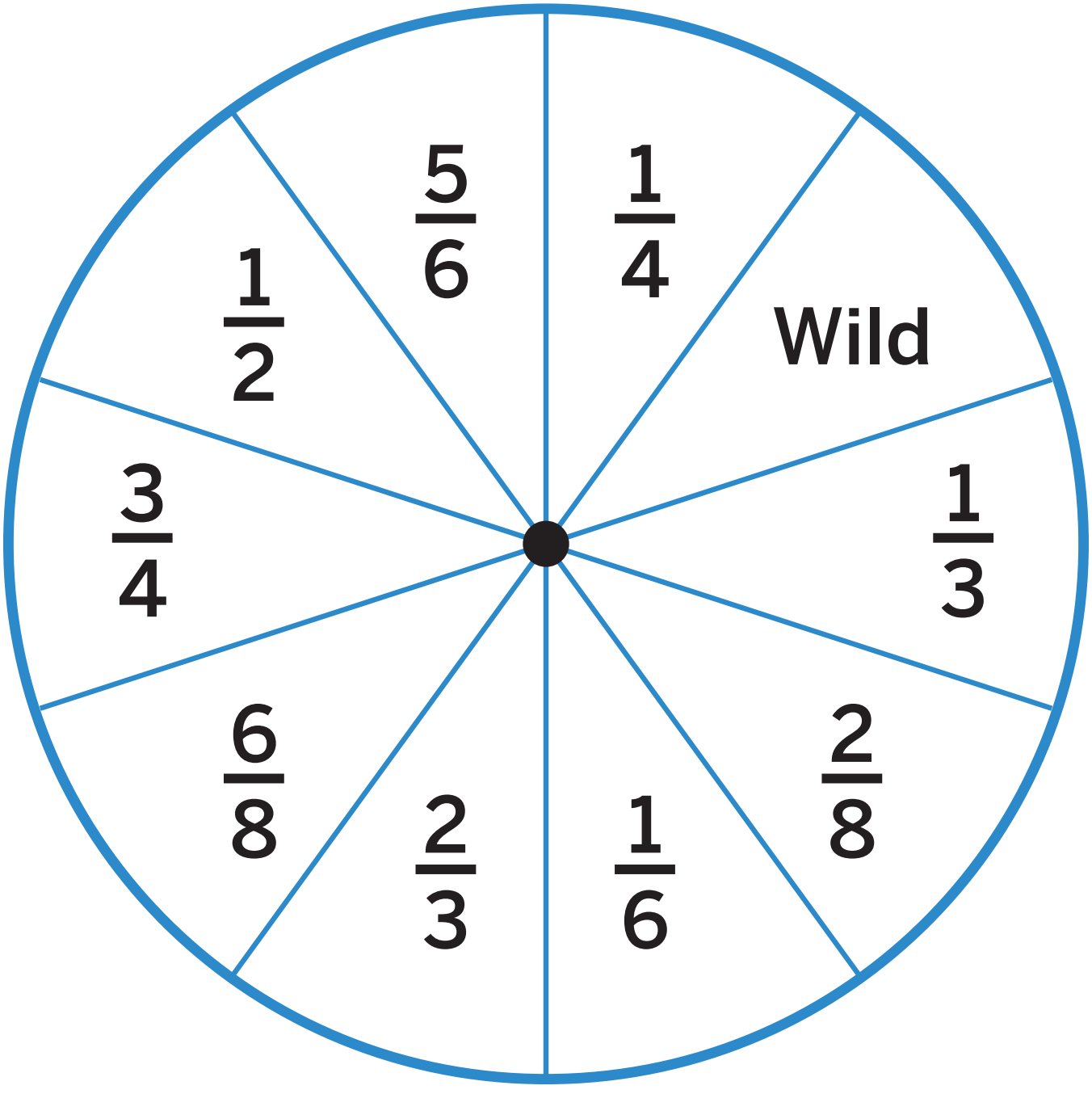


CENTER
Spinner



Number Line Scoot

Stage 3



CENTER
Directions

Rectangle Rumble

Stage 1

Let's represent the product of two numbers on a rectangular grid.

Pairs

You'll need . . .


coloring tools


1 number cube


1 paper clip


Gameboard


Spinner

Set-up

- Choose a color for your rectangles that is different from your partner.

How to Play

1. Spin the Spinner and roll the number cube.
2. Shade a rectangular area to represent the product of the two numbers. Rectangles cannot overlap, but they can share sides.
3. Label your rectangle with a number to represent the area.
4. Take turns until the grid cannot fit any more rectangles. If the rectangular area does not fit on the board, spin the Spinner and roll the number cube again.

How to Win

- Each player adds up their total area. The player with the greater total square units wins.

CENTER
Gameboard

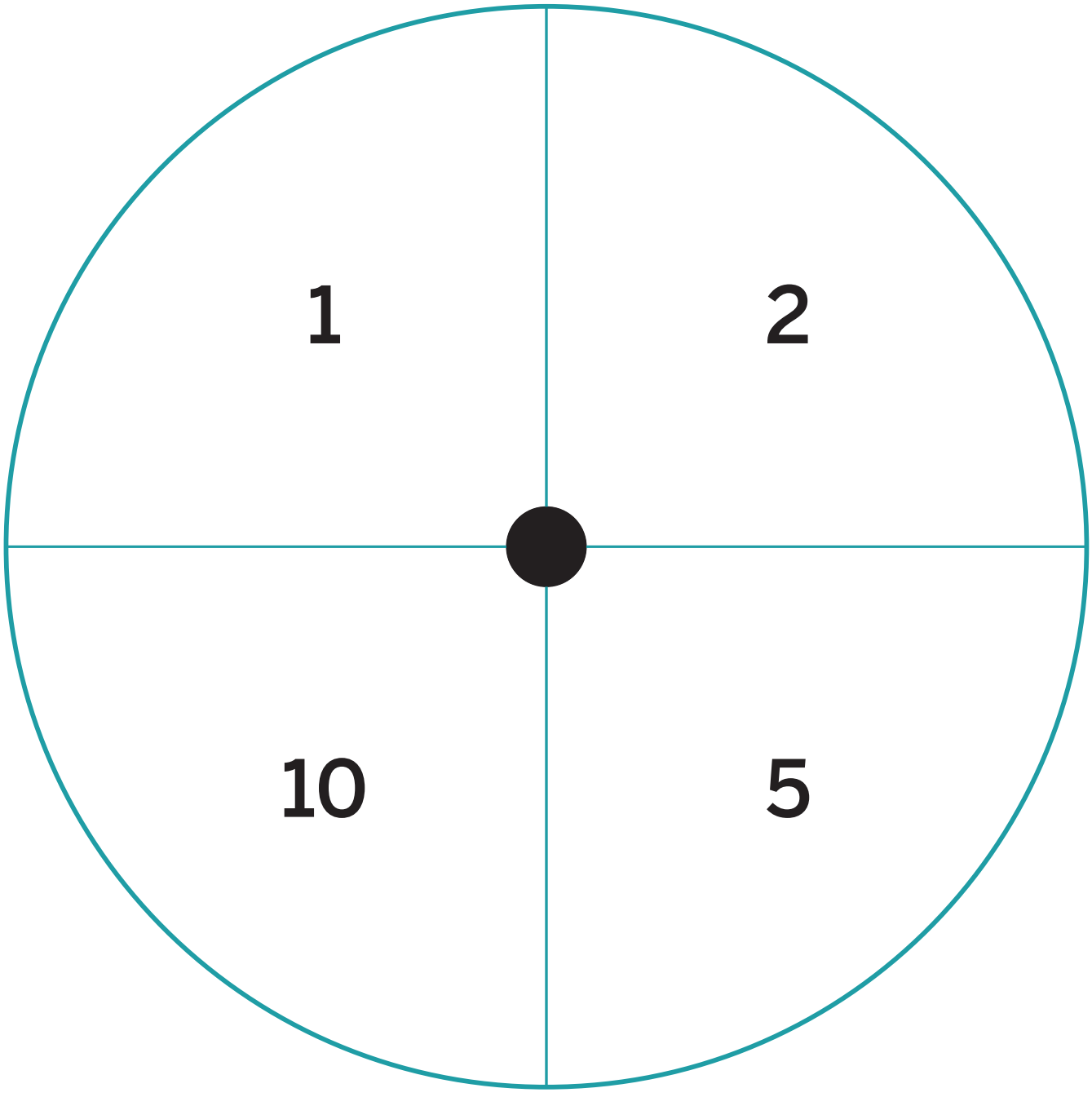
Rectangle Rumble

Stage 1

CENTER
Spinner

Rectangle Rumble

Stage 1



CENTER
Directions

Rectangle Rumble

Stage 2

Let's represent the product of two numbers on a rectangular grid.

Pairs

You'll need . . .


coloring tools


1 number cube


1 paper clip


Gameboard


Spinner

Set-up

- Choose a color for your rectangles that is different from your partner.

How to Play

1. Spin the Spinner and roll the number cube. If you land on *Wild*, choose a number between 1 and 5.
2. Shade a rectangular area to represent the product of the two numbers. Rectangles cannot overlap, but they can share sides.
3. Label your rectangle with a number to represent the area.
4. Take turns until the grid cannot fit any more rectangles. If the rectangular area does not fit on the board, spin the Spinner and roll the number cube again.

How to Win

- Each player adds up their total area. The player with the greater total square units wins.

CENTER
Gameboard

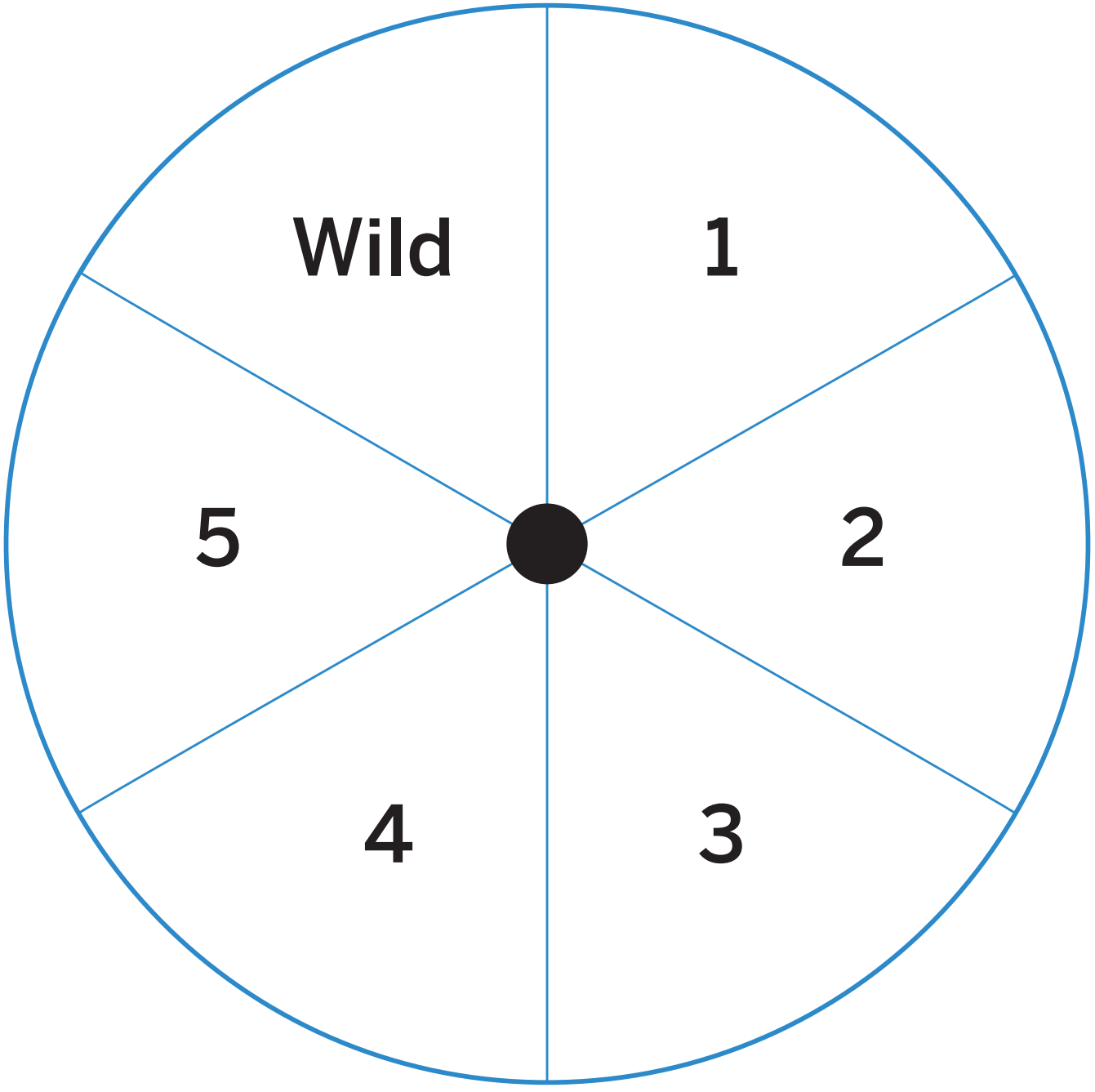
Rectangle Rumble

Stage 2

CENTER
Spinner

Rectangle Rumble

Stage 2



CENTER
Directions

Rectangle Rumble

Stage 3

Let's represent the product of two numbers on a rectangular grid.

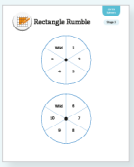
Pairs

You'll need . . .


coloring tools


2 paper clips


Gameboard


Spinners

Set-up

- Choose a color for your rectangles that is different from your partner.

How to Play

1. Spin each Spinner. If you land on *Wild*, choose a number between 1 and 5.
2. Shade a rectangular area to represent the product of the two numbers. Rectangles cannot overlap, but they can share sides.
3. Label your rectangle with a number to represent the area.
4. Take turns until the grid cannot fit any more rectangles. If the rectangular area does not fit on the board, spin each Spinner again.

How to Win

- Each player adds up their total area. The player with the greater total square units wins.

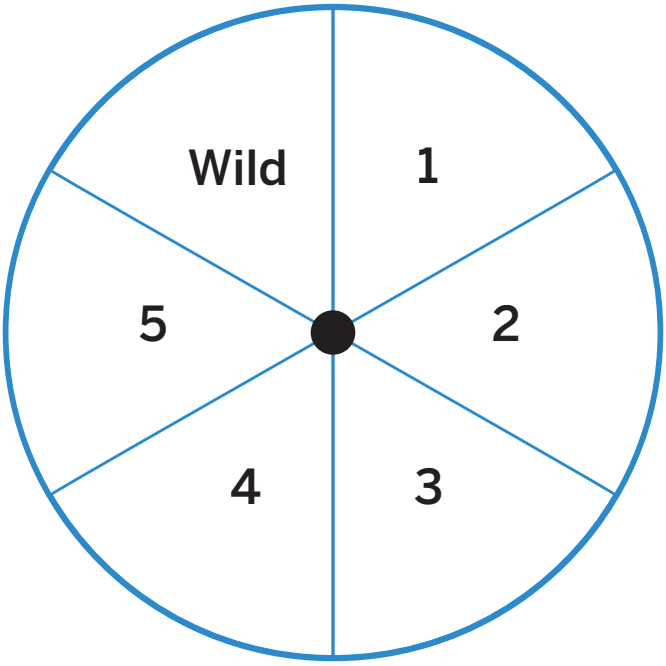
CENTER
Gameboard

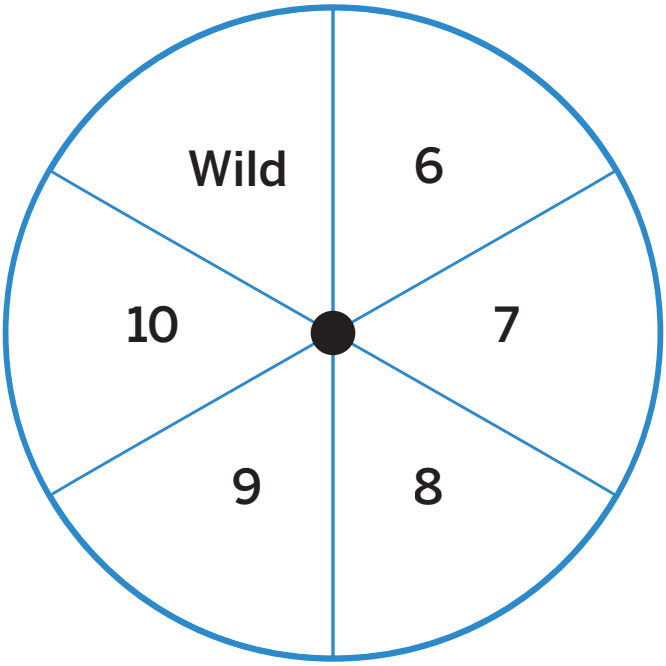
Rectangle Rumble

Stage 3

Rectangle Rumble

Stage 3





CENTER
Directions

Rectangle Rumble

Stage 4

Let's determine the perimeter of rectangles.

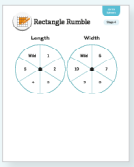
Pairs

You'll need . . .


coloring tools


2 paper clips


Gameboard


Spinners

Set-up

- Choose a color for your rectangles that is different from your partner.

How to Play

1. Spin each Spinner. If you land on *Wild*, choose a number between 1 and 5.
2. Draw a rectangle that has side lengths equal to the numbers on the Spinners. Rectangles cannot overlap, but they can share sides.
3. Record the perimeter of the rectangle inside the rectangle that you drew.
4. Take turns until the grid cannot fit any more rectangles. If the rectangular area does not fit on the board, spin each Spinner again.

How to Win

- Each player adds up the total of their rectangles' perimeters. The player with the greater total wins.

CENTER
Gameboard

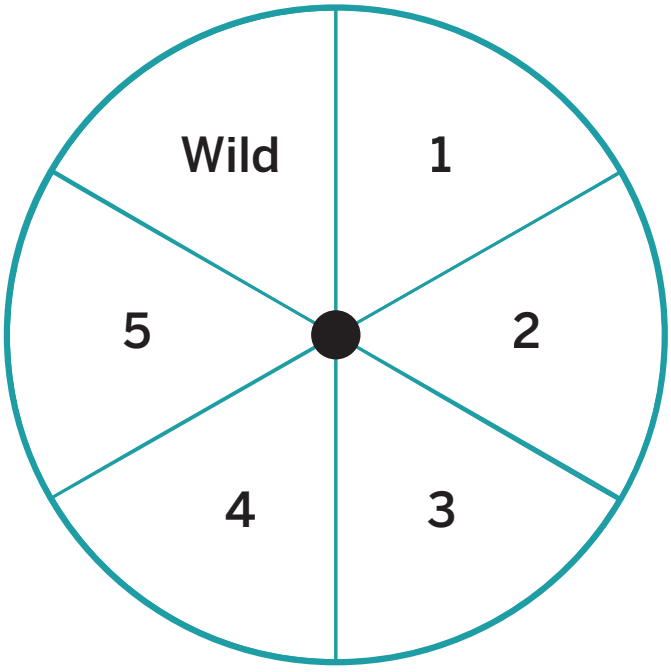
Rectangle Rumble

Stage 4

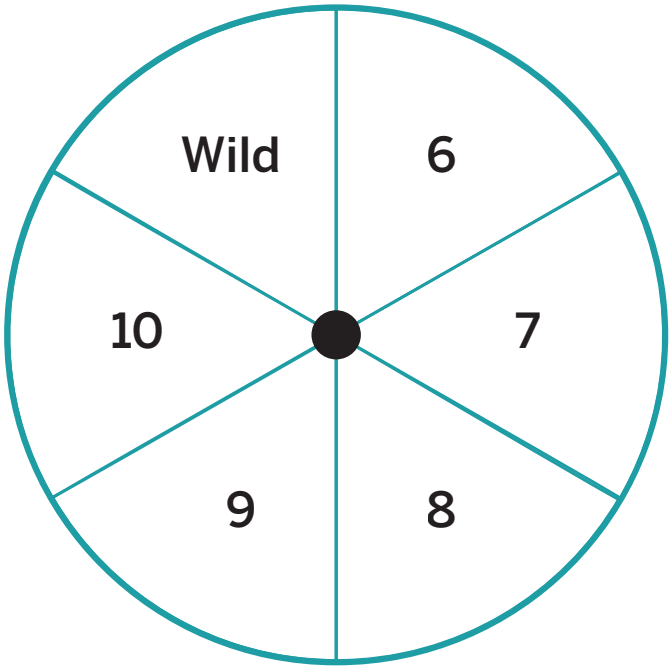
Rectangle Rumble

Stage 4

Length



Width



CENTER
Directions

Target Measurements

Stage 2

Let's draw line segments to a half of an inch.

Pairs

You'll need . . .

ruler (inches)

straightedge

Recording Sheet

How to Play

1. **Player A:** Choose a target length in half inches, up to 8 inches, and record it.
2. **Player A:** Begin to slowly draw a line with a straightedge on the Recording Sheet.
3. **Player B:** Say, "Stop!" when you think the length of the line is equal to the target measurement.
4. **Player B:** Measure the line segment to the nearest half inch. Record the measurement.
5. Determine the difference between the length of the line and the target measurement in half inches. 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 2

1			
	Target:	Actual:	Points:
2			
	Target:	Actual:	Points:
3			
	Target:	Actual:	Points:
4			
	Target:	Actual:	Points:
			Total Points: _____

CENTER
Directions

Target Measurements

Stage 3

Let's draw line segments to a quarter of an inch.

Pairs

You'll need . . .

ruler (inches)

straightedge

Recording Sheet

How to Play

1. **Player A:** Choose a target length in quarter inches, up to 8 inches, and record it.
2. **Player A:** Begin to slowly draw a line with a straightedge on the Recording Sheet.
3. **Player B:** Say, "Stop!" when you think the length of the line is equal to the target measurement.
4. **Player B:** Measure the line segment to the nearest quarter inch. Record the measurement.
5. Determine the difference between the length of the line and the target measurement in quarter inches. 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 3

1			
	Target:	Actual:	Points:
2			
	Target:	Actual:	Points:
3			
	Target:	Actual:	Points:
4			
	Target:	Actual:	Points:
			Total Points: _____

Target Numbers

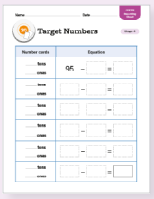
Stage 4

Let's subtract tens or ones from two-digit numbers.

Pairs

You'll need . . .

Number Cards, 1–9



Recording Sheet

Set-up

- Place the number cards facedown in a pile.

How to Play

1. Draw the top number card. Choose whether to subtract that number of *tens* or *ones* from the starting number.
2. Record your chosen number to create a subtraction equation. Complete the equation by finding the difference.
3. Record the difference from the previous equation as the starting number in your next equation.
4. Take turns until each player's Recording Sheet is full.

How to Win

- The player with a final difference closer to 0 wins.

Name _____ Date _____

CENTER
Recording Sheet

Target Numbers

Stage 4

Number cards	Equation
_____ tens _____ ones	95 − ☐ = ☐
_____ tens _____ ones	☐ − ☐ = ☐
_____ tens _____ ones	☐ − ☐ = ☐
_____ tens _____ ones	☐ − ☐ = ☐
_____ tens _____ ones	☐ − ☐ = ☐
_____ tens _____ ones	☐ − ☐ = ☐

CENTER
Directions

Target Numbers

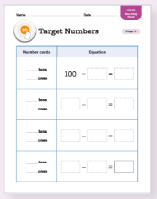
Stage 5

Let's subtract two-digit numbers from two-digit numbers.

Pairs

You'll need . . .

Number Cards, 1–9



Recording Sheet

Set-up

- Place the number cards facedown in a pile.

How to Play

1. Draw the top 3 number cards. Choose 1 card to represent the tens and 1 card to represent the ones to make a two-digit number to subtract from the starting number.
2. Record your chosen number to create a subtraction expression. Complete the equation by finding the difference.
3. Record the difference from the previous equation as the starting number in your next equation.
4. Take turns until each player's Recording Sheet is full.

How to Win

- The player with a final difference closer to 0 wins.

Name _____ Date _____

CENTER
Recording Sheet

Target Numbers

Stage 5

Number cards	Equation
_____ tens _____ ones	100 − ☐ = ☐
_____ tens _____ ones	☐ − ☐ = ☐
_____ tens _____ ones	☐ − ☐ = ☐
_____ tens _____ ones	☐ − ☐ = ☐

Target Numbers

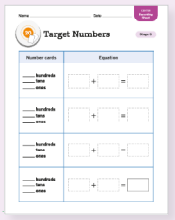
Stage 6

Let's add hundreds, tens, and ones to three-digit numbers.

Pairs

You'll need . . .

Number Cards, 1–9



Recording Sheet

Set-up

- Place the number cards facedown in a pile.
- Draw 3 number cards. Use the number cards to make a starting number for both players. Record the starting number in the first box on the Recording Sheet.

How to Play

1. Draw the top 5 number cards. Choose 1 card to represent the hundreds, 1 card to represent the tens, and 1 card to represent the ones to make a three-digit number to add to the starting number.
2. Record your number to create an addition expression. Complete the equation by finding the sum.
3. Record the sum from the previous equation as the starting number in your next equation.
4. Take turns until each player's Recording Sheet is full.

How to Win

- The player with a final sum closer to 1,000 wins.

Name _____ Date _____

CENTER
Recording Sheet

Target Numbers

Stage 6

Number cards	Equation
_____ hundreds _____ tens _____ ones	☐ + ☐ = ☐
_____ hundreds _____ tens _____ ones	☐ + ☐ = ☐
_____ hundreds _____ tens _____ ones	☐ + ☐ = ☐
_____ hundreds _____ tens _____ ones	☐ + ☐ = ☐

Target Numbers

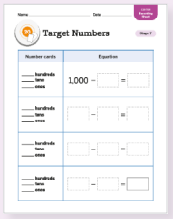
Stage 7

Let's subtract hundreds, tens, and ones from three-digit numbers.

Pairs

You'll need . . .

Number Cards, 1–9



Recording Sheet

Set-up

- Place the number cards facedown in a pile.

How to Play

1. Draw the top 5 number cards. Choose 1 card to represent the hundreds, 1 card to represent the tens, and 1 card to represent the ones to make a three-digit number to subtract from the starting number.
2. Record your number to create a subtraction expression. Complete the equation by determining the difference.
3. Record the difference from the previous equation as the starting number in your next equation.
4. Take turns until each player's Recording Sheet is full.

How to Win

- The player with a final difference closer to 0 wins.

Name _____ Date _____

CENTER
Recording Sheet

Target Numbers

Stage 7

Number cards	Equation
_____ hundreds _____ tens _____ ones	1,000 − ☐ = ☐
_____ hundreds _____ tens _____ ones	☐ − ☐ = ☐
_____ hundreds _____ tens _____ ones	☐ − ☐ = ☐
_____ hundreds _____ tens _____ ones	☐ − ☐ = ☐

Work Mats, Cards, and Grids

Digit Cards

Directions: Make enough copies so that each pair receives one strip. Pre-cut each row and distribute one strip to each pair.

0	1	2	3	4	5	6	7	8	9
0	1	2	3	4	5	6	7	8	9
0	1	2	3	4	5	6	7	8	9
0	1	2	3	4	5	6	7	8	9
0	1	2	3	4	5	6	7	8	9
0	1	2	3	4	5	6	7	8	9
0	1	2	3	4	5	6	7	8	9

Number Cards, 0–10

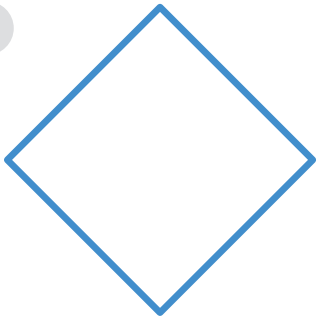
Directions: Make as many copies as are needed; four copies of this page creates one set of cards. Cut out the cards to create a set of cards that will be used throughout the year.

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	

Quadrilateral Cards, Grade 3

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



Quadrilateral Cards, Grade 3

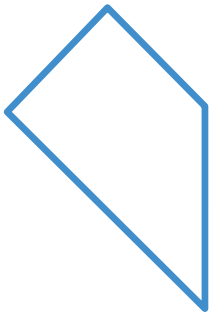
B

Quadrilateral Cards, Grade 3

C

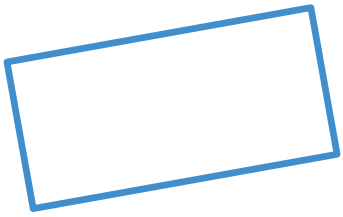
Quadrilateral Cards, Grade 3

D



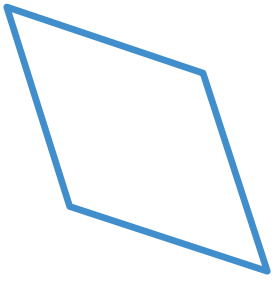
Quadrilateral Cards, Grade 3

E



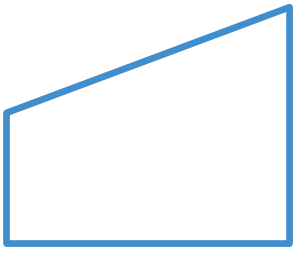
Quadrilateral Cards, Grade 3

F



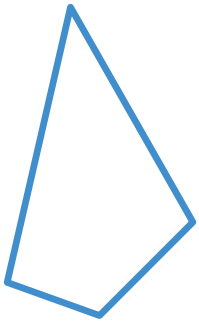
Quadrilateral Cards, Grade 3

G



Quadrilateral Cards, Grade 3

H



Quadrilateral Cards, Grade 3

I

Quadrilateral Cards, Grade 3

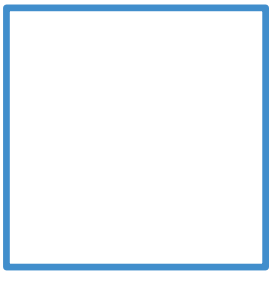
J

Quadrilateral Cards, Grade 3

K

Quadrilateral Cards, Grade 3

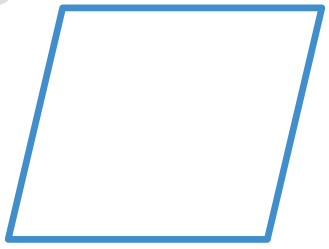
L



Quadrilateral Cards, Grade 3

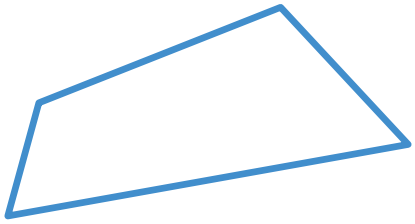
Quadrilateral Cards, Grade 3

M



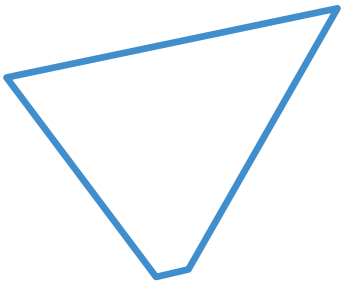
Quadrilateral Cards, Grade 3

N



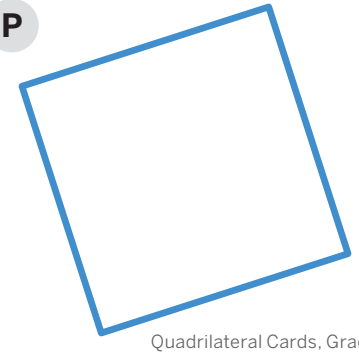
Quadrilateral Cards, Grade 3

O



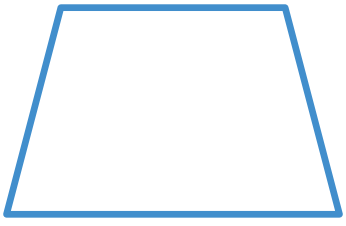
Quadrilateral Cards, Grade 3

P



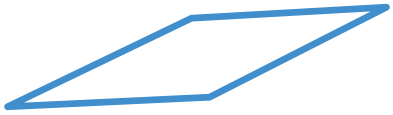
Quadrilateral Cards, Grade 3

Q



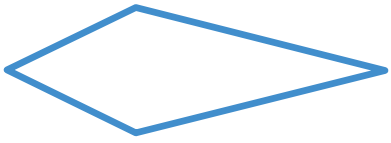
Quadrilateral Cards, Grade 3

R



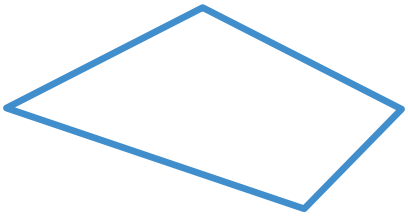
Quadrilateral Cards, Grade 3

S



Quadrilateral Cards, Grade 3

T



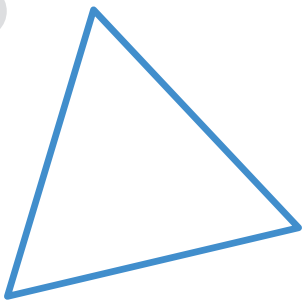
Quadrilateral Cards, Grade 3

Triangle Cards, Grade 3

CENTER
Cards

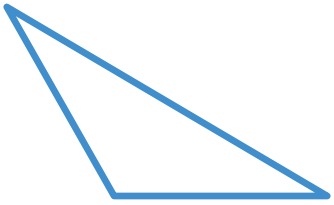
Directions: Make one copy per pair. Pre-cut the cards and distribute them so that each pair of students receives one set of cards.

A



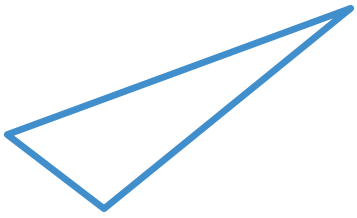
Triangle Cards, Grade 3

B



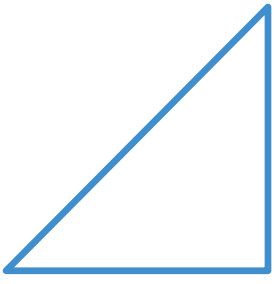
Triangle Cards, Grade 3

C



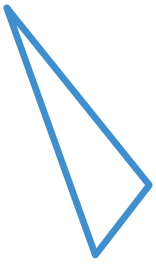
Triangle Cards, Grade 3

D



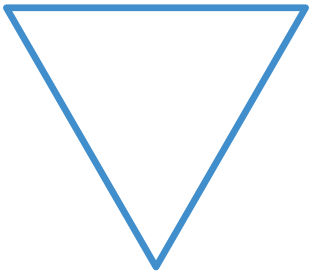
Triangle Cards, Grade 3

E



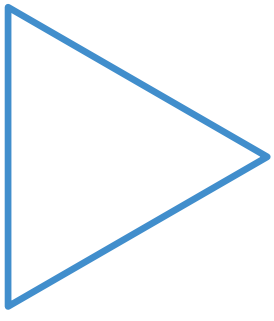
Triangle Cards, Grade 3

F



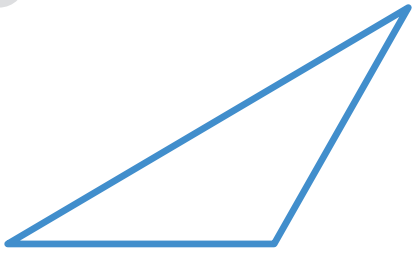
Triangle Cards, Grade 3

G



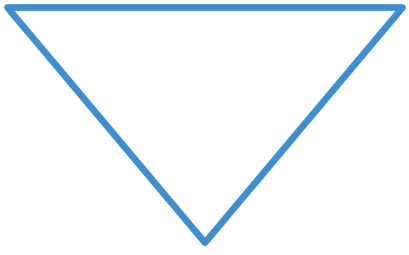
Triangle Cards, Grade 3

H



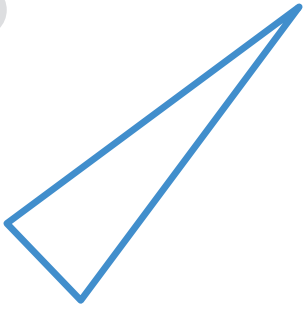
Triangle Cards, Grade 3

I



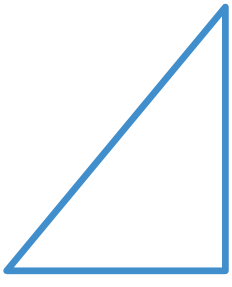
Triangle Cards, Grade 3

J



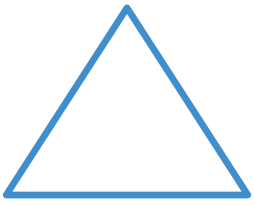
Triangle Cards, Grade 3

K



Triangle Cards, Grade 3

L



Triangle Cards, Grade 3