

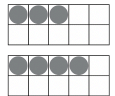
SUBTRACTION STRATEGY

USING DOUBLES AND NEAR DOUBLES

BUILDING FLUENCY THROUGH FLEXIBLE THINKING AND EFFECTIVE STRATEGIES

ADDITION AND SUBTRACTION FACT FAMILIES

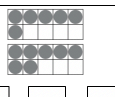
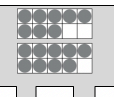
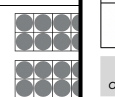
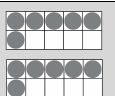
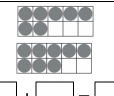
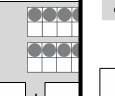
EXAMPLE



We can use these two parts to write a fact family.

$$3+4=7 \quad 7-4=3$$
$$4+3=7 \quad 7-3=4$$

Write an addition/subtraction fact family for each set of ten frame.

 $\square + \square = \square$ $\square + \square = \square$ $\square - \square = \square$ $\square - \square = \square$	 $\square + \square = \square$ $\square + \square = \square$ $\square - \square = \square$ $\square - \square = \square$	 $\square + \square = \square$ $\square + \square = \square$ $\square - \square = \square$ $\square - \square = \square$
 $\square + \square = \square$ $\square - \square = \square$	 $\square + \square = \square$ $\square - \square = \square$	 $\square + \square = \square$ $\square - \square = \square$

SUBTRACTING WITH NEAR DOUBLES

Figure out the missing part.

$13-7=\underline{\quad}$ <table border="1"><tr><td>13</td><td></td></tr><tr><td></td><td>7</td></tr></table> <p>Think: "What could I add to 7 to make 13?"</p>	13			7	$19-10=\underline{\quad}$ <table border="1"><tr><td>19</td><td></td></tr><tr><td></td><td>10</td></tr></table> <p>Think: "What could I add to 10 to make 19?"</p>	19			10	$5-3=\underline{\quad}$ <table border="1"><tr><td>5</td><td></td></tr><tr><td></td><td>3</td></tr></table> <p>Think: "What could I add to 3 to make 5?"</p>	5			3
13														
	7													
19														
	10													
5														
	3													
$9-4=\underline{\quad}$ <table border="1"><tr><td>9</td><td></td></tr><tr><td></td><td>4</td></tr></table> <p>Think: "What could I add to 4 to make 9?"</p>	9			4	$3-1=\underline{\quad}$ <table border="1"><tr><td>3</td><td></td></tr><tr><td></td><td>1</td></tr></table> <p>Think: "What could I add to 1 to make 3?"</p>	3			1	$11-6=\underline{\quad}$ <table border="1"><tr><td>11</td><td></td></tr><tr><td></td><td>6</td></tr></table> <p>Think: "What could I add to 6 to make 11?"</p>	11			6
9														
	4													
3														
	1													
11														
	6													
$15-8=\underline{\quad}$ <table border="1"><tr><td>15</td><td></td></tr><tr><td></td><td>8</td></tr></table> <p>Think: "What could I add to 8 to make 15?"</p>	15			8	$17-8=\underline{\quad}$ <table border="1"><tr><td>17</td><td></td></tr><tr><td></td><td>8</td></tr></table> <p>Think: "What could I add to 8 to make 17?"</p>	17			8	$7-2=\underline{\quad}$ <table border="1"><tr><td>7</td><td></td></tr><tr><td></td><td>2</td></tr></table> <p>Think: "What could I add to 2 to make 7?"</p>	7			2
15														
	8													
17														
	8													
7														
	2													

THINK ABOUT IT
How can you make a subtraction expression using two subtraction expressions?
 $16-8 \quad 16-9$
If $\underline{\quad}$ then $\underline{\quad}$

GUMBALL SUBTRACTION

Write the differences. Then shade the gumballs according to the difference.

1-5: orange 6-10: blue 11-15: green

$16-8=$	$13-7=$	$10-6=$	$8-5=$	$21-10=$	$14-7=$	$15-7=$
$7-4=$	$19-10=$	$8-4=$	$20-11=$	$11-5=$	$13-6=$	$9-5=$
$18-9=$	$10-5=$	$5-3=$	$19-9=$	$12-6=$	$10-4=$	$12-6=$
$12-5=$	$15-8=$	$7-3=$	$22-11=$	$10-4=$	$10-4=$	$10-4=$


SUBTRACTION STRATEGY

USE DOUBLES AND NEAR DOUBLES

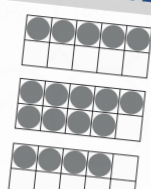
I can think about addition doubles and near doubles when I see a related fact.

$$10-5=\underline{\quad}$$

Think: "I know that 10 is the double of 5, so the missing part is 5!"



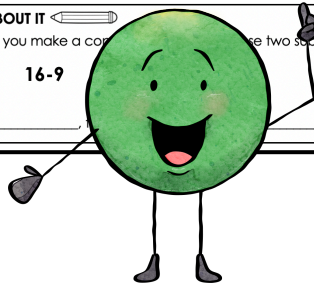
MATH TALK



Could you use these three numbers to form two addition sentences and two subtraction sentences?

How use one to create a story problem.

CREATED BY
SHELLEY GRAY



About This Resource

This subtraction strategy unit provides practice the **using doubles and near doubles** strategy.

This strategy involves using what students know about addition doubles and near doubles to solve a subtraction problem like 10-5.

This resource includes a variety of materials for encouraging students to use this strategy.

What's Included?

Using Doubles and Near Doubles Strategy Reference Posters
to post in your classroom

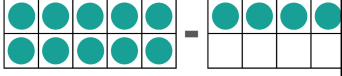
Thinking About Math Reflection
for your students to reflect on new learning

SUBTRACTION STRATEGY

USE DOUBLES AND NEAR DOUBLES

I can think about addition doubles and near doubles when I see a related fact.

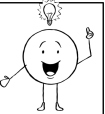
$10-5=$ _____



Think: "I know that 10 is the double of 5, so the missing part is 5."


©Shelley Gray www.ShelleyGrayTeaching.com


THINKING ABOUT MATH



Can you use the addition doubles and near doubles to help you subtract? Explain.

How could you think about these subtraction problems to solve them?

12-6 Explain: 

11-5 Explain: 


©Shelley Gray www.ShelleyGrayTeaching.com

Classroom Math Talk

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

(4 pages)


MATH TALK



Could you use the numbers to form sentences and the subtraction sentences?

Now use one to write a story problem.

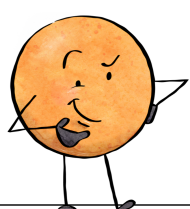
MATH TALK



Solve each of the following:

20-10
20-9
20-11

How are they connected?
What do you notice?




Activity Sheets

A variety of activities to practice using doubles and near doubles for subtraction


(11 pages)

ADDITION AND SUBTRACTION FACT FAMILIES


EXAMPLE  We can use these two parts to write a fact family.

$3+4=7$ $7-4=3$
 $4+3=7$ $7-3=4$


Write an addition/subtraction fact family for each set of ten frames.



$\square + \square = \square$
 $\square + \square = \square$
 $\square - \square = \square$
 $\square - \square = \square$



$\square + \square = \square$
 $\square + \square = \square$
 $\square - \square = \square$
 $\square - \square = \square$



$\square + \square = \square$
 $\square + \square = \square$
 $\square - \square = \square$
 $\square - \square = \square$

DOUBLES OR NEAR DOUBLES?

Solve the equations and sort them into the correct category. Would you use a known **doubles fact**, or a **near doubles fact** to solve each one?

$10-5=$	$13-7=$	$12-6=$
$7-4=$	$9-5=$	$20-10=$
$22-11=$	$14-7=$	$13-6=$
$18-9=$	$2-1=$	$16-8=$
$8-4=$	$5-3=$	$24-12=$

DOUBLES

NEAR DOUBLES

SUBTRACTING WITH NEAR DOUBLES


Figure out the missing part.

$13-7=$	$19-10=$	$5-3=$
13	19	5
7	10	3
Think: "What could I add to 7 to make 13?"	Think: "What could I add to 10 to make 19?"	Think: "What could I add to 3 to make 5?"

$1=$	$11-6=$
3	11
1	6
What could I add to 1 to make 3?"	Think: "What could I add to 6 to make 11?"

$8=$	$7-3=$
17	7
8	3
What could I add to 8 to make 17?"	Think: "What could I add to 3 to make 7?"

Between these two subtraction expressions:

THINK ABOUT IT 

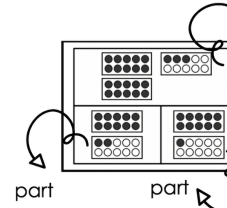
Explain the difference between a **doubles fact** and a **near doubles fact**.

Small Group or Station Activities

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

(2 stations)

WRITE A FACT FAMILY TASK CARDS



INSTRUCTIONS:

- Choose a part-part-whole
- On your recording sheet

IF I KNOW... TASK CARDS

If I know ³
18-9=9
then...

If I know ⁵
10-5=5
then...

INSTRUCTIONS:

- Choose a task card.
- Complete the recording sheet with other related facts that you know.

Mini Flashcards with Suggested Activities

$$14-7$$

$$8-4$$

$$13-6$$

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 DIFFERENCE TO GREATEST DIFFERENCE.
- TAKE A CARD AND WRITE A DIFFERENT EXPRESSION THAT HAS THE SAME DIFFERENCE.
- WRITE A RELATED ADDITION 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."

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.