

North Penn School District
Elementary Math Parent Letter

Grade 1

Unit 2-B -- Chapter 5: Addition and Subtraction Relationships

Examples from each lesson

Lesson 5.1

Problem Solving • Add or Subtract

There are 12 skunks in the woods.
Some skunks walk away.
There are 8 skunks still in the woods.
How many skunks walk away?

Unlock the Problem

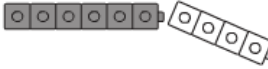


<p>What do I need to find?</p> <p>how many _____ walk away ----- skunks -----</p>	<p>What information do I need to use?</p> <p><u>12</u> skunks in the woods</p> <p><u>8</u> skunks still in the woods</p>
<p>Show how to solve the problem.</p> <div style="display: flex; justify-content: space-around; align-items: flex-start;"><div style="text-align: center;"><p>A horizontal bar divided into two sections. The right section is labeled '8'. Below the entire bar is a bracket labeled '12'. To the left of the bar, the number '4' is written with a plus sign and a line underneath it.</p></div><div style="text-align: center;"><p>8 skunks still in the woods</p><p>Two rows of 12 dots each. The top row has 4 outlined dots followed by 8 shaded dots. The bottom row has 12 shaded dots.</p></div></div> <p>_____ 4 walk away</p> <p>12 skunks</p>	

Lesson 5.2



Record Related Facts

Add and subtract within 20.

Use the numbers to write four related facts.


$$6 + 4 = 10$$
$$10 - 4 = 6$$

THINK
Each number is in all four facts.


$$4 + 6 = 10$$
$$10 - 6 = 4$$

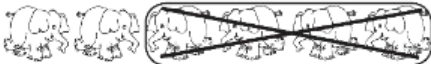

More information on this strategy is available on Animated Math Model #21.

Lesson 5.3

Identify Related Facts

Add and subtract within 20.

If you know an addition fact, you will also know the related subtraction fact.



Both facts use 2, 4, and 6. They are related facts.


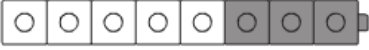
$$2 + 4 = 6$$
$$6 - 4 = 2$$

More information on this strategy is available on Animated Math Models #21, 22, 23.

Lesson 5.4

Use Addition to Check Subtraction

Add and subtract within 20.

<p>You can use addition to check subtraction.</p> <p>You start with 8. Take apart to subtract.</p>  $\begin{array}{r} 8 \\ - 3 \\ \hline 5 \end{array}$	<p>THINK Put the 5 and 3 back together.</p> <p>Add to check. You end with 8.</p>  $\begin{array}{r} 5 \\ + 3 \\ \hline 8 \end{array}$
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More information on this strategy is available on Animated Math Models #21, 22, 23.

Lesson 5.5


Algebra • Missing Numbers

Work with addition and subtraction equations.

Add or subtract to find the missing numbers.


$$6 + \boxed{5} = 11$$

$$11 - 6 = \boxed{5}$$

THINK
I start with 6. I keep adding cubes until there are 11.
The missing number is 5.
A related fact is $11 - 6 = 5$.



More information on this strategy is available on Animated Math Model #24.

Lesson 5.6

Algebra • Use Related Facts

Work with addition and subtraction equations.

Find $11 - 6$.

Use counters to help you.

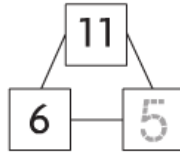
THINK

Start with 6. How many do I add to make 11?



$$6 + \underline{5} = 11$$

$$11 - 6 = \underline{5}$$



More information on this strategy is available on Animated Math Model #23.

Lesson 5.7

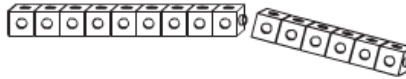
Choose an Operation

Represent and solve problems involving addition and subtraction.

Liz has 15 stuffed animals.
She gives away 6. How many stuffed animals are left?

THINK

Liz gives some away.
So, I subtract.
Circle **subtract**.



add

subtract

9 stuffed animals

$$\underline{15} - \underline{6} = \underline{9}$$

Lesson 5.8

Algebra • Ways to Make Numbers to 20

Add and subtract within 20.

These are some ways to make the number 14.

$7 + 7 = 14$

$4 + 4 + 6 = 14$

$14 - 0 = 14$

More information on this strategy is available on Animated Math Model #25.

Lesson 5.9

Algebra • Equal and Not Equal

Work with addition and subtraction equations.

An equal sign means both sides are the same.

$3 + 3 = 6 - 0$	$3 + 2 = 5 - 2$
<p>THINK $3 + 3 = 6$ and $6 - 0 = 6$. Is 6 the same as 6? <u>yes</u> It is true.</p>	<p>THINK $3 + 2 = 5$ and $5 - 2 = 3$. Is 5 the same as 3? <u>no</u> It is false.</p>

Lesson 5.10

Basic Facts to 20

Add and subtract within 20.

Mr. Chi has 12 books.
He sells 3 books.
How many books are left?

What is $12 - 3$?

THINK

I can count back.

Start at 12.

Count 11, 10, 9.

So, $12 - 3 = \underline{9}$.

THINK

I can use a related fact.

$$3 + 9 = 12$$

$$12 - 3 = \underline{9}$$

More information on this strategy is available on Animated Math Model #25.

Vocabulary

Related facts – addition and subtraction facts which share the same numbers