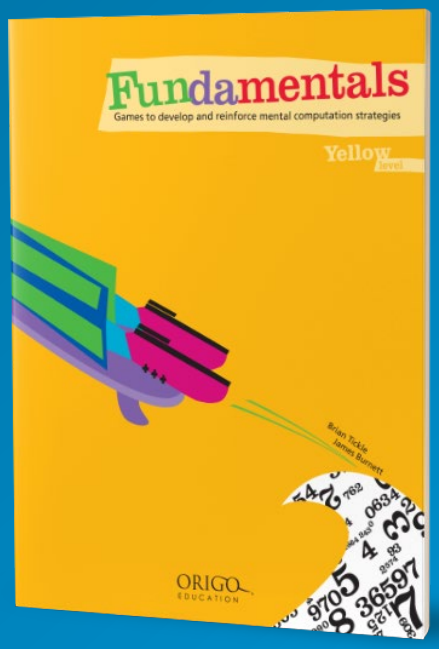
TEACHER RESOURCES

Games and Activities

We make
learning mathematics
enjoyable!

ORIGO EDUCATION

Enjoy these fun math games and activities from ORIGO Education's ***Fundamentals*** and ***GEO*** book series.



GRADES K–6

Fundamentals activities make meaningful math connections before, during, and after each game.

GRADES 3–6

Using the ***GEO*** Series to teach geometry encourages students to be more creative about how they look at structural objects.

To view other product packages with great activities visit **origoeducation.com/store** today!

ORIGO EDUCATION

Bridge-to-Ten Game Board

10 + 6 = ____ ___ + ___ = ____	10 + 6 = ____ ___ + ___ = ____
10 + 5 = ____ ___ + ___ = ____	10 + 5 = ____ ___ + ___ = ____
10 + 5 = ____ ___ + ___ = ____	10 + 5 = ____ ___ + ___ = ____
10 + 4 = ____ ___ + ___ = ____	10 + 4 = ____ ___ + ___ = ____
10 + 4 = ____ ___ + ___ = ____	10 + 4 = ____ ___ + ___ = ____
10 + 3 = ____ ___ + ___ = ____	10 + 3 = ____ ___ + ___ = ____
10 + 3 = ____ ___ + ___ = ____	10 + 3 = ____ ___ + ___ = ____
10 + 2 = ____ ___ + ___ = ____	10 + 2 = ____ ___ + ___ = ____
10 + 1 = ____ ___ + ___ = ____	10 + 1 = ____ ___ + ___ = ____

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 - ___ = ___	10 - ___ = ___
9 - ___ = ___	9 - ___ = ___
8 - ___ = ___	8 - ___ = ___
7 - ___ = ___	7 - ___ = ___
6 - ___ = ___	6 - ___ = ___
5 - ___ = ___	5 - ___ = ___

Materials:

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

Directions:

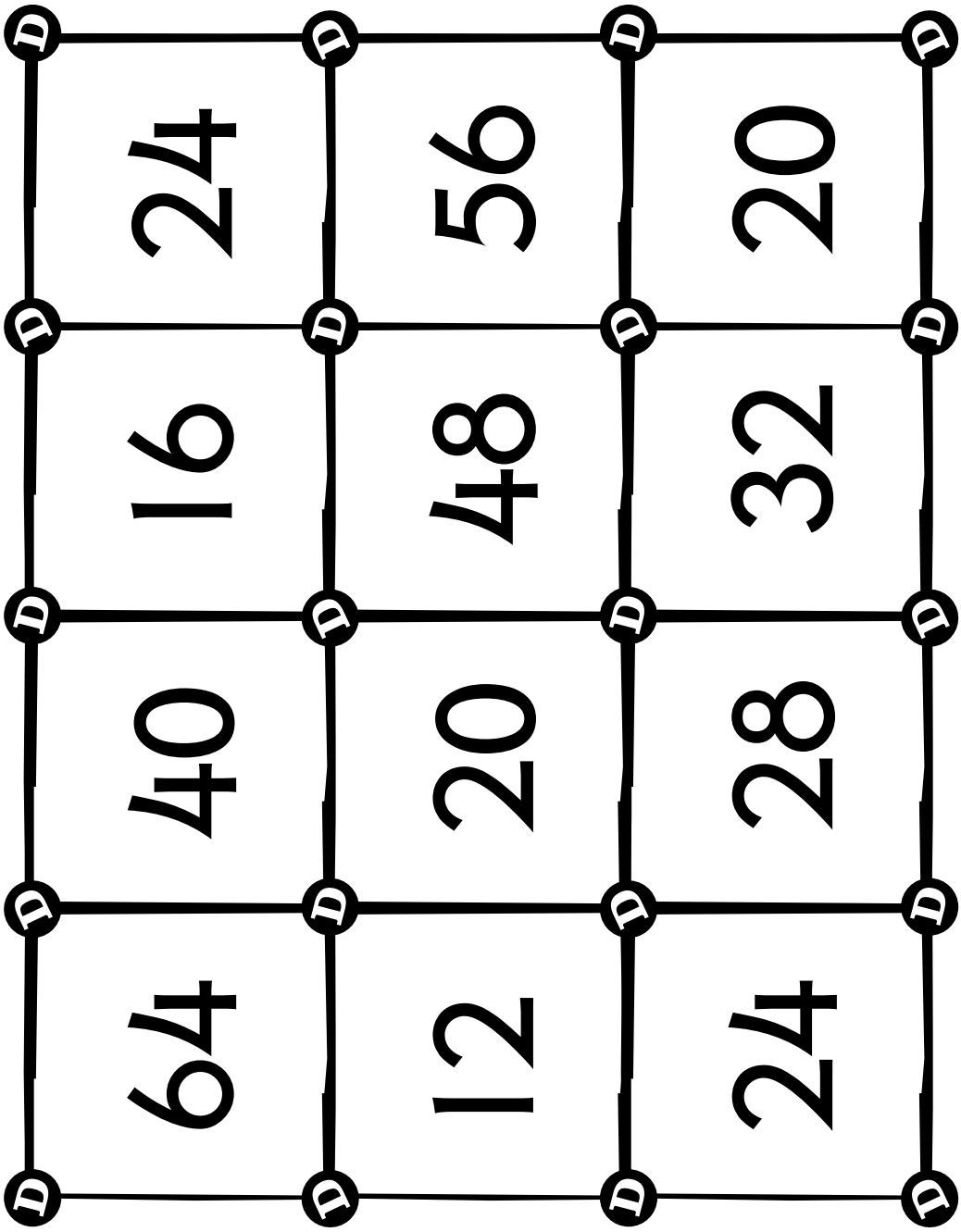
The aim is to complete twelve true number sentences.

- 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

This game board is from *Fundamentals* Orange Level: Grades 1–2
origoeducation.com/product/fundamentals-orange-grades-1-2

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.

This game board is from *Fundamentals* Purple Level: Grades 2–3
origoeducation.com/product/fundamentals-purple-grades-2-3

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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

Materials:

Each group of students will need

- *Times Tussle* game board
- one set of numeral cards. (Make 4 copies, cut out, and laminate to make one set.)

Each player will need

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

Directions (2-4 players):

- Shuffle and place numeral cards face down in a stack.
- The first player draws a card and decides whether to multiply the number by five or by ten to make a product on the game board. Example: Billy draws 6. He can multiply 6 x 5 (30) or 6 x 10 (60).
- The player claims a product on the game board by covering it with a counter. Although some numbers appear more than once on the game board, a player may only claim one number for each turn. If the two possible products are unavailable, the player misses a turn.
- The card is returned to the bottom of the stack.
- Each of the other players has a turn.
- The first player to make a 2 x 2 square or a line of four adjacent counters (horizontal, vertical, or diagonal) is the winner.

This game board is from *Fundamentals* Purple Level: Grades 2–3
origoeducation.com/product/fundamentals-purple-grades-2-3

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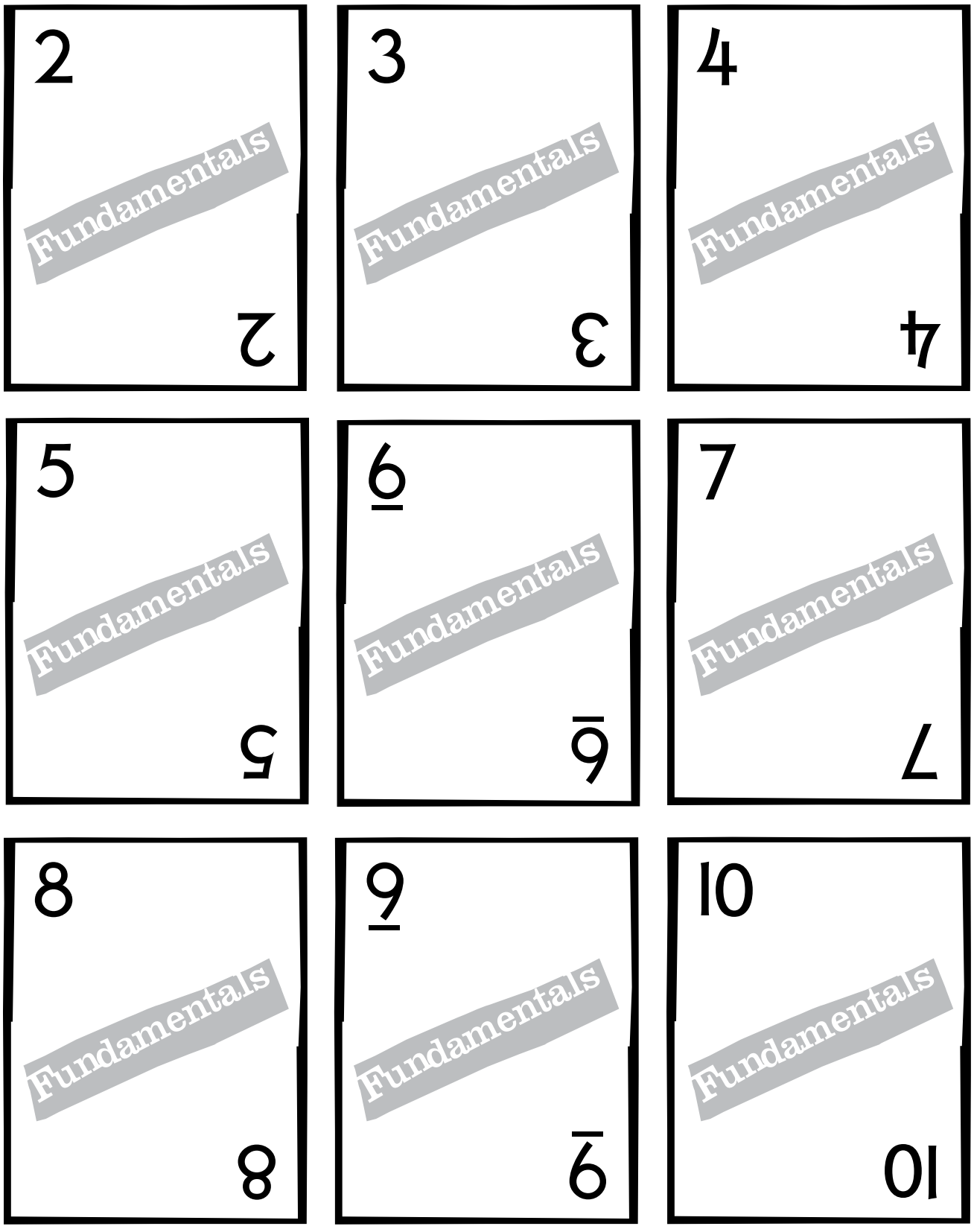
Times Tussle Numeral Cards



This game board is from *Fundamentals* Purple Level: Grades 2–3
origoeducation.com/product/fundamentals-purple-grades-2-3

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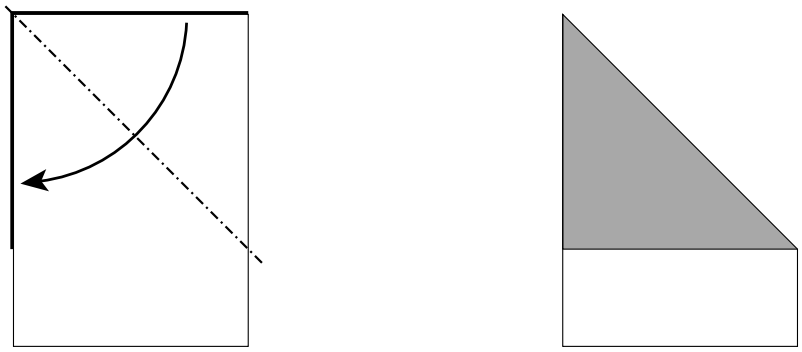
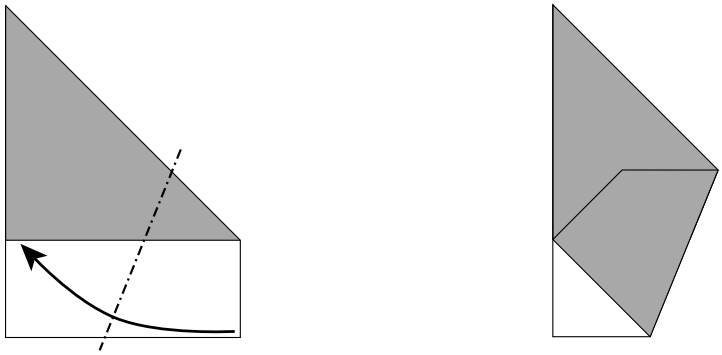
Folding a Three-Fold Kite

step 1 Make a square fold.



step 2 Fold to make these corners meet.



step 3 Fold to make these corners meet.

Turn the kite over so the folds are to the back.

A kite is a four-sided shape that has at least two pairs of adjacent sides that are equal and at least one pair of opposite angles that are equal.

Metric paper (A4, A5, etc.) must be used for these folding activities.

GEO metric paper is available for purchase at **origoeducation.com/product/geo-metric-paper**

This activity is from the *GEO Paper Polygons* book which includes *GEO* metric paper
origoeducation.com/product/geo-paper-polygons

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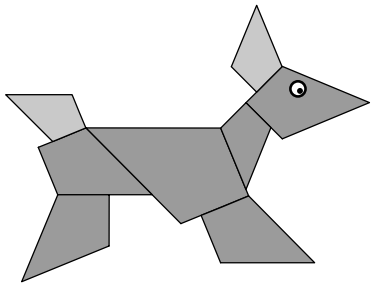
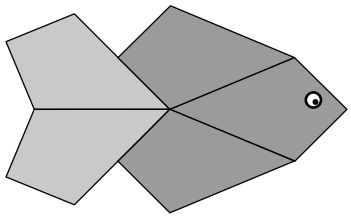
Create a Kite Picture



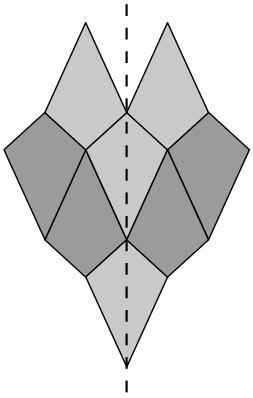
Dog

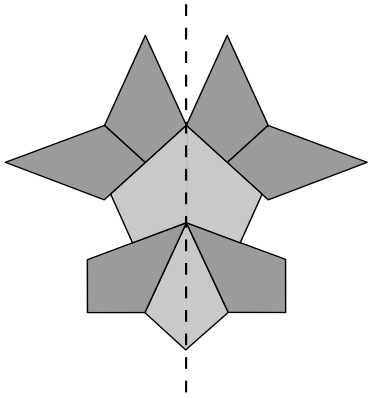


Fish

▲ *These are two shapes that can be made by students combining three-fold kites.*

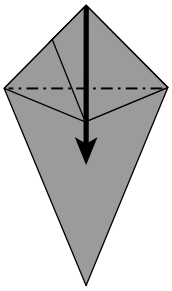
Make Symmetrical Designs



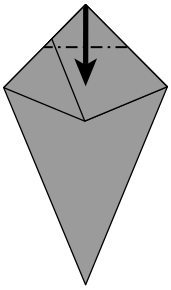


▲ *Challenge the students to find the lines of reflective symmetry in these designs.*

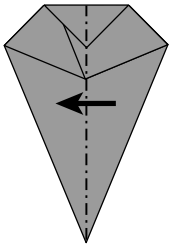
Make a Whale



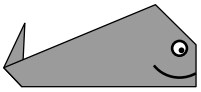
Step One



Step Two



Step Three



Step Four

▲ *The four steps students follow to make a whale from a three-fold kite.*

These activities are from the *GEO Paper Polygons* book which includes *GEO* metric paper
origoeducation.com/product/geo-paper-polygons

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Are you looking for some little 'gem stones' to add to your math lesson plans?

Visit ***Gem Stones*** – a new YouTube channel that explores math concepts, skills, and strategies **from a student's point of view.**

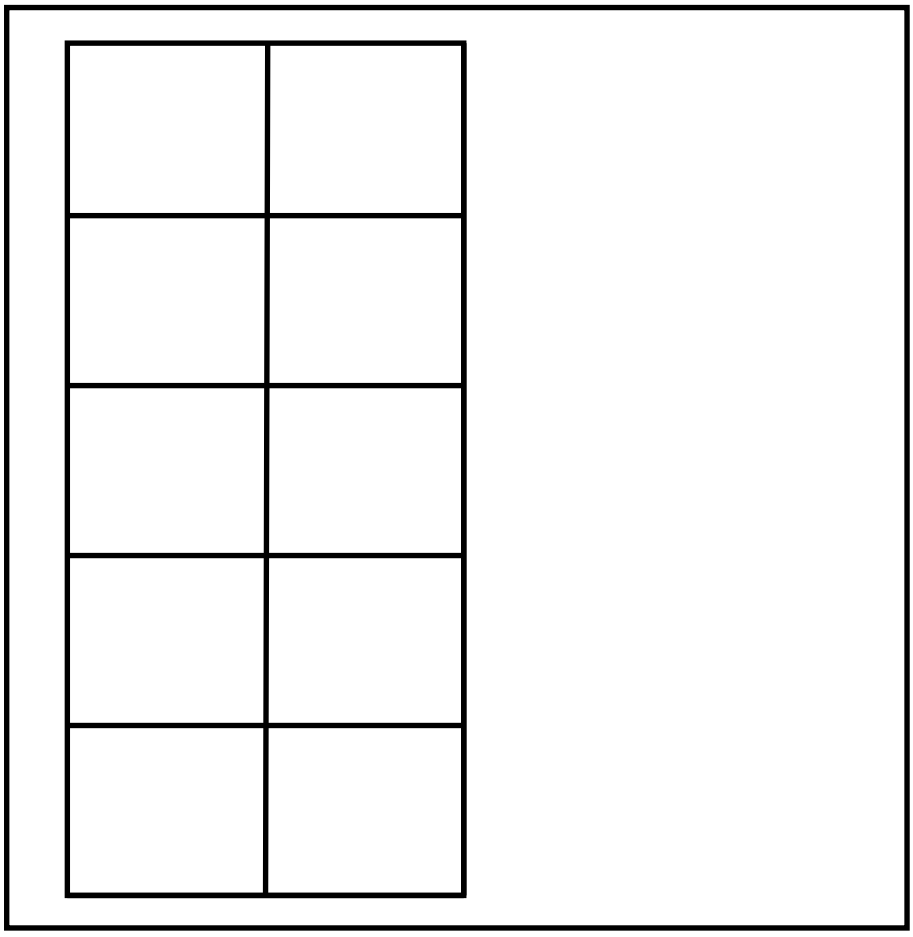
REVIEWED AND ENDORSED BY
ORIGO EDUCATION

Gemma is our founder's daughter. She has launched this channel to get elementary students excited about learning math. Her videos provide many useful tips and engaging activities that parents and teachers can use to teach math with understanding.

Subscribe to the ***Gem Stones*** channel today!

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 ____ + ____ = _____

b. 8 + 5 is the same as ____ + ____ = _____

c. 9 + 3 is the same as ____ + ____ = _____

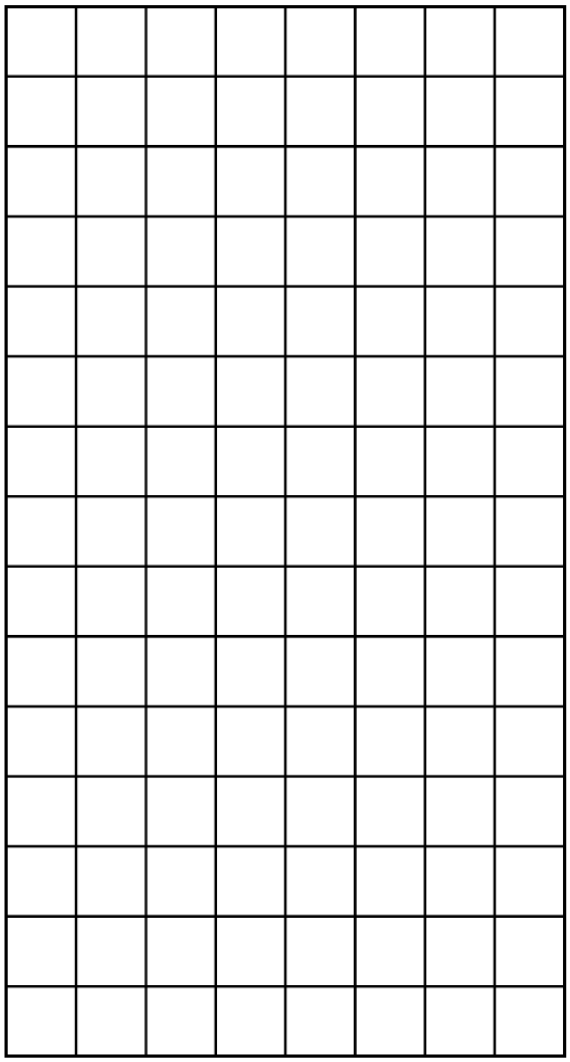
d. 8 + 7 is the same as ____ + ____ = _____

Use the QR code to view the *Gem Stones* video associated with this mathematics activity.

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 _____ = _____



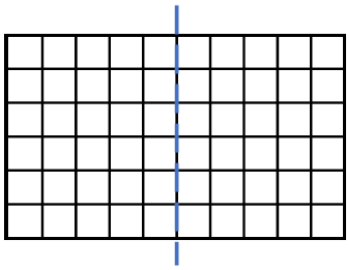
GemStones™

Use the QR code to view the *Gem Stones* video associated with this mathematics activity.

Exploring a Strategy to Multiply by Five

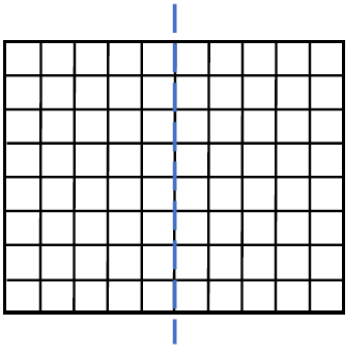
For each of these, write the tens fact then color half the rectangle and write the match fives fact.

a.



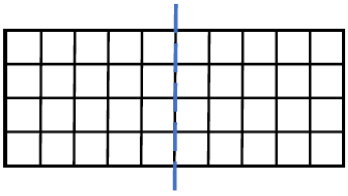
10 x 6 = _____ so 5 x 6 = _____

b.



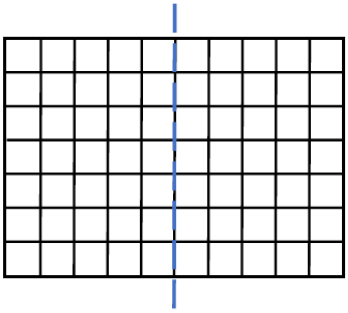
10 x 8 = _____ so 5 x 8 = _____

c.



10 x 4 = _____ so 5 x 4 = _____

d.

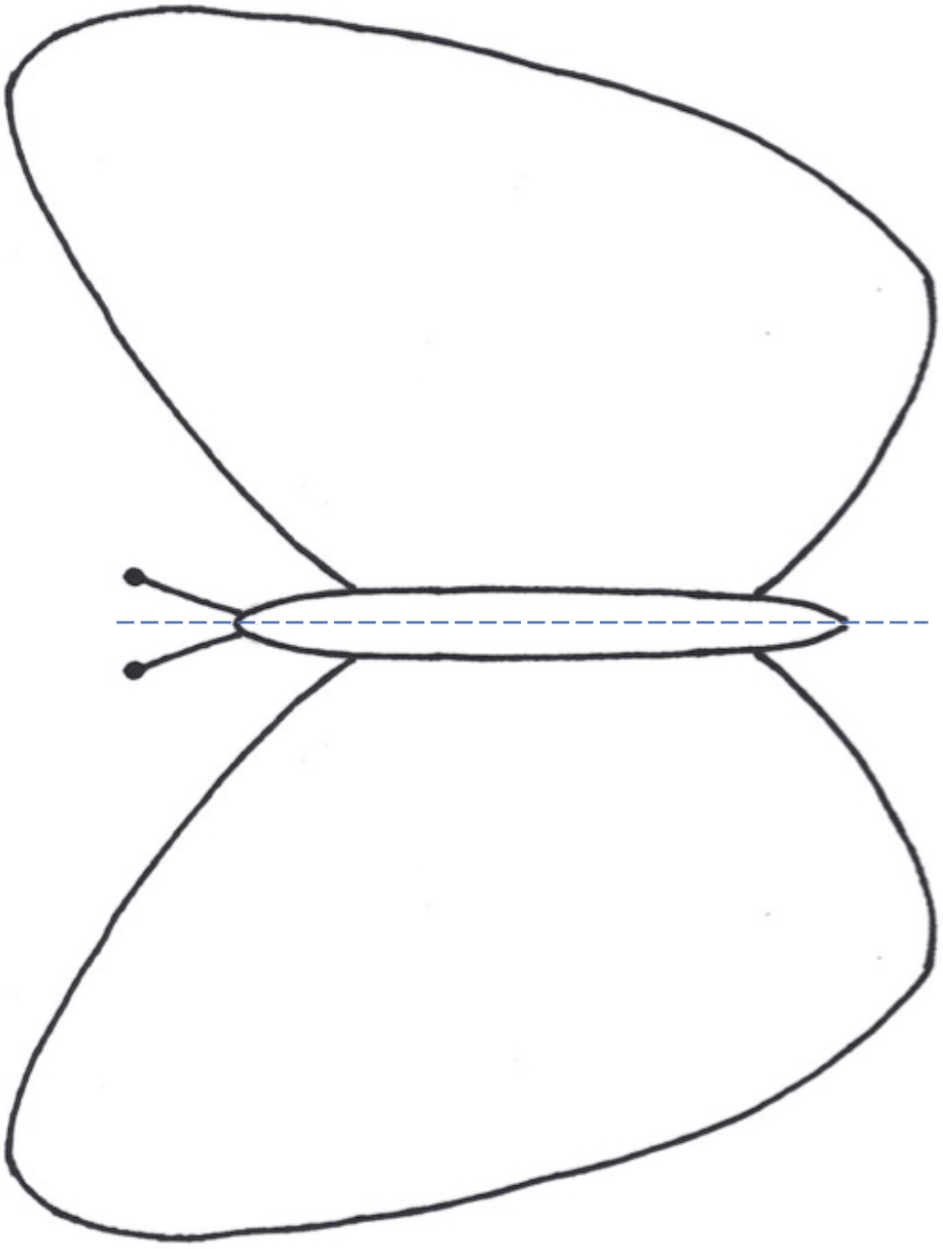


10 x 7 = _____ so 5 x 7 = _____

Use the QR code to view the *Gem Stones* video associated with this mathematics activity.

Doubling Numbers Less than Ten

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



Double _____ is _____ so _____ + _____ = _____

Use the QR codes or website addresses below to visit and read blog posts associated with some of the activities in this book.

Bridge-to-Ten Game Board
origoeducation.com/
blog/make-ten-strategy

Take or Tally Game Board
origoeducation.com/
blog/making-subtraction-efficient

Do the Ds
origoeducation.com/
blog/doubling-strategy-for-multiplication

Times Tussle Game Board and Numeral Cards
origoeducation.com/blog/use-tens-strategy

Sharing Little Gems of Math Understanding!
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