

ADDITION STRATEGY

NEAR DOUBLES

BUILDING FLUENCY THROUGH FLEXIBLE THINKING
AND EFFECTIVE STRATEGIES

NEAR DOUBLES MAZE

Solve each expression to get from the start to the finish.

START

8+8	14	3+5	7	5+6	12
17	16	21	13	18	11
4+5	9	10+12	17	8+10	14
10	7	22	21	19	11
7+9	20	10+11	20	3+4	10
16	6	7	7	8	13
4+6	5	2+3	6	5+7	16
9	10	13	15	18	11
8+9	19	6+8	14	9+10	19

VISUALIZING THE NEAR DOUBLES

Write the facts that are represented by each set of ten frames.

EXAMPLE

$3+3$	$3+4$	I know that $3+3=6$, and one more is 7.
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How are these facts related? _____

$4+4$	$4+5$	$5+5$	$5+6$
-------	-------	-------	-------

How are these facts related? _____

$7+7$	$7+8$	$8+8$	$8+9$
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How are these facts related? _____

These ten frames represent the doubles fact $7+7=14$.
What are two other nearby facts?

NEAR DOUBLES MATCH

Match the facts in each set to the representations.

$4+5$	$2+4$	$6+5$	$6+7$	$7+8$
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$3+4$	$7+6$	$8+10$	$2+3$	$5+6$
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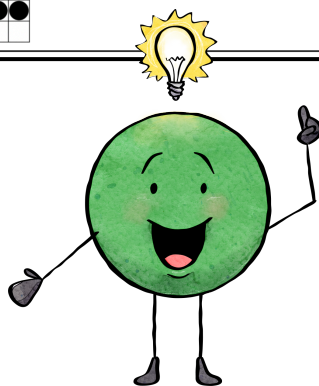
MATH TALK

Muffins are sold individually and in packages of 5. Nicholas needs 14. How many individual muffins and packages of 5 should he buy?

THINK:
 $5+5$ equals 10, and 1 more equals 11.

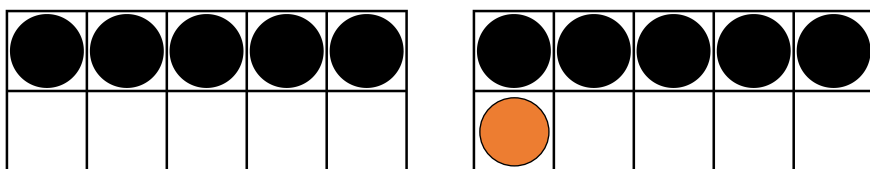
$5+6=11$

CREATED BY
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About This Resource

A **near double** is a fact that is close to a doubles fact. This is best illustrated with manipulatives. The ten frames below show one way to model $5+6$. The color of the ten frames guides us toward using what we know about the doubles facts because we can clearly see $5+6$ as $5+5$ and then one more.



What's Included?

Near Doubles Strategy Reference Poster
to post in your classroom

(3 pages)

Thinking About Math Reflection
for your students to reflect on new learning

Classroom Math Talk

Use these prompts for Number Talks or to get a conversation started about strategies and flexible thinking.

(4 pages)

MATH TALK



Muffins are so and in pac Nicholas nee How many ind and packag should l



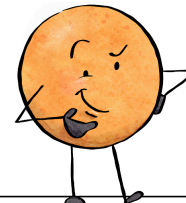
MATH TALK



Think of three different ways that you could solve

$$5+6.$$

Which one do YOU think is the most efficient?



Activity Sheets

A variety of activities to practice the near doubles facts in a fun and conceptual way

(13 pages)

NEAR DOUBLES MAZE

Solve each expression to get from the start to the finish.

START

8+8 14 3+5 7 5+6 12 9+11

17 16 21 13

4+5 9 10+12 17

10 7 22 21

7+9 20 10+11 20

16 6 7 7

4+6 5 2+3 6

9 10 13 15

NEAR DOUBLES MATCH

Match the facts in each set to the representations.

6+5= 6+7= 7+8=

8+10= 2+3= 5+6=

8+9=

BUILDING ON THE DOUBLES FACTS

For each doubles fact, create a model that represents one more, two more, one less, and two less.

Doubles Fact	One More	Two More	One Less	Two Less
3+3				
6+6				

VISUALIZING THE NEAR DOUBLES

Write the facts that are represented by each set of ten frames.

EXAMPLE: 3+3 → 3+4. I know that 3+3=6, and one more is 7.

How are these facts related?

How are these facts related?

These ten frames represent the doubles fact 7+7=14. What are two other nearby facts?

GUMBALL ADDITION

Write the sums. Shade the gumballs with an even sum red. Shade the gumballs with an odd sum yellow.

8+9= 5+5= 10+9= 10+12= 6+8= 7+6= 7+9=

3+5= 11+10= 7+7= 4+4= 8+7= 2+4= 6+4=

4+3= 8+8= 9+10= 10+8= 5+6= 7+5= 6+7=

12+10= 7+8= 6+5= 10+11=

3+4=

5+7= 9+11=

2+3= 9+7= 8+10= 3+3=

3+4= 4+5= 5+3= 8+6=

3+2= 10+10= 2+2= 5+4=

4+6= 9+8= 9+9= 6+6=

Small Group or Station Activities

Use these task card activities for guided math groups, small groups, or even individual learning.

(2 stations)

RELATED FACTS

INSTRUCTIONS:
Complete each puzzle by filling in the missing dots for each doubles fact to two related facts.

FACT MATCH

INSTRUCTIONS:
Match each fact to its representation.

Mini Flashcards with Suggested Activities

$7+8$
 $3+4$
 $3+5$

THINGS TO DO WITH FLASHCARDS

- USE THE FLASHCARDS TO BUILD OR DRAW REPRESENTATIONS.
- USE THE FLASHCARDS TO CREATE A STORY PROBLEM.
- CHOOSE 5 CARDS AND ORDER THEM FROM LEAST SUM TO GREATEST SUM.
- TAKE A CARD AND WRITE A DIFFERENT EXPRESSION THAT HAS THE SAME SUM.
- WRITE A RELATED SUBTRACTION EQUATION.
- USE A FLASHCARD TO WRITE AN ADDITION/SUBTRACTION FACT FAMILY.
- SORT THE FLASHCARDS INTO TWO CATEGORIES: "FACTS I KNOW" AND "FACTS I DON'T KNOW YET."
- SORT THE FLASHCARDS INTO TWO CATEGORIES: "EVEN PRODUCTS" AND "ODD PRODUCTS."

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My Math Fact Philosophy

My resources are created with this philosophy in mind:

- Math should be taught using the Concrete-Representational-Abstract model.
- UNDERSTANDING math facts is more important than memorizing math facts. Conceptual understanding is the **key to math fact fluency**.
- Students must be able to visualize the math in order to really understand it.
- True math fact fluency is more than just speed and accuracy. It also includes flexibility, which is essential to true fluency.
- One of the best ways to build flexibility is by making connections and forming relationships between facts.