

**Objectives**

- 22.1 Count 1–50.
- 22.2 Identify numbers 1–50 and numbers that come *before* and *after*.
- 22.3 Count decade numbers to 100.
- 22.4 Make sets of up to 50 objects by using a Hundred Chart.
- 22.5 Count on by ones from a decade number.
- 22.6 Represent a set of tens and ones by using Number Cards.
- 22.7 Recall that counting helps people explore God’s world.

BWS

**Biblical Worldview Shaping**

- **Exploring** (recall): God made the world in a way that allows us to count. Counting helps us explore and understand God’s world (22.7).

**Printed Resources**

- Instructional Aid 2: *Hundred Chart* (for each student)
- Visual 1: *Hundred Chart*
- Visuals 2–11: *Ten to One Hundred*
- Visuals: Shapes Kit (4 yellow circles)
- Student Manipulatives: Number Cards (0–9)

**Digital Resources**

- Video: Ch 4 Intro
- Games/Enrichment: Addition Flashcards

**Materials**

- Addition flashcards
- 50 UNIFIX® Cubes (for the teacher and for each student)

The Tens, Ones from the Visuals Place Value Kit may be substituted for the UNIFIX Cubes.

**Practice & Review****The Zero Principle of Addition**

Display 4 yellow circles as you read aloud the following word problem.

**Tens & Ones in Numbers to 50**

Write the number of tens and ones.  
Write the number.

Tens	Ones
4	8

48



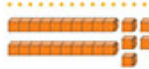
Tens	Ones
1	4

14



Tens	Ones
3	2

32



Tens	Ones
2	5

25



Tens	Ones
1	3

13



Tens	Ones
3	7

37



Tens	Ones
4	6

46

Write the number that comes after.

48 49 : 14 15 : 23 24 : 37 38 : 42 43

Write the number that comes before.

32 33 : 16 17 : 20 21 : 25 26 : 35 36

DQ has red and yellow rosebushes in his garden. One day 4 yellow roses bloomed, but no red roses bloomed. How many roses bloomed in the garden?

**How many yellow roses bloomed? 4**

Write “4” below the circles on display.

**How many red roses bloomed? 0**

Write “+ 0.”

**How many roses bloomed in the garden? 4**

Complete the number sentence:  $4 + 0 = 4$ .

**What happened when 0 red roses were added to the 4 yellow roses? The number of roses was the same: 4.**

Emphasize the principle that when an addend (number) is 0, the sum (answer) is the same as the other addend (number).

**Memorize Addition Facts**

Introduce the following facts.

0 + 0  
0 + 1 0 + 2 0 + 3 0 + 4 0 + 5 0 + 6  
1 + 0 2 + 0 3 + 0 4 + 0 5 + 0 6 + 0

Display each flashcard slowly. Invite students to give the answers.

Distribute Number Cards 0–6. Display each flashcard again. Direct the students to hold up the correct Number Card to indicate each answer.

**Count by 10s to 100**

Display Visual 1. Guide the students as they count by 10s to 100 as you point to each decade number.

How many books does DQ have?  
Write the numbers.

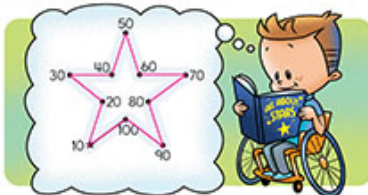


Trace the word to complete the sentence.

Counting helps me put things in \_\_\_\_\_.

### Time to Review

Start at the star and count by 10s.  
Connect the dots.



Complete each addition problem.

$$\begin{array}{r} 1 \cdot \\ + 0 \\ \hline 1 \end{array}$$

$$\begin{array}{r} 3 \dots \\ + 0 \\ \hline 3 \end{array}$$

$$\begin{array}{r} 0 \\ + 6 \dots \\ \hline 6 \end{array}$$

$$\begin{array}{r} 0 \\ + 3 \dots \\ \hline 3 \end{array}$$

46 forty-six

Math 1

Invite 10 students to form a line and hold up their hands. Guide as the students count fingers by 10s to 100.

## Engage

### Essential Question

Direct attention to the chapter opener on Worktext page 44 and read aloud the following scenario to introduce the chapter essential question.

"Look at all those books!" exclaimed DQ, as he scanned the stacks of books that had been donated to the children's room of the library. DQ and his friends Lily and Liam had come to help Miss Bings, the librarian, organize the books.

"It is a big job to put these books in order. We need to start by first counting them to find out how many total books we have," said Miss Bings as she pulled more books from a box.

DQ loved practicing his counting skills! He had an idea. "What if we put the books in stacks of 10 first? Putting them in order by 10s will make them easier to count."

Miss Bings was pleased. "Counting by 10s is a great idea, DQ! It will make our task of learning how many books we have go faster."

"Let's get started!" said Liam. The students began unpacking boxes and counting out stacks of 10 books. DQ could hardly wait to come back and check out a new book from the library!

Invite a student to read aloud the essential question. Encourage the students to consider this question and develop a response by the end of the chapter.

## Instruct

### Count 1–50

Guide a **choral counting** activity to help the students count 1–50. Display Visual 1. Ask a student to lead the class in counting from 1–50 as he or she points to each number on the chart.

### Identify Numbers 1–50 & Numbers That Come before & after

Guide an interactive activity to help the students locate numbers on a Hundred Chart. Say numbers 1–50 in random order and ask students to point to the numbers on Visual 1. Ask the students to say the numbers that are just before and just after each number.

### Count Decade Numbers up to 100

Guide a **visual analysis** of number charts to help the students count decade numbers. Display Visual 2.

**How many ambulances are in the row? 10**

**How many tens are in 10? 1**

Display Visual 3.

**How many buses are in the first row? 10**

**How many buses are in the second row? 10**

Guide the students as they count the buses by 10s.

**How many tens are in 20? 2**

Continue the activity with Visuals 4–6.

Direct attention to Visual 7. Explain that many years ago, before Christ was born, the letters *ty* meant "ten." Cover the letters *ty* in the word *sixty*. Explain that *sixty* means "six tens."

Point to the rows of trucks on the chart and guide the students as they count them by 10s.

**How many tens are in 60? 6**

Follow the same procedure with Visuals 8–11.

**Make Sets of Up to 50 Objects**

Use UNIFIX Cubes to help the students make and count sets of 10. Distribute the *Hundred Chart* pages and UNIFIX Cubes. Direct the students to place 30 cubes on their charts by placing 1 cube on each number 1–30.

**How many cubes did you put in the first row? 10**

**How many cubes did you put in the second row? 10**

**How many cubes did you put in the third row? 10**

Direct the students to connect each row of 10 cubes.

**How many groups or bars of 10 are there in 30? 3**

Guide the students as they count the bars of 10 by 10s.

**Counting on by Ones from a Decade Number**

Use UNIFIX Cubes to help the students count on from a decade number.

**How many more cubes are needed to have 34 cubes? 4**

Direct the students to put 4 more cubes on their charts.

**Is 30 more than or less than 34? less than**

Guide the students as they count the bars of 10 by 10s and the remaining cubes by counting on from 30. 10, 20, 30, 31, 32, 33, 34

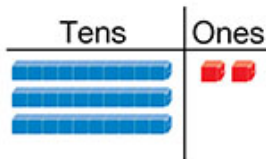
Continue the activity for 40 cubes and 5 more and 20 cubes and 6 more.

The *Hundred Chart* pages will be used again in future lessons.

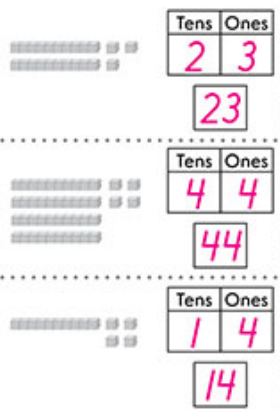
**Represent a Set of Tens & Ones**

Use Number Cards to help the students build an understanding of place value.

Distribute Number Cards 0–9. Display a Tens/Ones frame and put 3 bars of 10 UNIFIX Cubes on the Tens side and 2 individual cubes on the Ones side as shown.

**Tens & Ones in Numbers to 50**

Write the number of tens and ones.  
Write the number.



Write the number that comes just after.



Write the number that comes just before.



Guide the students as they count the bars of 10 by 10s.

**How many tens are in 30? 3**

Instruct the students to place Number Card 3 in the center of their desks.

Guide the students as they count the remaining cubes by counting on from 30.

**How many individual cubes or how many ones are there? 2**

Instruct the students to place Number Card 2 after the 3. Write the number 32 at the bottom of the display with the number 3 on the Tens side and the 2 on the Ones side. Point to the corresponding digits, 3 and then 2, as you ask the following questions.

**How many tens are in 32? 3**

**How many ones are in 32? 2**

Display 4 bars of 10 UNIFIX Cubes on the Tens side and 8 individual cubes on the Ones side.

**How many groups of 10 are in the Tens place? 4**

**How many individual cubes are in the Ones place? 8**

Guide the students as they count the bars of 10 by 10s and the individual cubes by counting on from 40.

**What is the number? 48**

Instruct the students to show the number by using their Number Cards. Write the number 48 at the bottom of the display.

Continue the activity for 29 and 35.

Match each number to the correct number of tens.

10	3 tens	60	8 tens
20	5 tens	70	6 tens
30	1 ten	80	9 tens
40	2 tens	90	10 tens
50	4 tens	100	7 tens

#### Addition Fact Review

Add.

$\begin{array}{r} 1 \\ + 0 \\ \hline 1 \end{array}$	$\begin{array}{r} 0 \\ + 2 \\ \hline 2 \end{array}$	$\begin{array}{r} 6 \\ + 0 \\ \hline 6 \end{array}$	$\begin{array}{r} 0 \\ + 4 \\ \hline 4 \end{array}$
$\begin{array}{r} 0 \\ + 0 \\ \hline 0 \end{array}$	$\begin{array}{r} 5 \\ + 0 \\ \hline 5 \end{array}$	$\begin{array}{r} 3 \\ + 0 \\ \hline 3 \end{array}$	$\begin{array}{r} 0 \\ + 1 \\ \hline 1 \end{array}$
$\begin{array}{r} 0 \\ + 6 \\ \hline 6 \end{array}$	$\begin{array}{r} 0 \\ + 3 \\ \hline 3 \end{array}$	$\begin{array}{r} 2 \\ + 0 \\ \hline 2 \end{array}$	$\begin{array}{r} 4 \\ + 0 \\ \hline 4 \end{array}$

44 forty-four

Math 1 Reviews

#### Counting to Explore God's World

Guide a **discussion** to help the students recall that counting helps them explore God's world. Remind the students that DQ, Lily, and Liam were helping Miss Bings put the books in order that had been donated to the library.

**What did Miss Bings say they needed to do first with the books?** count them

Explain that counting helps people explore God's world by learning about the things that are in it.

**What did DQ and the students need to learn about the books that were given to the library?** how many there were

Point out that counting the books to put them in stacks of 10 helped DQ and his friends put them in order.

**How does counting help you learn about God's world?** Counting helps me put things in order.

#### Apply

##### Worktext pages 45–46

Read and guide completion of page 45.

Read and explain the directions for page 46. Assist the students as they complete the page independently.

Direct attention to the biblical worldview shaping statement and guide the students as they complete the sentence.

**Objectives**

- 26.1 Make sets of up to 100 objects by using dimes and pennies.
- 26.2 Identify even and odd numbers up to 100.
- 26.3 Interpret a pictograph to compare numbers.
- 26.4 Compare numbers by using the greater-than and less-than signs.

**Printed Resources**

- Instructional Aid 3: Pictograph (for each student)
- Visuals: Money Kit (9 dimes, 9 pennies)
- Visuals: Sign Cards (Greater than, Less than; symbols and words side)
- Student Manipulatives: Number Cards (0–6)
- Student Manipulatives: Tens/Ones Mat
- Student Manipulatives: Money Kit (9 dimes, 9 pennies)

**Digital Resources**

- Games/Enrichment: Addition Flashcards

**Materials**

- Addition flashcards
- A library book with Dewey decimal numbers on the binding

**Greater Than & Less Than with Numbers to 100**

Write the number.  
Circle the single marbles to make pairs.  
Circle even if the number is even.  
Circle odd if the number is odd.



Student	Number of Books
DQ	
Jill	
Ken	

Look at the pictograph.  
Write the number of books.  
Complete each sentence.



7 is greater than 3

3 is less than 7

8 is greater than 7

7 is less than 8

**Practice & Review****The Order Principle of Addition**

Display a set of 4 pennies and a set of 2 pennies.

How many pennies are in the first set? 4

How many are in the second set? 2

Join the sets.

How many pennies are there in all? 6

What number sentence shows that the sets were joined?  $4 + 2 = 6$

Write " $4 + 2 = 6$ " below the sets of pennies.

Reverse the order of the sets of pennies on display.

How does the addition sentence change when the order of the sets of pennies are switched? The order of the numbers 4 and 2 (the addends) is changed to  $2 + 4$ .

How many pennies are in the first set? 2

How many pennies are in the second set? 4

Join the sets.

How many pennies are there in all? 6

What number sentence shows that the sets were joined?  $2 + 4 = 6$

Did changing the order of the sets change the answer? no

Continue the activity with a set of 3 pennies and a set of 1 penny.  $3 + 1 = 4$ ,  $1 + 3 = 4$

**Memorize Addition Facts**

Introduce the following fact.

$$3 + 3$$

Display the new addition flashcard. Invite a student to give the answer. Distribute Number Cards 0–6. Display the flashcard again. Direct the students to hold up the correct Number Card. Practice this and the previously memorized facts several times.

Circle the correct sign.

is greater than  $>$  is less than  $<$

55  $>$  68      84  $>$  63

92  $>$  76      69  $>$  87

Write the number of tens and ones.  
Write the number.

Tens	Ones
7	3
73	

Tens	Ones
8	5
85	

Tens	Ones
6	4
64	

**Time to Review**

Complete each addition problem.

$\begin{array}{r} 3 \dots \\ + 3 \dots \\ \hline 6 \end{array}$	$\begin{array}{r} 2 \dots \\ + 4 \dots \\ \hline 6 \end{array}$	$\begin{array}{r} 4 \dots \\ + 2 \dots \\ \hline 6 \end{array}$	$\begin{array}{r} 2 \dots \\ + 3 \dots \\ \hline 5 \end{array}$
-----------------------------------------------------------------	-----------------------------------------------------------------	-----------------------------------------------------------------	-----------------------------------------------------------------

54 fifty-four Math 1

### How many dimes are needed in the Tens place? 5

Display 5 dimes in the Tens place of the Tens/Ones frame. Direct the students to place 5 dimes on the Tens side of their mats.

### How many pennies are needed in the Ones place? 3

Display 3 pennies in the Ones place. Direct the students to place 3 pennies on the Ones side of their mats.

Explain that since 1 dime is the same as 10 pennies, the dimes can be counted on by 1s. Guide the students as they count the money. Point out that 5 dimes and 3 pennies is 53¢.

Follow the same procedure for 94¢ and 59¢.

### Identify Even & Odd Numbers up to 100

Use **coin manipulatives** to help the students identify even and odd numbers. Display 4 dimes and 6 pennies in the Tens/Ones frame and write "46" at the bottom of the frame. Direct the students to use their dimes and pennies to make the number 46 on their mats.

**What is an even number?** a number that makes pairs with nothing left over

**What is an odd number?** a number that makes pairs but has an odd one left over

**In which place do you look to know whether the number 46 is an even number or an odd number?** the Ones place

**Which digit is in the Ones place in 46?** 6

**How can you find out whether 6 is even or odd?** arrange the pennies in pairs

Direct the students to arrange their pennies in pairs.

**Can 6 be arranged in even pairs?** yes

**Is 46 an even number or an odd number?** even number

**Why is it an even number?** because the 6 pennies can be arranged in even pairs with nothing left over

Continue the activity for 87 **odd**, 74 **even**, 62 **even**, and 91 **odd**.

## Engage

### Organizing with Numbers

Guide a **discussion** about praising God for the useful mathematical ability He has given people. Display a library book with the numbers on the binding showing.

**Why does a library book have these numbers on its binding?** to help workers know where to place the book on the shelf

Explain that the numbers on the bindings of books allow librarians to keep the library organized.

Read Psalm 139:14. Explain that this verse refers to how marvelous our minds are; God has given people the ability to use numbers to do things like organize books in a library.

## Instruct

### Make Sets of up to 100 Objects

Use **coin manipulatives** to help the students count sets of objects up to 100. Distribute the Tens/Ones Mats and the dimes and pennies. Display a Tens/Ones frame and write "53" for display.

**Interpret a Pictograph**

Guide a visual analysis of a pictograph to help the students compare numbers. Display the *Pictograph* page. Explain that 5 first-grade students recorded the number of books they read in a week.

**Who read the most books?** Will

**Who read the fewest books?** Tim

**How many books did Jan read?** 5

Write the number next to Jan's name below the pictograph.

**How many books did Tim read?** 2

Write the number next to Tim's name below the pictograph.

Point to the greater-than sign in the first sentence.

**What does this sign mean?** is greater than

**Does the large, open end of the sign face the greater number or the smaller number?** the greater number

Compare the number of books that Jan read with the number of books that Tim read. Explain that when the books are matched one-to-one, Jan read more than Tim.

**Which number should you write first in the sentence?** 5

**Why should you write 5 first?** because it is the greater number

Complete the sentence for display.  $5 > 2$   
Invite a student to read aloud the sentence.  
 $5$  is greater than  $2$ .

Point to the less-than sign in the second sentence.

**What does this sign mean?** is less than

**Should the greater number or the smaller number be written first?** smaller

**Why should it be written first?** because the small, pointed end of the sign always points to the smaller number

Complete the sentence for display.  $2 < 5$  Ask a student to read aloud the sentence.  $2$  is less than  $5$ .

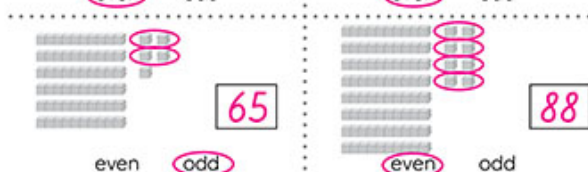
Continue the activity, comparing Kim's and Brent's totals (4 and 7).  $7 > 4$ ,  $4 < 7$

**Greater Than & Less Than with Numbers to 100**

Write the number. Circle the single cubes to make pairs.

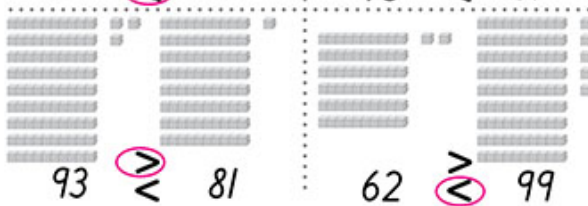
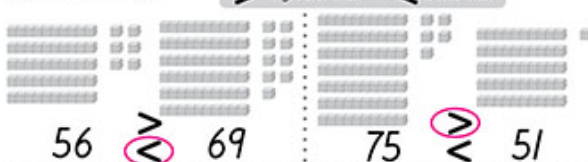
Circle even if the number is even.

Circle odd if the number is odd.



Circle the correct sign.

$>$  is greater than  $<$  is less than

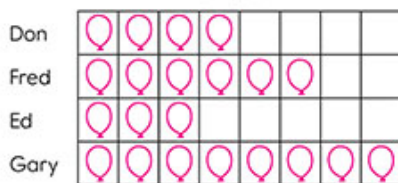


Chapter 4 • Lesson 26

fifty-one 51

## Chapter 2 Review

Use the information to make a pictograph.



Circle the person with the most balloons.  
 Underline the person with the fewest balloons.

Don      Fred      Ed      Gary

Don = 4

Fred = 6

Ed = 3

Gary = 8

## Addition Fact Review

Add.

$$\begin{array}{r} 3 \\ + 3 \\ \hline 6 \end{array}$$

$$\begin{array}{r} 0 \\ + 1 \\ \hline 1 \end{array}$$

$$\begin{array}{r} 4 \\ + 2 \\ \hline 6 \end{array}$$

$$\begin{array}{r} 2 \\ + 1 \\ \hline 3 \end{array}$$

$$\begin{array}{r} 2 \\ + 3 \\ \hline 5 \end{array}$$

$$\begin{array}{r} 0 \\ + 0 \\ \hline 0 \end{array}$$

$$\begin{array}{r} 3 \\ + 1 \\ \hline 4 \end{array}$$

$$\begin{array}{r} 0 \\ + 4 \\ \hline 4 \end{array}$$

$$\begin{array}{r} 5 \\ + 1 \\ \hline 6 \end{array}$$

$$\begin{array}{r} 2 \\ + 4 \\ \hline 6 \end{array}$$

$$\begin{array}{r} 6 \\ + 0 \\ \hline 6 \end{array}$$

$$\begin{array}{r} 1 \\ + 2 \\ \hline 3 \end{array}$$

52 fifty-two

Math 1 Reviews

## Compare Numbers by Using &gt; and &lt;

Use a **word problem** to help the students compare numbers. Display sets of dimes and pennies as you read aloud the following word problem.

Adele and Bridget are counting their money. This (display 6 dimes, 4 pennies) is the money from Adele's purse, and this (display 7 dimes, 2 pennies) is the money from Bridget's purse.

Invite a student to write the numbers below the corresponding sets. 64, 72

Display the Greater than and Less than Sign Cards.

**Which sign belongs between 64 and 72?** the less-than sign

Display the Less than Sign Card between 64 and 72. Guide the students as they read the sentence aloud. **64 is less than 72.**

Continue the activity for the following pairs of numbers:

7 dimes, 6 pennies and 6 dimes, 7 pennies  
 $76 > 67$

8 dimes, 6 pennies and 6 dimes, 3 pennies  
 $86 > 63$

5 dimes, 4 pennies and 7 dimes, 8 pennies  
 $54 < 78$

## Apply

**Worktext pages 53–54**

Read and guide completion of page 53.  
 Invite students to read aloud the completed

number sentences.

Read and explain the directions for page 54. Assist the students as they complete the page independently.

## Assess

**Reviews pages 51–52**

Review making and interpreting a pictograph on page 52.