

North Penn School District
Elementary Math Parent Letter

Grade 2

Unit 2 – Chapter 3: Basic Facts and Relationships

Examples for each lesson

Lesson 3.1

Use Doubles Facts

Add and subtract within 20.

Use doubles facts to help you find sums.

If you know $6 + 6$,
you can find $6 + 7$.

7 is 1 more than 6.
So $6 + 7$ is 1 more than $6 + 6$.

$\underline{6} + \underline{6} = \underline{12}$

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$\underline{6} + \underline{7} = \underline{13}$

More information on this strategy is available on Animated Math Model #11.

Lesson 3.2

Practice Addition Facts

Add and subtract within 20.

Use what you know to find sums.

Add in any order.

If you know $3 + 5$,
then you know $5 + 3$.

Count on to add. To add 1, 2, or 3 to any
number, count on from that number.

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$3 + 5 = \underline{8}$

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$5 + 3 = \underline{8}$

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$5 + 1 = \underline{6}$

More information on this strategy is available on Animated Math Models #12, 13, 14, and 15.


Lesson 3.3

Algebra • Make a Ten to Add Add and subtract within 20.

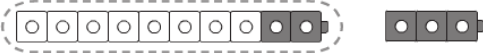
$8 + 5 = ?$

Step 1 Start with the greater addend.
Break apart the other addend to make a ten.

$8 \quad + \quad 5$



Step 2 You need to add 2 to 8 to make a ten. So, break apart 5 as 2 and 3.



$8 + 2 = 10 \qquad 3$

Step 3 Add on the rest to the 10. $10 + 3 = 13$

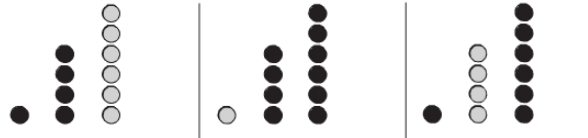
Step 4 Write the sum. $8 + 5 = 13$

More information on this strategy is available on Animated Math Model #16.

Lesson 3.4

Algebra • Add 3 Addends Add and subtract within 20.

Add numbers in any order.
The sum stays the same.



$1 + 4 + 6 = 11$
 $5 + 6 = 11$

$1 + 4 + 6 = 11$
 $1 + 10 = 11$


$1 + 4 + 6 = 11$
 $7 + 4 = 11$

More information on this strategy is available on Animated Math Model #17.

Lesson 3.5

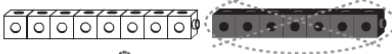
Algebra • Relate Addition and Subtraction Add and subtract within 20.

Use addition facts to help you subtract.




$8 + 7 = 15$

Think of $8 + 7 = 15$
to find the difference for
a related fact:
 $15 - 7 = \underline{\quad}$



$15 - 7 = \underline{8}$



More information on this strategy is available on Animated Math Model #18.

Lesson 3.6


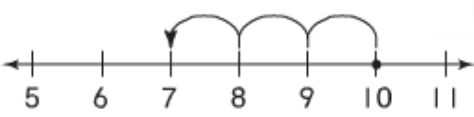
Practice Subtraction Facts

Add and subtract within 20.

Here are two ways to find differences.


$10 - 3 = \underline{\quad}$

Count back 1, 2, or 3.



$10 - 1 = \underline{9}$
 $10 - 2 = \underline{8}$
 $10 - 3 = \underline{7}$

Think of a related addition fact.



$3 + 7 = \underline{10}$
so, $10 - 3 = \underline{7}$

More information on this strategy is available on Animated Math Models # 18, 19, 20, and 21.

Lesson 3.7

Use Ten to Subtract


Add and subtract within 20.

You can get to ten to help find differences.

$13 - 7 = \underline{\quad}$

Step 1 Start with the first number.

Step 2 Subtract ones to get to 10.



$13 - 3 = 10$

Step 3 Subtract the rest from the 10.

Think: I had 7. I subtracted 3 to get to 10.
Now I subtract the 4 I have left.

$10 - \underline{4} = \underline{6}$

Step 4 Write the difference.

$13 - 7 = \underline{6}$

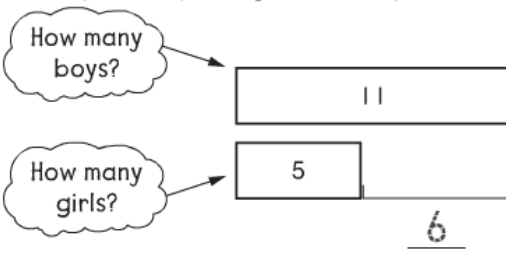
Lesson 3.8

Algebra • Use Drawings to Represent Problems

Represent and solve problems involving addition and subtraction.

You can use bar models to show problems.

There are 5 girls and 11 boys at the park.
How many more boys than girls are at the park?



Write a number sentence. $11 - 5 = 6$

There are 6 more boys than girls.

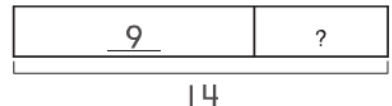
More information on this strategy is available on Animated Math Model #22.

Lesson 3.9

Algebra • Use Equations to Represent Problems

Represent and solve problems involving addition and subtraction.

Some red fish and 9 green fish are in a tank.
The tank has 14 fish. How many red fish are there?



Write a number sentence.

Use a ■ for the missing number.

$$14 - 9 = \blacksquare$$

5 red fish in the tank.

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


Lesson 3.10

Problem Solving • Equal Groups

Work with equal groups of objects to gain foundations for multiplication.

Clarence puts grapes in 4 rows.
He puts 5 grapes in each row.
How many grapes does Clarence have?

Unlock the Problem

What do I need to find? <u>how many grapes</u> Clarence has _____	What information do I need to use? Clarence has <u>4</u> rows of grapes. He puts <u>5</u> grapes in each row.
Show how to solve the problem.  Clarence has <u>20</u> grapes.	

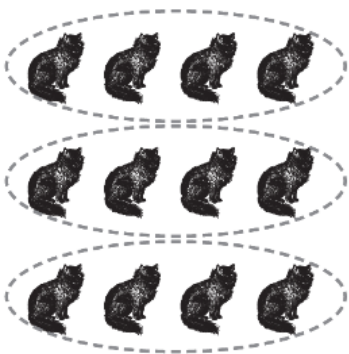
Lesson 3.11

Algebra • Repeated Addition

Work with equal groups of objects to gain foundations for multiplication.

Find the total number of cats.

- Circle each row.
3 equal rows
- Count how many rows.
- Count how many in one row.
4 cats in one row
- Write an addition sentence.
Add the number of cats in each row.


$$\underline{4} + \underline{4} + \underline{4} = \underline{12}$$

Vocabulary

Sums – the answers to addition problems

Addends – any of the numbers that are added

Differences – the answers to subtraction problems