Rising Into Third Grade

All rising into third grade students must read the required book choice at their grade level and complete the accompanying assignment. They must also read one additional book of their choice from the approved book list at their grade level, and then complete a one paragraph written summary. Each assignment is due on the first day of school.

Happy Reading!

Novel	Author
Required: *Pippi Longstocking	Astrid Lindgren
The 100 Dresses	Eleanor Estes
Mr. Popper's Penguins	Richard & Florence Atwater
Pocahontas	Edgar Parin D'Aulaire
The Emperor's New Clothes	Hans Christian Andersen

Pippi Longstocking Reading Assignment:

Pippi Longstocking is a fun and classic tale filled with adventures. Many generations have enjoyed this hilarious tale, and now it's your turn! As you read, take good notes, and after you are finished, please write one neat and well thought out paragraph to answer the following question:

- Pippi Longstocking is a bold girl of amazing strength, living on her own, doing whatever she pleases, and getting into all sorts of mischievous adventures. Despite these truths, we see that Pippi is generous, kind, hard-working, loyal, and compassionate. What lessons can we learn from Pippi's decisions and her character?

Compelling Questions to Ask Your Reader

Parents: You don't have to ask all of these questions during every story/chapter. Picking one or two is perfectly fine!



1. What does the character want, and why can't he or she have it?

a. Every story's main character wants something and can't have it-that's the conflict. Something is inhibiting the character from getting what he or she most
desires. There usually isn't only one right answer to this question.

2. Should he or she have done that?

a. Should is an incredibly powerful word-- one must be thought through, reasoned with, and backed up. The answer might seem obvious on the surface, but ask this question once or twice, and you may be surprised at how much fun you can have with it.

3. How is X like Y? Or how is X different from Y?

- a. Considering how something is like or different from something else is how we develop metaphors. Metaphors matter because they are how we understand and communicate ideas to one another.
- b. Do not limit the comparisons to characters alone-- include places and objects.

4. Who is the most in the story?

- a. Insert any character trait into the blank space. You'll probably need to follow up this question with a second one-- something like, "What makes you say that?" or, "Can you give me an example?"
- b. Here are some character traits to get you started: ambitious, bold, brave, bright, calm, capable, careful, cautious, charming, considerate, cowardly, creative, dangerous, dauntless, deceptive, disloyal, demanding, determined, faithful, foolish, friendly, generous, grateful, greedy, happy, hard-working, honest, humorous, intelligent, loving, merciful, mysterious, naughty, nervous, noble, obnoxious, persistent, pleasant, proud, reliable, resourceful, restless, sad, selfish, selfless, sharp-witted, sincere, thoughtful, unkind, unselfish, virtuous, wise, witty...

5. What does this story or character remind you of?

a. Again, we want our children to learn to think in metaphor, because metaphors are how we understand and communicate ideas.

6. What is the character most afraid of?

a. We learn a lot about a person by talking time to consider their greatest fears. This doesn't have to be the main character-- you can ask it about any of the central characters in the story who have their own fears and desires.

7. What would you change about the setting or main character if you were writing this book?

a. This question might work best for children over age seven. They get the benefit of using someone else's world and characters as they play with language and plot twists.

8. What surprised you most?

a. We can discover a lot about our kids by finding out what catches them off-guard, and is especially good after reading picture books, as picture book authors and illustrators often work very hard to surprise their readers.

9. Which character most reminds you of yourself?

- a. Most often we'll relate to the main character, but the conversations that follow this realization can lead to some great discussions and a new understanding of each other.
- b. Seeing ourselves in the books we read can shed a lot of light-- not just on the story, but on our own strengths and weaknesses as we live out our real day-to-day lives.

10. What is something you don't want to forget from this book (or from this chapter)?

- a. To answer this question, the reader must recall the story and bring to mind a specific scene.
- b. It's an easier question to answer than "What was your favorite part of the story?" because there's no pressure to find the very best answer. You can simply name any one thing you don't want to forget.

The conversations you unleash by asking open-ended questions in an easygoing, friendly way are limitless. You may find that one or two questions are your own go-tos, your favorites to ask your kids time and time again. A friendly disposition and a collection of open-ended questions such as these are all you need to have meaningful, lasting conversations with your kids about books.

Remember, the habit of asking compelling questions is more important than getting compelling answers. Make asking questions and having conversations as frequent and natural as asking your kids how their day went, or what they did at their friend's house. Don't worry too much about whether their answers are profound. That will come with time and practice. Instead, focus on helping your child develop a habit of asking questions.

^{*}Questions and descriptions taken from the book, <u>The Read-Aloud Family</u>, by Sarah Mackenzie, copyright 2018.

Summer Math Homework

Rising Third Grade Students

Dear parents,

The following math packet for your scholar includes the first 8 lessons in the Saxon Math 5/4 textbook that we use to teach our third graders. This packet has a WARM-UP section for quick mental math practice, as well as, a NEW CONCEPTS section where it explains the lesson and provides various examples for the scholar to follow. Finally, there is the LESSON PRACTICE and MIXED PRACTICE sections, where your scholar will be completing their work. The LESSON PRACTICE contains problems that directly relate to the lesson being taught. The MIXED PRACTICE is a spiral review of the previous lessons and concepts learned in second grade.

Assignment

Please have your scholar complete the <u>MIXED PRACTICE questions 1-30</u> for *each* lesson over the summer. We recommend breaking up each lesson into one week working on a few problems each night. This is to ensure your scholar is not overwhelmed at the end of the summer with all eight lessons.

Please make sure each lesson is completed neatly and correctly numbered with the scholar's name in the upper right hand corner of their paper, followed underneath by the lesson number, and the number of questions completed which is 1-30. Scholars *must* show their work for all required problems.

This packet is to be turned in to your scholar's third grade teacher on the **first day of school** and will be taken as their first math grade of the year.

Thank you for your continued support in your scholar's education and have a wonderful summer!!

Sincerely,

The Third Grade Team

Review of Addition • Addition Stories • Missing Addends, Part 1

WARM-UP

Facts Practice: 100 Addition Facts (Test A)[†]

Mental Math:

Add ten to a number:

$$d. 5 + 10$$

$$e. 25 + 10$$

$$f. 10 + 8$$

Patterns:

As a class, count by twos from 2 through 40 while the teacher or a student lists the numbers in a column on the board. Study the list. Which digits appear as final digits? Which digits do not appear as final digits?

NEW CONCEPTS

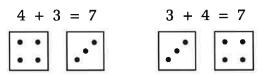
addition

Review of Addition is the combining of two groups into one group. For example, when we count the dots on the top faces of a pair of dot cubes (dice), we are adding.

The numbers that are added are called **addends**. The answer is called the sum. The expression 4 + 3 = 7 is a number sentence. A number sentence is a complete sentence that uses numbers and symbols instead of words. Here we show two ways to add 4 and 3:

[†]For instructions on how to use the Warm-up activities, please consult the preface.

Notice that if the order of the addends is changed, the sum remains the same. This property of addition is true for any two numbers and is called the **commutative property of addition**. When we add two numbers, either number may be first.



When we add zero to a number, the number is not changed. This property of addition is called the identity property of addition. If we start with a number and add zero, the sum is identical to the starting number.

$$4 + 0 = 4$$
 $9 + 0 = 9$ $0 + 7 = 7$

Solution A number sentence for the picture is 4 + 5 = 9. The number sentence 5 + 4 = 9 is also correct.

When adding three numbers, the numbers may be added in any order. Here we show six ways to add 4, 3, and 5. Each way the answer is 12.

Example 2 Show six ways to add 1, 2, and 3.

Solution We can form two number sentences that begin with the addend 1.

$$1 + 2 + 3 = 6$$
 $1 + 3 + 2 = 6$

We can form two number sentences that begin with the addend 2.

$$2 + 1 + 3 = 6$$
 $2 + 3 + 1 = 6$

We can form two number sentences that begin with the addend 3.

$$3 + 1 + 2 = 6$$
 $3 + 2 + 1 = 6$

Addition Many word problems tell a story. Some stories are about stories putting things together. Look at this story:

John had 5 marbles. He bought 7 more marbles. Now John has 12 marbles. There is a pattern to this story. John had **some** marbles. Then he bought **some more** marbles. When he put the marbles together, he found the **total** number of marbles. "**Some and some more**" stories like this have an addition pattern.

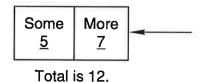
PATTERN	PROBLEM		
Some	5 marbles		
+ Some more	+ 7 marbles		
Total	12 marbles		

Here we show the pattern written sideways.

PATTERN: Some + some more = total

PROBLEM: 5 marbles + 7 marbles = 12 marbles

Here we show a diagram for the story:



Example 3 Miguel saw 8 ducks. Then he saw 7 more ducks. How many ducks did Miguel see in all?

Solution This problem follows the idea of "some and some more." We show the addition pattern below.

PATTERN: Some + some more = total

PROBLEM: 8 ducks + 7 ducks = 15 ducks

We find the total number by adding 8 and 7. Miguel saw 15 ducks in all.

Example 4 Samantha saw rabbits in the field. She saw 5 rabbits in the east field. She saw 3 rabbits in the west field. She saw 4 rabbits in the north field. How many rabbits did Samantha see in all?

Solution In this story there are three addends.

PATTERN	PROBLEM
Some	5 rabbits
Some more	3 rabbits
+ Some more	+ 4 rabbits
Total	12 rabbits

Samantha saw 12 rabbits in all.

part 1

Missing Some of the problems in this book will have an addend addends, missing. When one addend is missing and the sum is given, the problem is to find the missing addend. Can you figure out the missing addend in this number sentence?

Since we know that 2 + 5 = 7, the missing addend is 5. We will often use a letter to represent a missing number, as we see in the example below.

Example 5 Find each missing addend:

(a)
$$\frac{4}{N}$$

(b)
$$B + 6 = 10$$

- **Solution** (a) The letter N stands for a missing addend. Since 4 + 3 = 7, the letter N stands for the number 3 in this number sentence.
 - (b) In this problem the letter B is used to stand for the missing addend. Since 4 + 6 = 10, the letter B stands for the number 4.

LESSON PRACTICE

Practice set Add:

$$a. 5 + 6$$

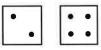
b.
$$6 + 5$$

$$c. 8 + 0$$

$$\mathbf{d.} \ 4 + 8 + 6$$

$$e. 4 + 5 + 6$$

- f. Diane ran 5 laps in the morning. She ran 8 laps in the afternoon. How many laps did she run in all?
- g. Write two number sentences for this picture to show the commutative property:



h. Show six ways to add 1, 3, and 5.

Find each missing addend:

i.
$$7 + N = 10$$

$$j. A + 8 = 12$$

Problem set

- 1. There were 5 students in the first row and 7 students in the second row. How many students were in the first two rows?
- 2. Ling had 6 coins in her left pocket and 3 coins in her right pocket. How many coins did Ling have in both pockets?

Find each sum or missing addend:

$$3.9 + 4$$

$$4.8 + 2$$

5.
$$\frac{4}{N}$$

6.
$$W + 5 = 8$$

8

0

7.
$$\frac{6}{P}$$

8.
$$Q + 8$$

9.
$$3 + 4 + 5$$

10.
$$4 + 4 + 4$$

11.
$$6 + R = 10$$

12.
$$X + 5 = 6$$

 \boldsymbol{Z}

17.
$$M + 9 \over 10$$

$$\frac{9}{+F}$$
 19.

20.
$$0 + N$$

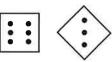
21.
$$3 + 2 + 5 + 4 + 6$$

22.
$$2 + 2 + 2 + 2 + 2 + 2 + 2$$

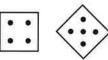
18.

Write a number sentence for each picture:

23.



24





- **25.** Show six ways to add 2, 3, and 4.
- **26.** Sometimes a missing number is shown by a shape instead of a letter. Choose the correct number for Δ in the following number sentence:

$$\Delta + 3 = 10$$

LESSON



Missing Addends, Part 2

WARM-UP

Facts Practice: 100 Addition Facts (Test A)

Mental Math:

Add ten to a number:

a. 40 + 10

b. 26 + 10

c. 39 + 10

d.7 + 10

e. 10 + 9

f. 10 + 63

Patterns:

As a class, count by fives from 5 to 100 while the teacher or a student lists the numbers in a column on the board. Which digits appear as final digits? Which numbers in the list are numbers we say when we count by twos from 2 to 100?

NEW CONCEPT

Derek rolled a dot cube three times. The picture below shows the top face of the cube for the first two rolls.



First roll



Second roll

The total number of dots on all three rolls was 12. Can you draw a picture of Derek's third roll?

We will write a number sentence for this problem. The first two numbers are 5 and 3. We do not know the number of the third roll, so we will use a letter. We know that the total is 12.

$$5 + 3 + T = 12$$

To find the missing addend, we first add 5 and 3, which makes 8. Then we think, "Eight plus what number equals twelve?" Since 8 plus 4 equals 12, the third roll was

Example Find each missing addend:

(a)
$$6 \\ N \\ + 5 \\ \hline 17$$

(b)
$$4 + 3 + 2 + B + 6 = 20$$

Solution

- (a) We add 6 and 5, which makes 11. We think, "Eleven plus what number equals seventeen?" Since 11 plus 6 equals 17, the missing addend is 6.
- (b) First we add 4, 3, 2, and 6, which equals 15. Since 15 plus 5 is 20, the missing addend is 5.

LESSON PRACTICE

Practice set Find each missing addend:

a.
$$8 + A + 2 = 17$$

b.
$$B + 6 + 5 = 12$$

c.
$$4 + C + 2 + 3 + 5 = 20$$

MIXED PRACTICE

Problem set [†]1. Hoppy ate 5 carrots in the morning and 6 carrots in the afternoon. How many carrots did Hoppy eat in all?

2. Five friends rode their bikes from the school to the lake.

They rode 7 miles, then rested. They still had 4 miles to go. How many miles was it from the school to the lake?

Find each sum or missing addend:

3.
$$9 + N = 13$$

$$\begin{array}{ccc}
\mathbf{5.} & P \\
 & + 6 \\
\hline
 & 13
\end{array}$$

6.
$$5$$
 2 $+ W$ 12

[†]The italicized numbers within parentheses underneath each problem number are called *lesson reference numbers*. These numbers refer to the lesson(s) in which the major concept of that particular problem is introduced. If additional assistance is needed, refer to the discussion, examples, or practice problems of that lesson.

9. 8 10. 9 11. 2 12. 3 (1) 7 (1) 9
$$+ 3$$
 $+ 3$ $+ 6$ $+ 2$

17. 5
 18. 8
 19. 2
 20. 5

 (2) 3
 (1) 4
 (2)
$$X$$
 (1) 2

 $+ T$
 $+ 6$
 $+ 7$
 $+ 6$

 10
 $+ 6$
 $+ 1$
 $+ 6$

21. 5 + 5 + 6 + 4 +
$$X = 23$$

22. Show six ways to add 4, 5, and 6.

Write a number sentence for each picture:

26. Which number is in the following number sentence?

$$6 + \square = 10$$

- A. 4
- B. 6
- C. 10
- D. 16

3

Sequences • Digits

WARM-UP

Facts Practice: 100 Addition Facts (Test A)

Mental Math:

Add ten, twenty, or thirty to a number:

g. One less than 24 is 23. What number is one less than 36? ... one less than 43? ... one less than 65?

Vocabulary:

Copy these two patterns on a piece of paper. In each of the six boxes, write either "addend" or "sum."

NEW CONCEPTS

Sequences Counting is a math skill we learn early in life. Counting by ones, we say "one, two, three, four, five,"

These numbers are called **counting numbers**. The counting numbers continue without end. We may also count by numbers other than one.

Counting by twos: 2, 4, 6, 8, 10, ...

Counting by fives: 5, 10, 15, 20, 25, ...

These are examples of counting patterns. A counting pattern is a **sequence**. The three dots mean that the sequence continues without end. A counting sequence may count up or count down. We can study a counting sequence to discover a rule for the sequence. Then we can find more numbers in the sequence.

Example 1	Find the rule and the next three numbers of this counting sequence:				
	10, 20, 30, 40,, ,, ,				
Solution	The rule is count up by tens . Counting this way, we find that the next three numbers are 50 , 60 , and 70 .				
Example 2	Find the rule of this counting sequence. Then find the missing number in the sequence.				
	30, 27, 24, 21,, 15,				
Solution	The rule is count down by threes. If we count down three from 21, we find that the missing number in the sequence is 18. We see that 15 is three less than 18, which follows the rule.				
Digits	To write numbers, we use digits. Digits are the numerals 0, 1, 2, 3, 4, 5, 6, 7, 8, and 9. The number 356 has three digits, and the last digit is 6. The number 67,896,094 has eight digits, and the last digit is 4.				
Example 3	The number 64,000 has how many digits?				
Solution	The number 64,000 has five digits .				
Example 4	What is the last digit of 2001?				
Solution	The last digit of 2001 is 1.				
LESSON PRACT	TICE				
Practice set	Write the rule and the next three numbers of each counting sequence: a. 10, 9, 8, 7,,,				
	b. 3, 6, 9, 12,,,				
	Find the missing number in each counting sequence: c. 80, 70,, 50, d. 8,, 16, 20, 24,				
	How many digits are in each number? e. 18 f. 5280 g. 8,403,227,189				
	What is the last digit of each number? h. 19 i. 5281 j. 8,403,190				

Problem set

- 1. Blanca has 5 dollars, Susan has 6 dollars, and Britt has 7 dollars. Altogether, how much money do the three girls have?
- 2. On William's favorite CD there are 9 songs. On his next⁽¹⁾ favorite CD there are 8 songs. Altogether, how many songs are on William's two favorite CDs?
- 3. How many digits are in each number?
 - (a) 593
- (b) 180
- (c) 186,527,394
- 4. What is the last digit of each number?
 - " (a) 3427
- (b) 460
- (c) 437,269

Find each missing addend:

5.
$$5 + M + 4 = 12$$

6. 8 + 2 +
$$W = 16$$

Write the next number in each counting sequence:

Write the rule and the next three numbers of each counting sequence:

Find the missing number in each counting sequence:

19. (3)	How many small rectangles are shown? Count by twos.	
	How many X's are shown? Count by fours.	XX XX XX XX XX XX XX XX XX

21. Write a number sentence for the picture below.



- **26.** If $\Delta = 3$ and $\Box = 4$, then $\Delta + \Box$ equals which of the following?
 - A. 3 B. 4 C. 5 D. 7

4

Place Value

WARM-UP

Facts Practice: 100 Addition Facts (Test A)

Mental Math:

Add ten, twenty, or thirty to a number:

a. 66 + 10

b. 29 + 20

c. 10 + 76

d.38 + 30

e. 20 + 6

f. 40 + 30

g. What number is one less than 76? ... than 49? ... than 68?

Problem Solving:

Tom has a total of nine coins in his left and right pockets. Copy and complete this table listing the possible number of coins in each pocket. Your table should have ten rows of numbers.

Number of Coins				
Left	Right			
0	9			
1				

NEW CONCEPT

To help us with the idea of **place value**, we will use pictures to show different amounts of money. We will use \$100 bills, \$10 bills, and \$1 bills.

Example 1 How much money is shown in the picture below?







Solution Since there are 2 hundreds, 4 tens, and 3 ones, the amount of money shown is \$243.

Example 2 Use money manipulatives or draw a diagram to show how to make \$324 with \$100 bills, \$10 bills, and \$1 bills.

Solution To show \$324, we use 3 hundreds, 2 tens, and 4 ones.





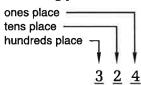


3 hundreds

2 tens

4 ones

The value of each place is determined by its position. Three-digit numbers like 324 occupy three different places.



Example 3 Use money manipulatives or draw a diagram to show both \$203 and \$230. Which is the greater amount of money, \$203 or \$230?

Solution Using bills, we show \$203 and \$230 like this:





\$203





\$230

The amount \$230 is greater than \$203.

Example 4 The digit 7 is in what place in 753?

Solution The 7 is in the third place from the right, which shows the number of hundreds. So the 7 is in the **hundreds place**.

LESSON PRACTICE

Practice set

- a. Use money manipulatives or draw a diagram to show \$231 in \$100 bills, \$10 bills, and \$1 bills.
- **b.** Use money manipulatives or draw a diagram to show \$213. Which is less, \$231 or \$213?
- c. The digit 6 is in what place in each of these numbers?
 (a) 16 (b) 65 (c) 623
- d. Use three digits to write a number equal to 5 hundreds, 2 tens, and 3 ones.

Problem set

- 1. When Robert looked at the cards in his hand, he saw 3 clubs.
 - 4 diamonds, 5 spades, and 1 heart. How many cards did he have in all?
- 2. Write a number sentence for this (1) picture:





3. How many cents are in 4 nickels? Count by fives.









Find each sum or missing addend:

$$\begin{array}{ccc}
4. & 4 \\
 & + N \\
\hline
 & 12
\end{array}$$

6. 13
$$+ Y$$
 19

7.
$$7 + S$$

$$8. \ 4 + N + 5 = 12$$

$$9. N + 2 + 3 = 8$$

Write the rule and the next three numbers of each counting sequence:

- **10.** 9, 12, 15, ____, ___, ...
- **11.** 30, 24, 18, ____, ___, ___, ...
- **12.** 12, 16, 20, _____, ____,
- **13.** 35, 28, 21, ____, ___,
- 14. How many digits are in each number?
 - (a) 37,432
- (b) 5,934,286
- (c) 453,000
- **15.** What is the last digit of each number?
- (a) 734
- (b) 347
- (c) 473
- 16. Draw a diagram to show \$342 in \$100 bills, \$10 bills, and (4) \$1 bills.
- 17. How much money is shown by this picture?







Find the missing number in each counting sequence:

- **18.** 24, _____, 36, 42,
- **19.** 36, 32, _____, 24, ...
- **20.** How many ears are on 10 rabbits? Count by twos.
- 21. The digit 6 is in what place in 365? $^{(4)}$
- **22.** Write a number sentence for this picture:





Find each missing addend:

23.
$$2 + 5 + 3 + 2 + 3 + 1 + N = 20$$

24.
$$4 + B + 3 + 2 + 5 + 4 + 1 = 25$$

- **25.** Show six ways to add 6, 7, and 8.
- **26.** In the number 123, which digit shows the number of hundreds?
 - A. 1
- B. 2
- C. 3
- D. 4

Ordinal Numbers • Months of the Year

WARM-UP

Facts Practice: 100 Addition Facts (Test A)

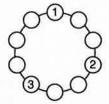
Mental Math:

Add a number ending in zero to another number:

f. What number is one less than 28? ... 87? ... 54?

Patterns:

Copy this design of ten circles on a piece of paper. In each circle, write a counting number from 1 to 10 that continues the pattern of "1, skip, skip, 2, skip, skip, 3,"



NEW CONCEPTS

numbers

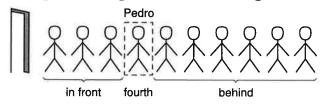
Ordinal If we want to count the number of children in a line, we say, "one, two, three, four," These numbers tell us how many children we have counted. To describe a child's position in a line, we use words like first, second, third, and fourth. Numbers that tell position or order are called **ordinal numbers**.

Example 1

There are ten children in the lunch line. Pedro is fourth in line. (a) How many children are in front of Pedro? (b) How many children are behind him?

Solution

A diagram may help us understand the problem. We draw and label a diagram using the information given to us.



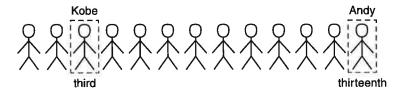
- (a) Since Pedro is fourth in line, we see that there are three children in front of him.
- (b) The rest of the children are behind Pedro. From the diagram, we see that there are six children behind him.

Many times ordinal numbers are abbreviated. The abbreviation consists of a counting number and the letters st, nd, rd, or th. Here we show some abbreviations.

first second third	1st 2nd 3rd	sixth seventh	6th 7th 8th	eleventh twelfth thirteenth	11th 12th 13th
fourth	4th	ninth	9th	twentieth	20th
fifth	5th	tenth	10th	twenty-first	21st

Example 2 Andy is 13th in line. Kobe is 3rd in line. How many students are between Kobe and Andy?

Solution We begin by drawing a diagram.



From the diagram we see that there are nine students between Kobe and Andy.

the year

Months of We use ordinal numbers to describe the months of the year and the days of each month. This table lists the twelve months of the year in order. A common year is 365 days long. A leap year is 366 days long. The extra day in a leap year is added to February.

Month	ORDER	DAYS
January	first	31
February	second	28 or 29
March	third	31
April	fourth	30
May	fifth	31
June	sixth	30
July	seventh	31
August	eighth	31
September	ninth	30
October	tenth	31
November	eleventh	30
December	twelfth	31

When writing dates, we can use numbers to represent the month, day, and year. For example, if Robert was born on the second day of June in 1988, then he could write his birth date this way:

6/2/1988

The form for this date is "month/day/year." The 6 stands for the sixth month, which is June, and the 2 stands for the second day of the month.

- Example 3 Jenny wrote her birth date as 7/8/89. (a) In what month was Jenny born? (b) In what year was she born?
 - **Solution** (a) In the United States we usually write the number of the month first. The first number Jenny wrote was 7. She was born in the seventh month, which is **July**.
 - (b) When confusion is unlikely, we often abbreviate years by using only the last two digits of the year. So we assume that Jenny was born in **1989**.
- Example 4 Mr. Chitsey's driver's license expired on 4/29/03. Write that date using the name of the month and all four digits of the year.
 - Solution The fourth month is April. The year 03 represents 2003. So Mr. Chitsey's license expired on April 29, 2003.

LESSON PRACTICE

- **Practice set**
- **a.** Kiyoko was third in line, and Kayla was eighth in line. How many people were between them?
- b. Write your birth date in month/day/year form.
- **c.** In month/day/year form, write the date that Independence Day will next be celebrated.

MIXED PRACTICE

- **Problem set**
- 1. At the grocery store there were 5 people in the first line, 6 people in the second line, and 4 people in the third line. Altogether, how many people were in the three lines?

Find each missing addend:

6. 2 7. 2 8.
$$R$$
 9. 3 (1) $+ A$ (1) $+ 5$ 11 $- 5$

10. Todd was born on 8/15/93. Write Todd's birth date using (5) the name of the month and all four digits of the year.

Write the rule and the next three numbers of each counting sequence:

- **11.** 12, 15, 18, ____, ___,
- **12.** 16, 20, 24, _____, ____,
- **13.** 28, 35, 42, _____, ____,

Find the missing number in each counting sequence:

- **16.** Draw a diagram to show \$432 in \$100 bills, \$10 bills, and (4) \$1 bills.
- 17. Write a number sentence for the picture below.



- 18. The digit 8 is in what place in 845?
- 19. Use three digits to write the number that equals
 (4) 2 hundreds plus 3 tens plus 5 ones.
- **20.** If the pattern is continued, what will be the next circled number?

$$1, 2, 3, 4, 5, 6, 7, 8, 9, 10, \dots$$

21. Seven boys have how many eyes? Count by twos.

22.	5	23.	5	24.	9	25.	8
(1)	8	(1)	7	(1)	7	(1)	7
	4		3		6		3
	7		8		5		5
	4		4		4		4
	+ 3	9	+ 2	_	+ 2	i.	+ 9

- **26.** Jenny was third in line. Jessica was seventh in line. How many people were between Jenny and Jessica?
 - A. 3
- B. 4
- C. 5
- D. 6

LESSON

6

Review of Subtraction • Addition and Subtraction Fact Families

WARM-UP

Facts Practice: 100 Addition Facts (Test A)

Mental Math:

Nine is one less than ten. When adding 9 to a number, we may mentally add 10 and then think of the number that is one less than the sum. For 23 + 9 we may think, "23 + 10 is 33, and one less than 33 is 32."

Problem Solving:

Terrell has a total of nine coins in his left and right pockets. He has **some coins** (at least two) in each pocket. Make a table that lists the possible number of coins in each pocket.

NEW CONCEPTS

Review of Remember that when we add, we combine two groups into subtraction one group.

When we **subtract**, we separate one group into two groups. To take away two from six, we subtract.

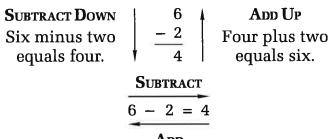
When we subtract one number from another number, the answer is called the **difference**. If we subtract two from six, the difference is four.

$$\begin{array}{c}
6 \\
-2 \\
\hline
4
\end{array}$$
 difference

Here we write "two subtracted from six" horizontally:

$$6 - 2 = 4$$

We can check a subtraction answer by adding the difference to the number subtracted. This is like doing the problem "in reverse." The sum of the addition should equal the starting number.



The order of numbers matters in subtraction. The expression 6 - 2 means "take two from six." This is not the same as 2 - 6, which means "take six from two."

Addition and

A fact family is a group of three numbers that can be arranged subtraction to form four facts. The three numbers 2, 4, and 6 form an **fact families** addition and subtraction fact family.

Recognizing addition and subtraction fact families can help us learn the facts.

The numbers 3, 5, and 8 form an addition and subtraction Example fact family. Write two addition facts and two subtraction facts using these three numbers.

LESSON PRACTICE

Practice set Subtract. Check your answers by adding.

- f. The numbers 5, 6, and 11 form a fact family. Write two addition facts and two subtraction facts using these three numbers.
- g. Describe how to check a subtraction answer. Show an example.

23

Problem set

1. 14 **2.** 15 **3.** 9 **4.** 11
$$\underline{-5}$$
 $\underline{-6}$ $\underline{-8}$ $\underline{-6}$ $\underline{-4}$ $\underline{-7}$

5. 12 **6.** 11 **7.** 15 **8.** 9
$$\stackrel{(6)}{=}$$
 $\stackrel{-}{=}$ $\stackrel{(6)}{=}$ $\stackrel{-}{=}$ $\stackrel{(6)}{=}$ $\stackrel{-}{=}$ $\stackrel{(6)}{=}$ $\stackrel{-}{=}$

9. 13 10. 12 11. 8 12. A
$$\frac{(6)}{-5}$$
 $\frac{-6}{17}$ $\frac{11}{17}$ $\frac{11}{17}$ $\frac{12}{17}$ $\frac{A}{14}$

13. 3 +
$$W = 11$$
 14. 1 + 4 + $M = 13$

15. The numbers 4, 6, and 10 form a fact family. Write two addition facts and two subtraction facts using these three numbers.

Write the rule and the next three numbers of each counting sequence:

- **19.** How many days are in the tenth month of the year?
- **20.** Draw a diagram to show \$326.
- **21.** The digit 6 is in what place in 456?

Find each missing addend:

22.
$$2 + N + 4 = 13$$
 23. $A + 3 + 5 = 16$

24.
$$1 + 2 + 3 + M + 5 + 6 = 20$$

- **25.** Show six ways to add 3, 4, and 5.
- 26. The ages of the children in Tom's family are 7 and 9. The ages of the children in Mary's family are 3, 5, and 9. Which number sentence shows how many children are in both families?

A.
$$3 + 7 = 10$$

B.
$$7 + 9 = 16$$

C.
$$2 + 3 = 5$$

D.
$$3 + 5 + 9 = 17$$

LESSON



Writing Numbers Through 999

WARM-UP

Facts Practice: 100 Addition Facts (Test A)

Mental Math:

Add one less than ten to a number:

$$a. 28 + 9$$

b. 44 + 9

c. 87 + 9

Review:

d.63 + 20

e. 46 + 50

f. 38 + 30

Patterns:

The months of the year repeat. Twelve months after January is January of the next year. Twenty-four months after January is January again. (a) What month is twenty-five months after January? (b) On Valentine's Day, Kadeeja's sister was 22 months old. In what month was Kadeeja's sister born?

NEW CONCEPT

Whole numbers are the counting numbers and the number zero.

To write the names of whole numbers through 999 (nine hundred ninety-nine), we need to know the following words and how to put them together:

0 zero 10 ten 20 twenty 1 one 11 eleven 30 thirty	
1 one 11 eleven 30 thirty	
1 0 to 10 to	
2 two 12 twelve 40 forty	
3 three 13 thirteen 50 fifty	
4 four 14 fourteen 60 sixty	
5 five 15 fifteen 70 seventy	y
6 six 16 sixteen 80 eighty	
7 seven 17 seventeen 90 ninety	
8 eight 18 eighteen 100 one hu	ndred
9 nine 19 nineteen	

You may refer to this chart when you are asked to write the names of numbers in the problem sets.

Note: The names of two-digit numbers that are greater than 20 and do not end with the number 0 are written with a hyphen.

Example 1 Use words to write the number 44.

Solution We use a hyphen and write **"forty-four."** Notice that "forty" is spelled without a "u."

To write three-digit numbers, we first write the number of hundreds and then we write the rest of the number. We do not use the word "and" when writing whole numbers.

Example 2 Use words to write the number 313.

Solution First we write the number of hundreds. Then we write the rest of the number to get **three hundred thirteen.** (We do not write "three hundred and thirteen.")

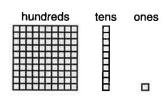
Example 3 Use words to write the number 705.

Solution First we write the number of hundreds. Then we write the rest of the number to get **seven hundred five.**

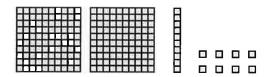
Example 4 Use digits to write the number six hundred eight.

Solution Six hundred eight means "six hundreds and eight ones." There are no tens, so we write a zero in the tens place and get **608**.

In Lesson 4 we used \$100 bills, \$10 bills, and \$1 bills to demonstrate place value. Here we show another model for place value. Small squares stand for ones. The long, tensquare rectangles stand for tens. The large, hundred-square blocks stand for hundreds.



Example 5 Use words to write the number shown by this model:



Solution Two hundreds, one ten, and eight ones is 218, which we write as two hundred eighteen.

LESSON PRACTICE

Practice set Use words to write each number:

a. 0

b. 81

c. 99

d. 515

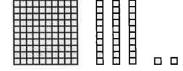
e. 444

f. 909

Use digits to write each number:

g. nineteen

- h. ninety-one
- i. five hundred twenty-four
- j. eight hundred sixty
- k. Use words to write the number shown by this model:



MIXED PRACTICE

Problem set1. Annie has 8 dollars. She needs 6 dollars more to buy the radio. How much does the radio cost?

2. Bixby poured 8 ounces of soda into a pitcher containing 8 ounces of juice. How many ounces of liquid were in the mixture?

Find each missing addend:

3.
$$5 + N + 2 = 11$$

4.
$$2 + 6 + N = 15$$

Subtract. Check by adding.

Use digits to write each number:

9. two hundred fourteen

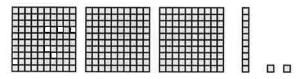
10. five hundred thirty-two

Use words to write each number:

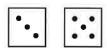
11. 301

12. 320

13. Use words to write the number shown by this model:



14. Write a number sentence for this (1) picture:



Write the rule and the next three numbers of each counting sequence:

Find the missing number in each counting sequence:

19. How much money is shown by this picture?





- **20.** The numbers 7, 8, and 15 form a fact family. Write two addition facts and two subtraction facts using these three numbers.
- **21.** Brad was twelfth in line. His sister was sixth in line. How many people were between Brad and his sister?
- **22.** Six nickels is equal to how many cents? Count by fives. (3)

25.
$$5 + 8 + 6 + 4 + 3 + 7 + 2$$

26. Which addition sentence is related to 12 - 5 = 7?

A.
$$7 + 5 = 12$$

B.
$$12 + 5 = 17$$

C.
$$12 + 7 = 19$$

D.
$$12 - 7 = 5$$

LESSON

8

Adding Money

WARM-UP

Facts Practice: 100 Subtraction Facts (Test B)

Mental Math:

Add one less than ten to a number:

$$a. 56 + 9$$

b. 63 + 9

c. 48 + 9

Review:

d.74 + 20

e. 60 + 30

f. 49 + 40

Problem Solving:

Terrell has a total of nine coins in his left and right pockets. He has some coins in each pocket. He has more coins in his right pocket than in his left pocket. Make a table that lists the possible number of coins in each pocket.

NEW CONCEPT

Sakura had \$24. Then on her birthday she was given \$15. How much money does Sakura now have?

We can use \$10 bills and \$1 bills to add \$15 to \$24.

Sakura had \$24.

She was given \$15. + 1 5

Now she has ...

The total is 3 tens and 9 ones, which is \$39.

We can also add \$24 and \$15 with pencil and paper. When we use pencil and paper, we first add the digits in the ones place. Then we add the digits in the tens place. (Remember to include the dollar sign in the answer.)

Example Add: \$32 + \$7

Solution To add with pencil and paper, we write the numbers so that the digits in the ones place are lined up.

LESSON PRACTICE

Practice set Add:

$$a. $53 + $6$$

MIXED PRACTICE

Problem set Use digits to write each number:

- 1. three hundred forty-three
- 2. three hundred seven
- **3.** Use words to write the number 592.

Find each missing addend:

$$\begin{array}{cccc}
4. & 2 \\
& 4 \\
& + N \\
\hline
& 12
\end{array}$$

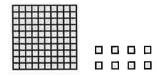
5.
$$R$$
 + 6 10

6. 1
$$T + 7$$
 14

7. 2
$$6 + N$$
 13

16. Grey has \$23. Beckie has \$42. Together, Grey and Beckie $\binom{(1,8)}{}$ have how much money?

17. Use words to write the number shown by this model:



18. Sarah was born on the fifth day of August in 1994. Write (5) her birth date in month/day/year form.

Write the rule and the next three numbers of each counting sequence:

- **24.** Show six ways to add 5, 6, and 7. $\frac{1}{1}$
- **25.** Write two addition facts and two subtraction facts using ⁽⁶⁾ 7, 8, and 15.
- **26.** If $7 + \blacklozenge = 15$, then which of the following is *not* true?

A.
$$\phi - 7 = 15$$

B.
$$15 - 7 = \spadesuit$$

C.
$$15 - \spadesuit = 7$$

D.
$$\phi$$
 + 7 = 15