

FAMILY RESOURCES

Supporting Mathematical Thinking at Home

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learning mathematics
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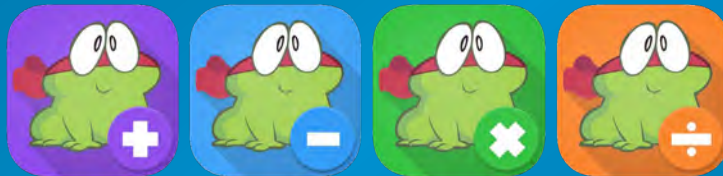


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Subitizing with Dominoes

Focus:

Identify the quantity on the domino without having to count

Directions:

Choose a domino and hold it so the student can see the quantity for about 3 seconds.
Turn the domino face down and ask, "How many dots did you see?"

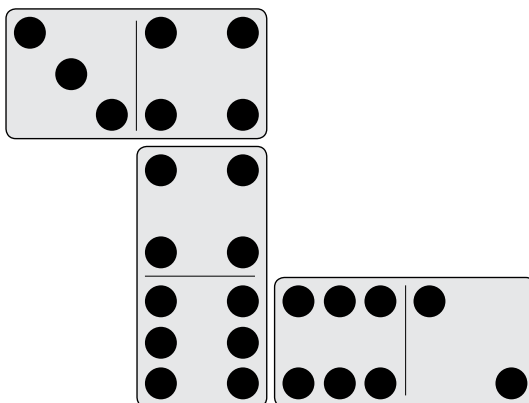
Match my Number

Focus:

Matching pictorial representations on dominoes to pairs of symbols

Directions:

- Distribute 10 dominoes to each person
- Lay a domino on the table face up
- In turns, student matches the domino with the same quantity (see example below)
- Take turns matching quantities until all dominoes are gone or no more matches can be made
- Shuffle the dominoes and play again



Follow the Suits

Focus:

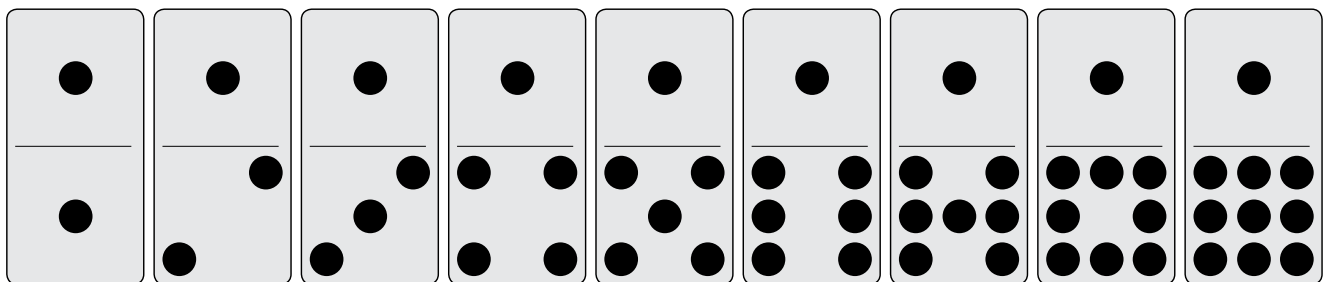
Sorting and sequencing using pictorial representations

Note:

Dominoes with the same number of dots on one end are in the same 'suit.' This activity will provide opportunities for students to match, sort, compare, and order tiles while investigating the structure of a set of dominoes

Activity:

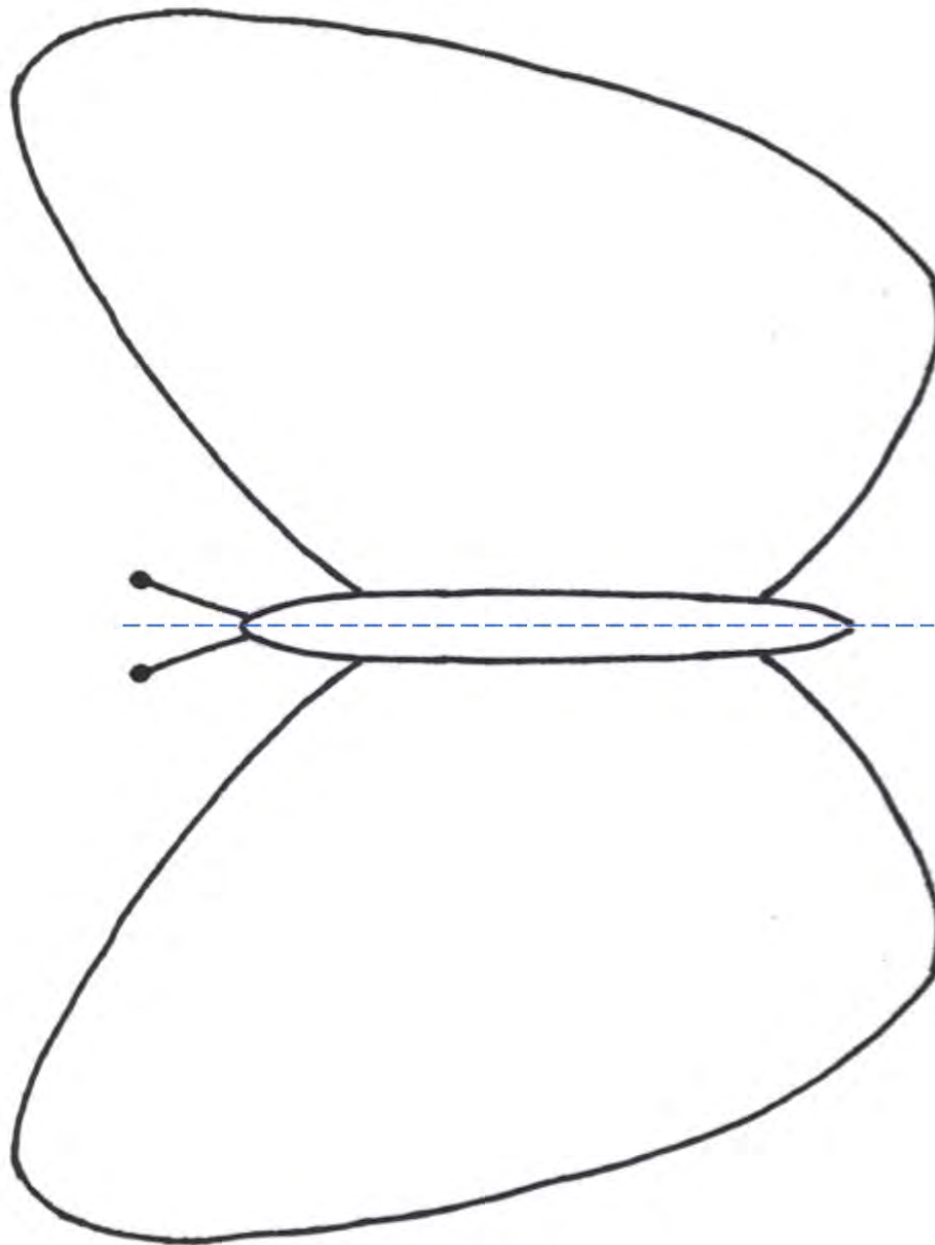
- Ask a group of students to find all of the dominoes with one dot on one end (1-dot suit). Have them place the dominoes in a row to check they have found all the tiles that form the suit, as shown below.



- Ask the students to repeat the previous step for the dominoes with two dots on one end. Ask, "What do you notice? How many dominoes are in each group? Are any dominoes in both groups, why?" What will happen when we find all of the dominoes with three dots on one end? Encourage students to make predictions and then use the dominoes to check.
- Repeat for other suits, including the zero-suit

Doubling Numbers Less than Ten

Fold in half. Paint blots on one half and fold in half again.



Double _____ is _____ so _____ + _____ = _____

Using the Double Add 1 Strategy

11	19	13	15
13	9	17	19
17	11	15	9

Focus:

Using doubles facts to solve a doubles plus 1 equation

Materials:

- Doubles add one game board
- One cube showing the numerals 4, 5, 6, 7, 8, 9
- Four counters per player, each player has a different color counter

Directions:

The player who places all four counters on the board first, wins.

How to Play:

First player rolls the number cube and doubles the number rolled, then adds one to it.

Player claims the sum by covering it with a counter. If that sum is already covered, the player misses a turn.

Other players have a turn.

Example:

Carla rolls a 7 and says, "I know that double 7 is 14, so 7 add 8 must be one more. That's 15."

Making a "Ten" to Add Basic Facts

Use counters or bottle tops on the ten-frame to help you complete the sentences below.

- a. $9 + 6$ is the same as $\underline{\quad} + \underline{\quad} = \underline{\quad}$
- b. $8 + 5$ is the same as $\underline{\quad} + \underline{\quad} = \underline{\quad}$
- c. $9 + 3$ is the same as $\underline{\quad} + \underline{\quad} = \underline{\quad}$
- d. $8 + 7$ is the same as $\underline{\quad} + \underline{\quad} = \underline{\quad}$

Bridge-to-Ten Game Board

$10 + 6 = \underline{\quad}$ $\underline{\quad} + \underline{\quad} = \underline{\quad}$	$10 + 6 = \underline{\quad}$ $\underline{\quad} + \underline{\quad} = \underline{\quad}$
$10 + 5 = \underline{\quad}$ $\underline{\quad} + \underline{\quad} = \underline{\quad}$	$10 + 5 = \underline{\quad}$ $\underline{\quad} + \underline{\quad} = \underline{\quad}$
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$10 + 4 = \underline{\quad}$ $\underline{\quad} + \underline{\quad} = \underline{\quad}$	$10 + 4 = \underline{\quad}$ $\underline{\quad} + \underline{\quad} = \underline{\quad}$
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$10 + 3 = \underline{\quad}$ $\underline{\quad} + \underline{\quad} = \underline{\quad}$	$10 + 3 = \underline{\quad}$ $\underline{\quad} + \underline{\quad} = \underline{\quad}$
$10 + 3 = \underline{\quad}$ $\underline{\quad} + \underline{\quad} = \underline{\quad}$	$10 + 3 = \underline{\quad}$ $\underline{\quad} + \underline{\quad} = \underline{\quad}$
$10 + 2 = \underline{\quad}$ $\underline{\quad} + \underline{\quad} = \underline{\quad}$	$10 + 2 = \underline{\quad}$ $\underline{\quad} + \underline{\quad} = \underline{\quad}$
$10 + 1 = \underline{\quad}$ $\underline{\quad} + \underline{\quad} = \underline{\quad}$	$10 + 1 = \underline{\quad}$ $\underline{\quad} + \underline{\quad} = \underline{\quad}$

Materials:

Two blank cubes, marked as follows: (Be sure to underline the 9s and 6s!)

Cube A: 8, 8, 8, 9, 9, 9

Cube B: 3, 4, 5, 5, 6, 7

Directions:

Roll your number cubes and write the fact below the example in the grid that will help you figure out the answer.

Write the answer to both facts.

For example, if you roll 9 and 5, you can write $9 + 5$ under $10 + 4$ because $9 + 5$ is the same as $10 + 4$.

Take or Tally Game Board

$10 - \underline{\quad} = \underline{\quad}$

$10 - \underline{\quad} = \underline{\quad}$

$9 - \underline{\quad} = \underline{\quad}$

$9 - \underline{\quad} = \underline{\quad}$

$8 - \underline{\quad} = \underline{\quad}$

$8 - \underline{\quad} = \underline{\quad}$

$7 - \underline{\quad} = \underline{\quad}$

$7 - \underline{\quad} = \underline{\quad}$

$6 - \underline{\quad} = \underline{\quad}$

$6 - \underline{\quad} = \underline{\quad}$

$5 - \underline{\quad} = \underline{\quad}$

$5 - \underline{\quad} = \underline{\quad}$

Materials:

- Take or Tally game board for each player
- 2 blank cubes, marked as follows:
(Be sure to underline the 9s and 6s!)
 - o Write 1, 2, 3, 1, 2, 3 on one cube
 - o Write 4–9 on the other.





Directions:

The aim is to complete twelve true number sentences.

- The first player rolls the two number cubes.
- The player then writes the two numbers in one of the number sentences on his or her game board. The completed number sentence must be true.
- Example: Sue rolls 4 and 3. She completes the number sentence $7 - 4 = 3$.
- If a true number sentence cannot be made, the player makes a tally in the space provided at the bottom of his or her game board.
- The first player to complete twelve number sentences before making a total of ten tallies is the winner.

Tally

Cat and Mice Game Board

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

Cat and Mice Game Rules

Focus:

Calculating difference for the basic subtraction facts

Materials:

- Two number cubes showing numerals 5-10
- One counter to represent the cat
- Three counters in a different color to represent the mice
- 45 linking cubes. Connect cubes to make trains to represent each of the numbers 5-10.

Directions:

- The player for the cat wins if they “capture” all three mice before they reach the spaces marked “home”. To capture a mouse, the player must correctly move their counter onto a space that a mouse counter occupies. The player for the mice wins if they can avoid be “captured” and all three of their counters reach “home”.
- Decide who will play for the mice and be Player 1. Player 2 will play for the cat.
- Player 1 places a counter onto each space showing a mouse on the game board. Player 2 places a counter onto the space showing the cat.

How to Play:

Roll the cubes.

Calculate the difference between the numbers rolled and say the answer aloud.

The other player must confirm the difference.

A move is one space up, down, left, right, or diagonal in any direction. For Player 1:

If your answer is correct, move one of your counters onto an adjacent space that shows the difference. For Player 2: If your answer is correct, move your counter onto an adjacent space that shows the difference.

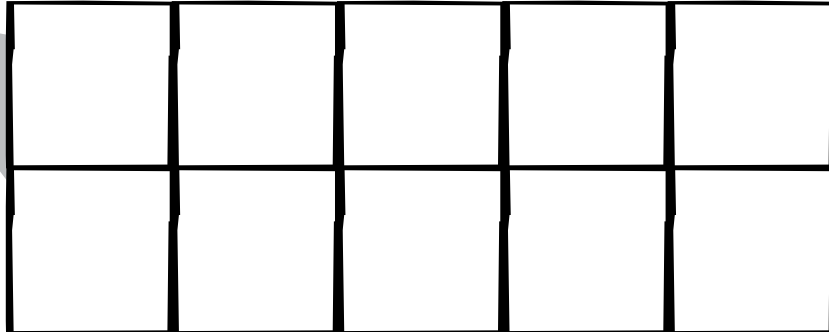
If an answer is incorrect or the difference is not available on an adjacent space, you miss a turn.

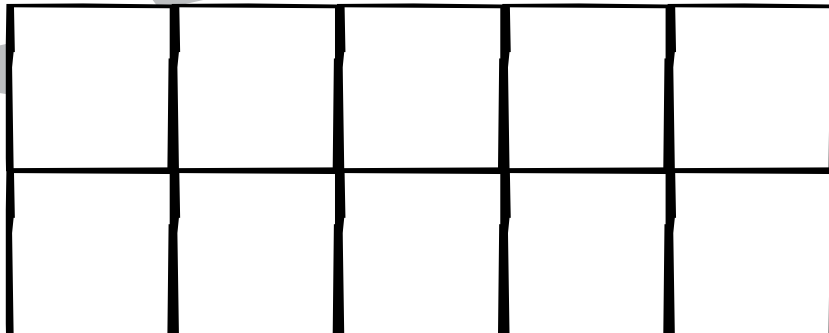
If the two numbers rolled are the same, you miss a turn.

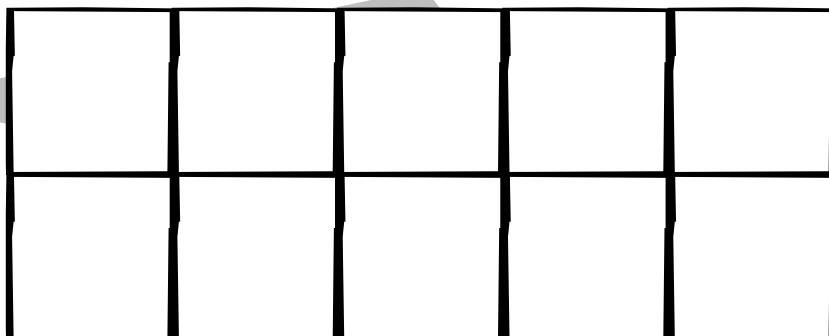
For Player 2: When you move to a space occupied by a mouse counter, take that counter off the game board.

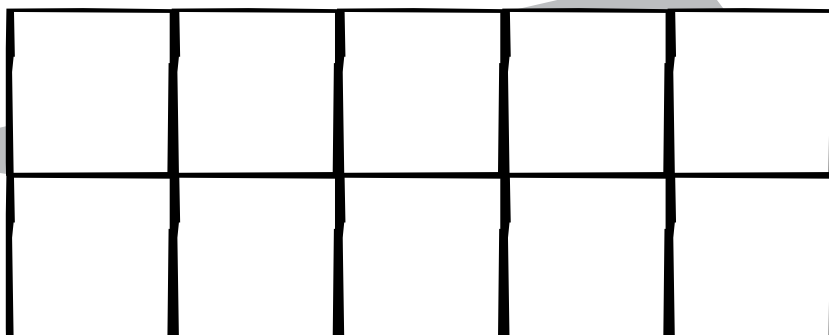
Play continues in turns until all three mouse counters have been removed or the last mouse counter reaches “home”.

First to Forty Game Board

A ten-frame grid consisting of two rows and five columns of empty squares.

A ten-frame grid consisting of two rows and five columns of empty squares.

A ten-frame grid consisting of two rows and five columns of empty squares.

A ten-frame grid consisting of two rows and five columns of empty squares.

Materials:

Each pair of players will need

- One (1) standard number cube showing numerals or dot patterns 1–6.

Each player will need

- Forty (40) counters (a different color for each player).

Directions:

The aim is to fill four ten-frames with counters.

- Players must start at the top row and fill from left to right in each ten-frame.
- The first player rolls the number cube.
- The player then places that number of counters in the first ten-frame on his or her game board.
- The other player has a turn.
- The first player to fill all of his or her ten-frames is the winner. It is not necessary to roll an exact number to finish.

Tens or Fives

$2 \times 10 = \underline{\quad}$ $2 \times 5 = \underline{\quad}$	$1 \times 10 = \underline{\quad}$ $1 \times 5 = \underline{\quad}$	$5 \times 10 = \underline{\quad}$ $5 \times 5 = \underline{\quad}$	$9 \times 10 = \underline{\quad}$ $9 \times 5 = \underline{\quad}$	$7 \times 10 = \underline{\quad}$ $7 \times 5 = \underline{\quad}$
$3 \times 10 = \underline{\quad}$ $3 \times 5 = \underline{\quad}$	$5 \times 10 = \underline{\quad}$ $5 \times 5 = \underline{\quad}$	$7 \times 10 = \underline{\quad}$ $7 \times 5 = \underline{\quad}$	$2 \times 10 = \underline{\quad}$ $2 \times 5 = \underline{\quad}$	$4 \times 10 = \underline{\quad}$ $4 \times 5 = \underline{\quad}$
$7 \times 10 = \underline{\quad}$ $7 \times 5 = \underline{\quad}$	$8 \times 10 = \underline{\quad}$ $8 \times 5 = \underline{\quad}$	$3 \times 10 = \underline{\quad}$ $3 \times 5 = \underline{\quad}$	$6 \times 10 = \underline{\quad}$ $6 \times 5 = \underline{\quad}$	$9 \times 10 = \underline{\quad}$ $9 \times 5 = \underline{\quad}$
$4 \times 10 = \underline{\quad}$ $4 \times 5 = \underline{\quad}$	$2 \times 10 = \underline{\quad}$ $2 \times 5 = \underline{\quad}$	$8 \times 10 = \underline{\quad}$ $8 \times 5 = \underline{\quad}$	$7 \times 10 = \underline{\quad}$ $7 \times 5 = \underline{\quad}$	$1 \times 10 = \underline{\quad}$ $1 \times 5 = \underline{\quad}$
$2 \times 10 = \underline{\quad}$ $2 \times 5 = \underline{\quad}$	$6 \times 10 = \underline{\quad}$ $6 \times 5 = \underline{\quad}$	$9 \times 10 = \underline{\quad}$ $9 \times 5 = \underline{\quad}$	$3 \times 10 = \underline{\quad}$ $3 \times 5 = \underline{\quad}$	$8 \times 10 = \underline{\quad}$ $8 \times 5 = \underline{\quad}$

Focus:

Using tens facts to multiply by five

Materials:

- 2 cubes with the following configuration

Cube A: 1, 2, 3, 4, 5, 6

Cube B: 7, 7, 8, 8, 9, 9

- Game board
- Each player will need a colored pencil or marker of a different color.

Directions:

The winner is the first to build a winning sequence of four adjacent counters in a horizontal, vertical, or diagonal line, or to make a box of four.

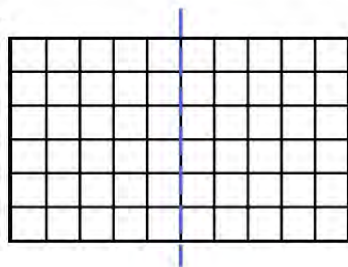
How to Play:

- Roll both cubes.
- Choose to multiply the number on cube A or B by 10. Find that fact on the board and fill in the product for multiplying the chosen number by ten and by five. Four in any direction wins.
- Some numbers appear more than once on the gameboard. Players must decide whether to build a winning sequence or block the other player.
- If both possible numbers are not available, the player misses a turn.
- Play continues until one player builds a winning sequence.

Exploring a Strategy to Multiply by Five

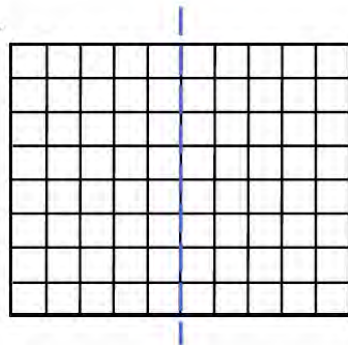
For each of these, write the tens fact then color half the rectangle and write the match fives fact.

a.



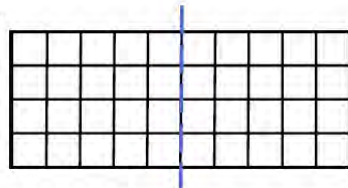
$10 \times 6 = \underline{\quad\quad} \text{ so } 5 \times 6 = \underline{\quad\quad}$

b.



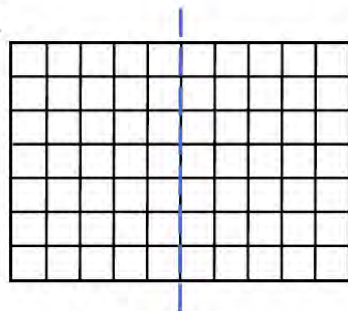
$10 \times 8 = \underline{\quad\quad} \text{ so } 5 \times 8 = \underline{\quad\quad}$

c.



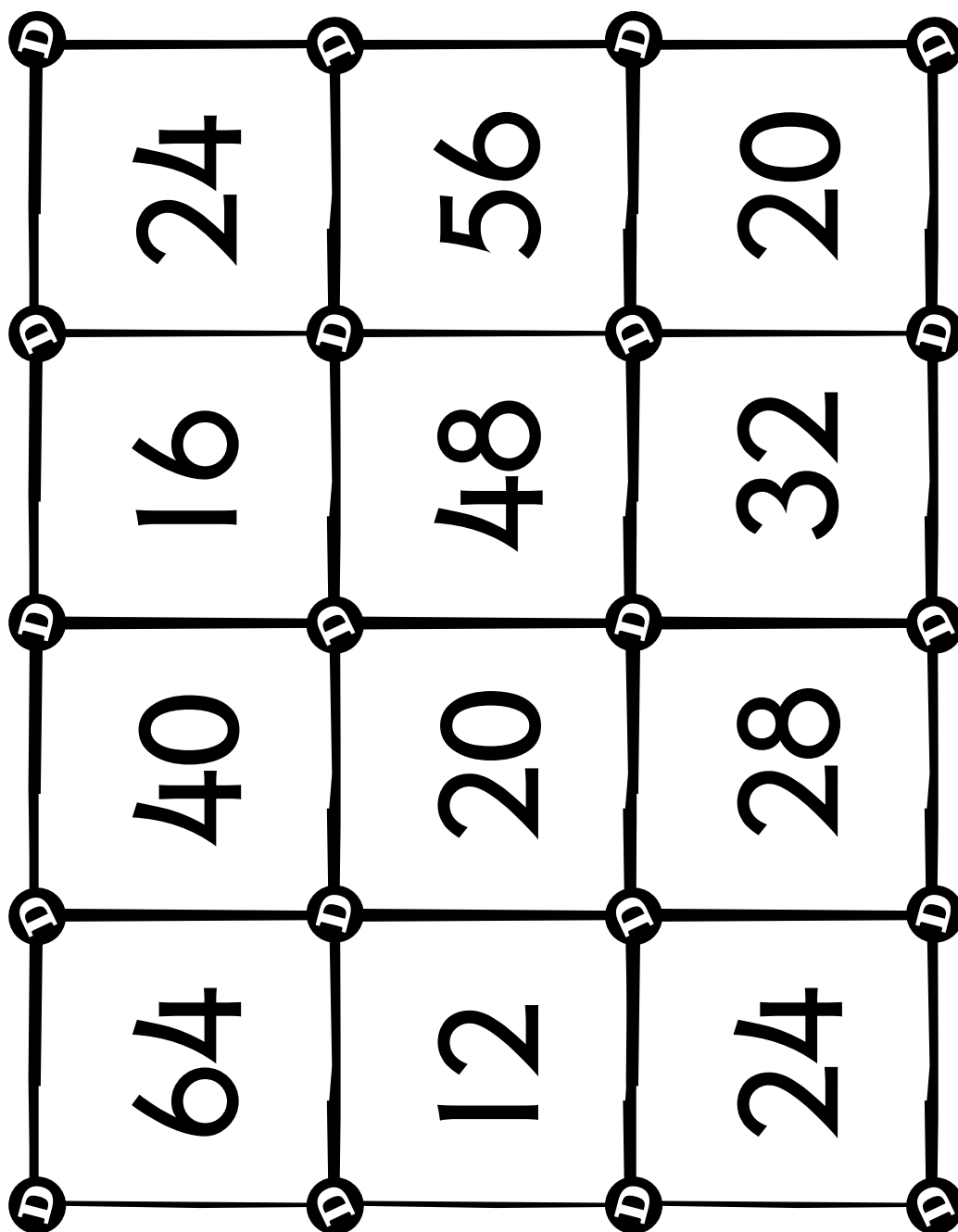
$10 \times 4 = \underline{\quad\quad} \text{ so } 5 \times 4 = \underline{\quad\quad}$

d.



$10 \times 7 = \underline{\quad\quad} \text{ so } 5 \times 7 = \underline{\quad\quad}$

Do the Ds



Materials:

Each group of students will need

- *Do the Ds* game board
- 2 blank cubes, marked as follows:
 - Write “double double” or “DD” on three faces, write “double double double” or “DDD” on the remaining three faces on one cube
 - Write 3, 4, 5, 6, 7, 8 on the other cube.

Each player will need

- 4 transparent counters (a different color for each player)

Directions (2–4 players):

- The first player rolls the two cubes.
- The player follows the instruction, doubling the number, two or three times. Example: *Lily rolls “4” and “DDD”. She thinks double 4 is 8, double 8 is 16, double 16 is 32. 4 multiplied by 8 is 32.*
- The player claims the answer on the game board by covering it with a counter. If an answer is unavailable, the player misses a turn.
- Each of the other players has a turn.
- The first player to place all four counters on the game board is the winner.

Nice and Easy Game Board

30×3	50×3	70×3	90×3
30×4	50×4	70×4	90×4
30×6	50×6	70×6	90×6
30×7	50×7	70×7	90×7
30×8	50×8	70×8	90×8
30×9	50×9	70×9	90×9

Focus:

Using doubling and halving to multiply.

Materials:

- 2 cubes with the following numerals
- Cube A:** 15, 15, 25, 35, 45, 45
- Cube B:** 6, 8, 12, 14, 16, 18

Each player will need

- Counters (a different color for each player).


Directions:

Roll the cubes.


Example: 15 and 18 are rolled.
Say, "15 multiplied by 18 is the same as 30 multiplied by 9."
Place a counter on 30 x 9.

First person with five counters on the game board wins.

Times Tussle Game Board



20	50	25	50	10	30
70	30	10	90	45	80
35	40	25	40	15	45
80	15	50	100	90	35
45	25	20	40	50	100
45	25	30	20	30	15
70	60	35	60	20	40


Focus:

Multiplying numbers two to ten by five and ten.

Materials:

- 3 cubes: Cube A should be one color; Cubes B and C should be the same color as each other, but a different color than Cube A. Cubes will have the following numerals:

Cube A: 5, 5, 5, 10, 10, 10

Cube B: 2, 3, 4, 5, 6,

Cube C: 5, 6, 7, 8, 9, 10

Each player will need

- 14 transparent counters (different color for each player)

Directions:

The winner is the first player to build a winning sequence four adjacent counters in a horizontal, vertical, or diagonal line.

How to Play:

Roll all cubes and choose Cube A and one other cube.

Multiply and cover the product. Four in a row, any direction, wins.

Some numbers appear more than once on the game board. You must decide whether to build a winning sequence or block the other player.

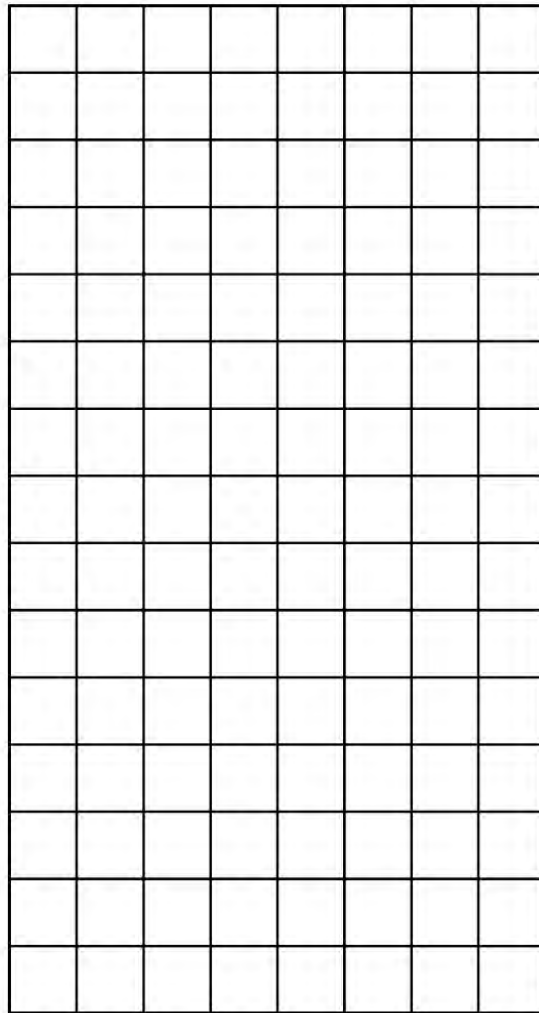
If both possible answers are not available, you miss a turn.

Play continues in turns until one player builds a winning sequence.

Exploring the Doubling and Halving Strategy for Multiplication

Cut out the rectangle then use the doubling and halving strategy to help you complete the sentence below.

15 x 8 is the same as _____ x _____ = _____



Nice and Easy Too! Game Board

90	150	210	270
120	200	280	360
180	300	420	540
210	350	490	630
240	400	560	720
270	450	630	810

Focus:

Using doubling and halving to multiply.

Materials:

- 2 cubes with the following numerals

Cube A: 15, 15, 25, 35, 45, 45

Cube B: 6, 8, 12, 14, 16, 18

Each player will need

- Counters (a different color for each player).

Directions:

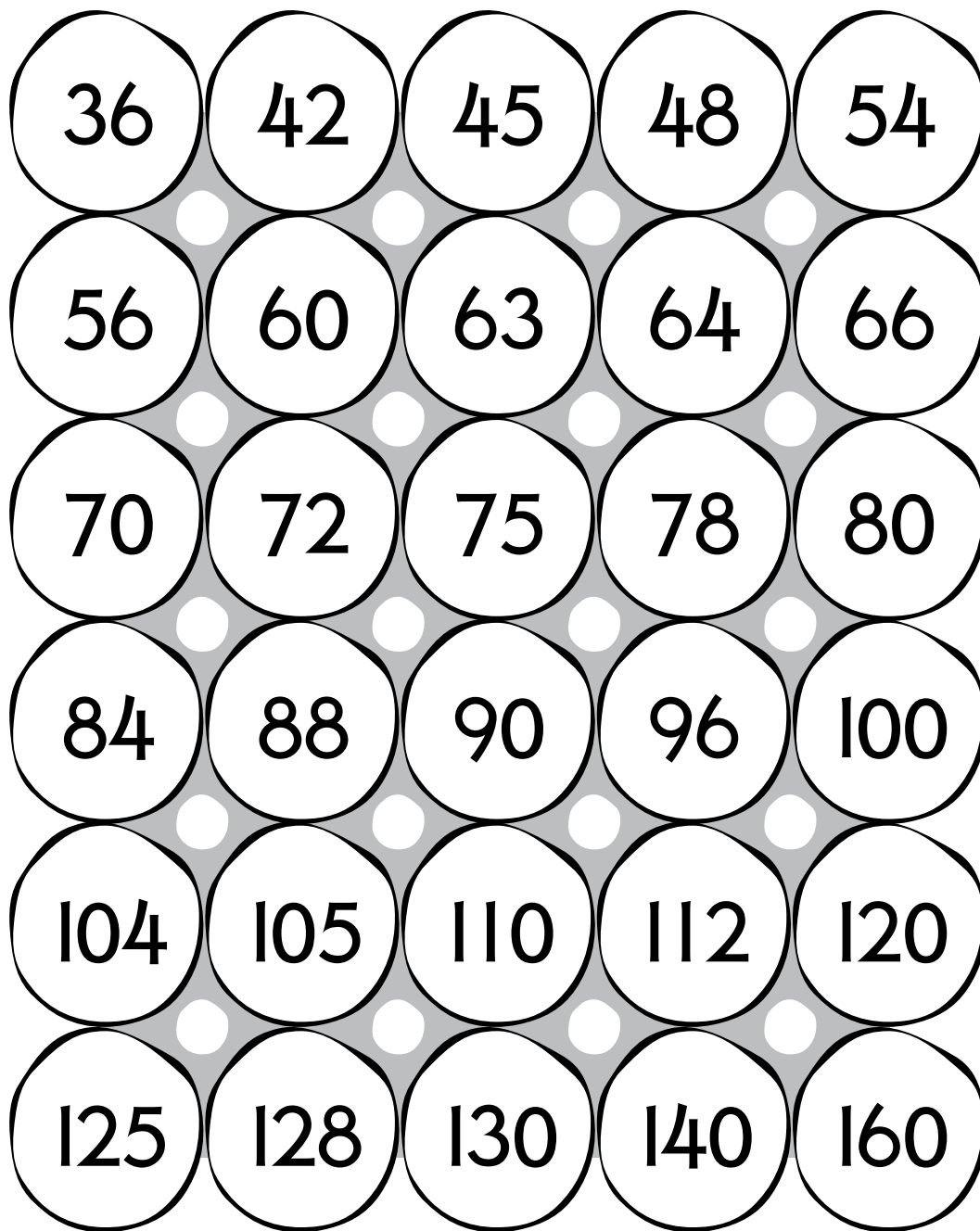
Play 'Nice and Easy' first and use the same cubes for this game.

Roll the cubes.

Example: 35 and 16 are rolled. Say, "35 multiplied by 16 is the same as 70 multiplied by 8. It equals 720." Place a counter on 720.

First person with five counters on the game board wins.

Friendly Factors Game Board



Focus:

Using factors to multiply whole numbers.

Materials:

Each pair of players will need

- One (1) set of numeral tokens with the following numerals: 12, 14, 15, 16, 18, 21, 22, 24, 25, 26, 28, 32.
- One (1) number cube showing the numerals: 3, 3, 4, 4, 5, and 5.

Each player will need

- Fifteen (15) counters (a different color for each player).

Directions:

The aim is to place as many counters on the game board as possible.

- The tokens are placed face up beside the game board.
- The first player selects a token and then rolls the number cube.
- The player mentally calculates the product of the two numbers and claims the answer on the game board by covering it with a counter. If an answer is unavailable, the player misses a turn.
- The token is returned.
- The other player has a turn.
- The player with the greater number of counters on the game board after ten rounds is the winner.

Discount Dilemma Game Board

\$144	\$450	\$54	\$216	\$90	\$160
\$900	\$180	\$375	\$108	\$120	\$30
\$60	\$250	\$100	\$72	\$192	\$50
\$800	\$400	\$90	\$48	\$80	\$128
\$500	\$80	\$750	\$120	\$96	\$40
\$45	\$180	\$64	\$150	\$75	\$60

Focus:

Calculating discounts.

Materials:

Each pair of players will need

- Two (2) percentage cubes. One cube should show 10%, 10%, 20%, 20%, 25%, 50%. The second cube should show 10%, 20%, 25%, 25%, 50%, 50%.
- One (1) set of price tags with the following amounts: \$60, \$80, \$100, \$120, \$160, \$200, \$240, \$500, \$1000.

Each player will need

- Twenty (20) counters (a different color for each player)

Directions:

The aim is to arrange four counters in a 2 x 2 square or adjacently in a horizontal, vertical, or diagonal line.

- The price tags are placed face down in a stack.
- The first player picks up two price tags and rolls the two percentage cubes.
- The player considers all possible combinations before calculating a percentage discount and deducting it from the starting price

Example: Mohan draws \$60 and \$100 and rolls 20% and 25%. He chooses to calculate a 20% discount off \$60 and calculates the new price as \$48.

- The player then claims the discounted price on the game board by covering it with a counter. Although some numbers appear on the game board more than once, a price may only be claimed once for any one turn. If an answer is unavailable, the player misses a turn.
- The two cards are returned and the stack is reshuffled.
- The other player has a turn.
- The first player to make a 2 x 2 square or a line of four adjacent counters is the winner.

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Use the QR codes below to discover more about the products associated with each game or activity in this book.

GRADE K



Match my Number

From *Dominoes: A Little Book of Big Ideas*



Follow the Suits

From *Dominoes: A Little Book of Big Ideas*



Doubling Numbers Less than Ten

From the GS14 *Gem Stones* video

GRADE 1



Using the Double Add 1 Strategy

From *Fundamentals Yellow Level: Grades K–1*



Making a "Ten" to Add Basic Facts

From the GS6 *Gem Stones* video



Take or Tally

From *Fundamentals Orange Level: Grades 1–2*

Use the QR codes below to discover more about the products associated with each game or activity in this book.

GRADE 2



Cat and Mice

From Fundamentals Orange Level: Grades 1–2



First to Forty

From Fundamentals Orange Level: Grades 1–2

GRADE 3



Exploring a Strategy to Multiply by Five

From the GS9 Gem Stones video



Do the Ds

From Fundamentals Purple Level: Grades 2–3

Use the QR codes below to discover more about the products associated with each game or activity in this book.

GRADE 4



Nice and Easy

From Fundamentals Red Level: Grades 4–5



Times Tussle

From Fundamentals Purple Level



Exploring the Doubling and Halving Strategy for Multiplication

From the GS10 Gem Stones video

GRADE 5



Nice and Easy Too!

From Fundamentals Red Level: Grades 4–5



Friendly Factors

From Fundamentals Red Level: Grades 4–5

Use the QR code below to discover more about the product associated with the game in this book.

GRADES 6–8



Discount Dilemma

From Fundamentals Blue Level: Grades 5–6



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Number

- GS3: Exploring Odd and Even Numbers
- GS44: Naming Groups of Ten
- GS43: Talking About Teen Numbers

Symbolic Representations

- GS33: Introducing Comparison Symbols

Fractions

- GS24: Identifying One-Half and One-Fourth of a Whole Area
- GS25: Identifying and Naming Equal Parts of a Whole
- GS26: Introducing the Fraction Symbol
- GS27: Writing Unit Fractions from Number Lines
- GS28: Introducing Numerators and Denominators
- GS29: Representing Fractions as the Sum of Unit Fractions
- GS36: Comparing Fractions with the Same Numerators or the Same Denominators

Addition and Subtraction

- GS13: Exploring Doubles in the Real World
- GS14: Doubling Numbers Less Than 10
- GS15: Using Doubles to Add “Next Door” Numbers (Doubles-Plus-1 facts)
- GS16: Using Doubles to Add Nearby Numbers (Doubles-Plus-2 facts)
- GS5: Exploring Combinations That Make 10
- GS6: Making a “Ten” to Add Basic Facts
- GS1: Using Tens to Keep Score
- GS2: Using Tens to Keep Score (Part 2)
- GS4: Exploring Patterns When Adding Odd and Even Numbers
- GS7: Making a Ten to Add a 2-Digit Number

GS20: Counting On One or Two to Add Basic Facts
GS23: Using Addition to Solve Basic Subtraction Facts
GS17: Adding Four Single-Digit Numbers
GS18: Calculating the Difference Between One- and Two-Digit Numbers

Multiplication and Division

GS9: Exploring a Strategy to Multiply by Five
GS8: Using Arrays to Explore Turn Around Facts for Multiplication
GS21: Building Down from a Known “Tens” Facts to Multiply by 9
GS22: Building Up from a Known “Fives Fact” to Multiply by Six
GS32: Relating Multiplication and Division
GS34: Using Doubling to Multiply by 2
GS12: Finding Pairs of Factors
GS10: Exploring the Doubling and Halving Strategy for Multiplication

Geometry

GS40: Measuring Angles Using a Protractor
GS41: Identifying Scalene, Isosceles, and Equilateral Triangles
GS42: Calculating the Area of Triangles
GS19: Exploring the Sum of the Angles in a Quadrilateral
GS11: Exploring the Sum of the Angles of a Triangle

Ratio and Percent

GS37: Introducing Percentages
GS38: Introducing Percentages Greater than 100%

Addition and Subtraction Strategies Videos

Introducing the ORIGO Model for Teaching Skills

ORIGO ONE ENGLISH: <https://origo-education.wistia.com/medias/26icnyoznj> Short Link: b.link/O1_22_E

ORIGO ONE SPANISH: <https://origo-education.wistia.com/medias/8bt8v8fbv7> Short Link:

Using Five- and Ten-Frames to Represent Numbers

ORIGO ONE ENGLISH: <https://origo-education.wistia.com/medias/affdnul85b> Short Link: b.link/O1_45_E

ORIGO ONE SPANISH: <https://origo-education.wistia.com/medias/8qpwlwbwt6> Short Link:

Teaching the Count-On Strategy for Addition

ORIGO ONE ENGLISH: <https://origo-education.wistia.com/medias/bv1c3s6bht> Short Link: b.link/O1_1

ORIGO ONE SPANISH: <https://origo-education.wistia.com/medias/0kiklt4bgz> Short Link:

GemStones20: Counting on one or two add basic facts

Gem Stones: <https://www.youtube.com/watch?v=MW1l9PxDsby>

GS 13: Exploring Doubles in the Real World

Gem Stones: <https://youtube.com/watch?v=qfuWSb5CixY> Short Link: <https://youtu.be/qfuWSb5CixY>

14: Doubling Numbers Less Than 10

Gem Stones: <https://youtube.com/watch?v=JZt2P4OdGx8> Short Link: <https://youtu.be/JZt2P4OdGx8>

Teaching the use Doubles Strategy for Addition

ORIGO ONE ENGLISH: <https://origo-education.wistia.com/medias/w14o4303pm> Short Link: b.link/O1_4_E

ORIGO ONE SPANISH: <https://origo-education.wistia.com/medias/89jdod6z4q>

GS 15: Using Doubles to Add "Next Door" Numbers (Doubles-Plus-1 facts)

Gem Stones: <https://www.youtube.com/watch?v=KMfqfZHzh8I> Short Link: <https://youtu.be/KMfqfZHzh8I>

GS16: Using Doubles to Add Nearby Numbers (Doubles-Plus-2 facts)

Gem Stones: <https://www.youtube.com/watch?v=0QcCVR6Yqus> Short Link: <https://youtu.be/0QcCVR6Yqus>

GS5: Exploring combinations that make 10

Gem Stones: <https://www.youtube.com/watch?v=qzydNEeHpQw> Short Link: <https://youtu.be/qzydNEeHpQw>

Using the Make-Ten or Bridge-to-ten Strategy to Addition

ORIGO ONE ENGLISH: <https://origo-education.wistia.com/medias/e7tku31liu> Short Link: b.link/O1_7_E

ORIGO ONE SPANISH: <https://origo-education.wistia.com/medias/8c2oc6577t> Short Link:

GS6: Making a "Ten" to Add Basic Facts

Gem Stones: <https://www.youtube.com/watch?v=ROuWdXdQ11g> Short Link: <https://youtu.be/ROuWdXdQ11g>

GS7: Making a Ten to add a 2 digit number and activity

Gem Stones: <https://www.youtube.com/watch?v=kq1meaJDirA> Short Link: <https://youtu.be/kq1meaJDirA>

Teaching the Think-Addition Strategy for Subtraction

ORIGO ONE ENGLISH: <https://origo-education.wistia.com/medias/cm98lr2tax> Short Link: b.link/O1_2_E

ORIGO ONE SPANISH: <https://origo-education.wistia.com/medias/e1syja2uz4> Short Link:

GS23: Using addition to solve basic subtraction facts:

Gem Stones: <https://www.youtube.com/watch?v=12FZs1JXQKU&t=1s>

Multiplication and Division Strategies Videos

Introducing the ORIGO Model for Teaching Skills

ORIGO ONE ENGLISH: <https://origo-education.wistia.com/medias/26icnyoznj> Short Link: b.link/O1_22_E

ORIGO ONE SPANISH: <https://origo-education.wistia.com/medias/8bt8v8fbv7> Short Link:

GS46: Doubling and halving multiples of ten and five

Gem Stones: <https://www.youtube.com/watch?v=iNA-OOUp9dA>

Teaching the Use-Tens Strategy for Multiplication

ORIGO ONE ENGLISH: <https://origo-education.wistia.com/medias/gyw3z0dyld> Short Link:

[http://b.link/O1_3_E](https://b.link/O1_3_E)

ORIGO ONE SPANISH: <https://origo-education.wistia.com/medias/zzwsm5x269>

GS9: Exploring a strategy to Multiply by Five

Gem Stones: <https://youtube.com/watch?v=g0qNTyY8yz8> Short Link: <https://youtu.be/g0qNTyY8yz8>

GS8: Using arrays to explore turn around facts for multiplication

Gem Stones: <https://youtube.com/watch?v=WhXryzUmX5Y> Short Link: <https://youtu.be/WhXryzUmX5Y>

Teaching the Doubling Strategy for Multiplication

ORIGO One: <https://origo-education.wistia.com/medias/ikn1y886en> Short Link: b.link/O1_9

ORIGO ONE SPANISH: <https://origo-education.wistia.com/medias/2y2hoqlg7p> Short Link:

GS34: Using doubling to multiply by 2

Gem Stones: <https://www.youtube.com/watch?v=1wmnjdXQFwx>

Teaching the Build-Up Strategy for Multiplication

ORIGO ONE ENGLISH: <https://origo-education.wistia.com/medias/17saqfy40q> Short Link: b.link/O1_6_E

ORIGO ONE SPANISH: <https://origo-education.wistia.com/medias/8zt98as7on> Short Link:

GS22: Building up from a known "fives fact" to multiply by six

Gem Stones: <https://www.youtube.com/watch?v=YmLLaZnKpRY>

Teaching the Build-Down Strategy for Multiplication

ORIGO ONE ENGLISH: <https://origo-education.wistia.com/medias/gtwhame631> Short Link: b.link/O1_8_E

ORIGO ONE SPANISH: <https://origo-education.wistia.com/medias/rkrzr1jek8> Short Link:

GS21: Building Down from a Known "tens" Facts to Multiply by 9

Gem Stones: <https://www.youtube.com/watch?v=GDwhFy5PsGM> Short Link:

<https://youtu.be/GDwhFy5PsGM>

Teaching the Think-Multiplication Division Strategy

ORIGO ONE ENGLISH: <https://origo-education.wistia.com/medias/a0n12cd5d2> Short Link: b.link/O1_5_E

ORIGO ONE SPANISH: <https://origo-education.wistia.com/medias/27vunbppia> Short Link:

GS32: Relating multiplication and division

Gem Stones: <https://www.youtube.com/watch?v=9ipO5KYRm0E>