



Fourth Edition



Contents

Balanced Approach	vii
Instructional Materials	viii
Lesson Features	x
Review Features	xii
Teaching Tips	xiii
Lesson Plan Overview	xv
New to This Edition	1

1 Classifying & Sorting

- 2 Chapter Overview
- 4 Same & Different
- 6 Sort by Color
- 8 Sort by Size
- 10 Sort by Shape
- 12 Sort by More Than 1 Attribute
- 14 Identify Objects That Do Not Belong
- 16 One-to-One Matching
- 18 Chapter 1 Review

2 Numbers 0-5

- 20 Chapter Overview
- 22 One
- 24 Two
- 26 Three
- 28 Four
- 30 Five
- 32 Zero
- 34 Ordinal Numbers (first-fifth)
- 36 Chapter 2 Review
- 38 Cumulative Review

3 Numbers 6-10

- 40 Chapter Overview
- 42 Six
- 44 Seven
- 46 Eight
- 48 Nine
- 50 Ten
- 52 Ordinal Numbers (first-tenth)
- 54 Chapter 3 Review
- 56 Cumulative Review

4 Geometry

- 58 Chapter Overview
- 60 Circle
- 62 Rectangle
- 64 Square
- 66 Triangle
- 68 Patterns
- 70 Chapter 4 Review
- 72 Cumulative Review

5 Measurement

- 74 Chapter Overview
- 76 Compare Size
- 78 Compare Weight
- 80 Compare Capacity
- 82 Compare Height & Length
- 84 Measure Height & Length
- 86 Chapter 5 Review
- 88 Cumulative Review

6 Numbers 11-19

- 90 Chapter Overview
- 92 Eleven & Twelve
- 94 Thirteen & Fourteen
- 96 Fifteen & Sixteen
- 98 Seventeen & Eighteen
- 100 Nineteen
- 102 Chapter 6 Review
- 104 Cumulative Review

7 Time

- 106 Chapter Overview
- 108 Order Events
- 110 Analog & Digital Clocks
- 112 Time to the Hour
- 114 Write Time
- 116 Chapter 7 Review
- 118 Cumulative Review

8 Numbers to 39

- 120 Chapter Overview
- 122 Count & Write 11–19
- 124 Count & Write 20–25
- 126 Count & Write 26–29
- 128 Count & Write 30–32
- 130 Count & Write 33–35
- 132 Count & Write 36–39
- 134 Chapter 8 Review
- 136 Cumulative Review

9 Addition to 5

- 138 Chapter Overview
- 140 Addition Readiness
- 142 Addition Readiness
- 144 Addition
- 146 Complete Addition Sentences
- 148 *Count On* to Add
- 150 Tell an Addition Story
- 152 Chapter 9 Review
- 154 Cumulative Review

10 Calendars

- 156 Chapter Overview
- 158 Days of the Week
- 160 Days of the Month
- 162 Read a Calendar
- 164 Yesterday, Today & Tomorrow
- 166 Chapter 10 Review
- 168 Cumulative Review

11 Compose Numbers

- 170 Chapter Overview
- 172 Money Manipulatives
- 174 Numbers 0–10
- 176 Draw to Add
- 178 10 and Some More
- 180 Numbers 0–20
- 182 Chapter 11 Review
- 184 Cumulative Review

12 More Addition

- 186 Chapter Overview
- 188 Sums to 6
- 190 Write Addition Sentences
- 192 Plus 1
- 194 Draw to Add
- 196 Chapter 12 Review
- 198 Cumulative Review

13 Equal Parts

- 200 Chapter Overview
- 202 Wholes & Parts of Wholes
- 204 Number of Equal Parts
- 206 Equal Parts
- 208 Make Equal Parts
- 210 Chapter 13 Review
- 212 Cumulative Review

14 Numbers to 100

- 214 Chapter Overview
- 216 Numbers 40–49
- 218 Numbers 50–59
- 220 Numbers 60–69
- 222 Numbers 70–79
- 224 Numbers 80–89
- 226 Numbers 90–99
- 228 One Hundred
- 230 Count to 100
- 232 Chapter 14 Review
- 234 Cumulative Review

15 Subtraction to 6

- 236 Chapter Overview
- 238 Begin Subtraction
- 240 Minus 1
- 242 Minus 2
- 244 Minus 3
- 246 More Subtraction
- 248 Whole Minus a Part
- 250 Chapter 15 Review
- 252 Cumulative Review

16 Geometry

- 254 Chapter Overview
- 256 2D & 3D Shapes
- 258 Spheres & Cylinders
- 260 Rectangular Solids
- 262 Cones
- 264 Patterns
- 266 Compose Shapes
- 268 Chapter 16 Review
- 270 Cumulative Review

17 Time

- 272 Chapter Overview
- 274 Time to the Hour
- 276 Tell Time
- 278 Write Time
- 280 Chapter 17 Review
- 282 Cumulative Review

18 Addition & Subtraction to 10

- 284 Chapter Overview
- 286 Add with Larger Addends
- 288 Decompose Numbers
- 290 Decompose More Numbers
- 292 Subtract with Larger Numbers
- 294 Find the Missing Part
- 296 Find the Unknown Part
- 298 Add & Subtract
- 300 Chapter 18 Review
- 302 Cumulative Review



19 Measurement

- 304 Chapter Overview
- 306 Temperature
- 308 Measure Length
- 310 Measure Length & Height
- 312 Measure & Compare
- 314 Draw to Compare
- 316 Chapter 19 Review
- 318 Cumulative Review

20 Calendars

- 320 Chapter Overview
- 322 Days of the Week
- 324 Months of the Year
- 326 Birthday Months
- 328 Seasons
- 330 Chapter 20 Review
- 332 Cumulative Review

21 Equal Parts

- 334 Chapter Overview
- 336 Equal Parts
- 338 Equal Parts of a Circle
- 340 2 Equal Parts of a Square
- 342 4 Equal Parts of a Square
- 344 Chapter 21 Review
- 346 Cumulative Review

22 Math Review

- 348 Chapter Overview
- 350 Numbers 0–20
- 352 Compare Sets of Objects
- 354 Add
- 356 Subtract
- 358 2D & 3D Shapes
- 360 Compose Shapes
- 362 Chapter 22 Review
- 364 Cumulative Review

Appendix

- A2 Bible Action Truths
- A4 Bible Promises
- A5 Explaining the Gospel
- A6 Manipulative Alternatives
- A7 Material Preparation
- A7 Manipulative Management
- A8 PreCursive Number Strokes
- A9 Songs
- A23 Math Background
- A32 Index
- A34 Photo Credits
- A40 How to Use the Teacher's Toolkit CD

Teacher's Toolkit CD

- Teacher Information
- Parent Letter
- Visuals (from the Teacher's Visual Packet)
- Instructional Aids
- 1-2-3 Write
- Extended Activities
- Math Board Suggestions
- Worktext Answer Key



Lesson Features

Objectives point out skills to teach in the lesson.

The Materials section lists items to collect or prepare ahead of time.

Practice and Review provides activities for practicing previously taught skills, such as counting objects and number recognition. Review of concepts can occur any time during the day.

Teach for Understanding or Check for Understanding provides effective procedures for explaining math concepts, using manipulatives, and promoting problem solving using critical-thinking skills.

The Lesson Focus prepares the students for what they will learn in the lesson.

Group work promotes collaborative learning.

Encourage a Christian worldview by discussing real-life problems to show the students that math is a powerful tool for exercising dominion over the earth as commanded in Genesis 1:28.

Lesson 10 Worktext pages 19–20

Objectives

- Understand the relationship between the number 2 and quantities of 2
- Reason that 2 is 1 more than 1

- Construct stories and pictures for the number 2

Teacher Materials

- Chart 4: Two
- Stick puppet: Farmer Brown
- Dot Pattern Cards 1–2
- Manipulatives: 4 caterpillars, 5 ladybugs, 2 circles
- A counting frame (or 12 pig or sheep manipulatives)
- A pair of work gloves

Student Materials

- Manipulatives for each pair of students: 2 caterpillars, 1 ladybug
- J-2-3 Write, number 2 (Teacher's Toolkit CD)
- Farm Number Book, number 2 (Teacher's Toolkit CD)
- Farm Number Book goats (Teacher's Toolkit CD)

Practice and Review

Count up to 12 objects

- Display the counting frame (or manipulatives).
- Move 6 beads, one at a time, to the right side of the counting frame as you lead the students in counting the beads.
- Move all the beads back to the left. Choose a volunteer to move the beads and lead the class in counting 8 beads. Repeat the procedure, this time counting 12 beads.

Determine the set with more or fewer objects

- Display 3 caterpillars in a column on the left and 5 ladybugs in a column on the right.

How can we determine whether the number of caterpillars is the same as the number of ladybugs? *Use one-to-one matching.*

- Choose a student to draw lines to match the animals. Is the number of caterpillars and ladybugs the same? *no. Are there more caterpillars or more ladybugs? There are more ladybugs.*

- Remove the figures and place 4 caterpillars on the left and 3 ladybugs on the right.

Is the number of caterpillars and ladybugs the same? *no. Are there fewer caterpillars or fewer ladybugs? There are fewer ladybugs.*

- Move each caterpillar next to a ladybug. How many fewer ladybugs are there than caterpillars? *1. How do you know? There is 1 caterpillar that does not have a match.*

Teach for Understanding

Lesson Focus

In this lesson you will learn about the number 2. You will identify and draw pictures with 2 objects and will practice writing the number 2.

Understand the relationship between the number 2 and quantities of 2

- Display the work gloves. Choose volunteers to name things Farmer Brown might wear gloves to do.

- Hold up the Farmer Brown puppet. Direct a student to count Farmer Brown's hands. Ask another student to tell how many gloves Farmer Brown needs.

- Count the gloves as you hold them up one at a time. What do we call a set of gloves that fit each hand? *a pair of gloves.*

How many gloves are in a pair? *2 gloves.*

- Explain that the word *pair* can be another name for a set of 2 matching objects.

Name some other objects that make up a pair. *possible answers: shoes, socks, twins, Farmer Brown's eyes, ears, arms, and feet.*

Who were the first pair of people? *Adam and Eve.*

God originally made 1 person, Adam. But God did not want the man to be alone. God made a woman, Eve, to be Adam's wife. Then there were 2 people. By the end of Day 6, God had made 2 people, the man and his wife.

- Display the Two chart. Explain that this chart shows the number 2. Point out the number word two.

- Invite a student to count the goats on the chart.
- Display Dot Pattern Card 2. Count together the dots on the card. Choose a volunteer to tell which number the dot pattern represents.

- Display Dot Pattern Card 1. Choose a volunteer to tell what number the dot pattern represents.

How are the dot patterns different? *There is 1 more dot in 2 than in 1.*

- Draw a rectangle for display and place 1 circle in the center of the rectangle.

- Demonstrate that the dot pattern for 2 is made of 1 and 1 more. Point to the circle as you count, "one." Then add a second circle, positioning the 2 circles to show the dot pattern for 2. Count together the dots in the set.

Reason that 2 is 1 more than 1

- Group the students in pairs. Distribute 2 caterpillars and 1 ladybug to each pair.

How many caterpillars do you have? *2 caterpillars.*

How many ladybugs do you have? *1 ladybug.*

- Invite the students to match 1 caterpillar to 1 ladybug to show one-to-one matching.

Are there more caterpillars or more ladybugs? *There are more caterpillars. How do you know? There is 1 caterpillar that does not have a matching ladybug.*

Is 2 more or less than 1? *2 is more than 1.*

How many more ladybugs would I need to give you so that you would have a set of 2 ladybugs? *1 more ladybug.*

- Guide the students to conclude that 2 is 1 more than 1.

- Allow the pairs of students to arrange the caterpillars to make various dot patterns for 2.

Reduced Worktext pages provide solutions. Use these pages to evaluate student progress and to determine where more guidance is needed

A variety of activities allows the students to see math at work in real-life contexts.

Two

Complete the sentence.

There are 2 farmers.

Draw a line from each dot to the correct number.

Circle the goats of clothing on the laundry line.

Tell a story about the goats. Complete the sentence.

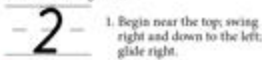
There are 2 goats.

Write each number.

Time to Review exercises provide systematic review of skills and concepts.

Construct stories and pictures for the number 2

- Describe the stroke and finger-trace the number 2 on the chart. Demonstrate the stroke as you write the number on the handwriting lines.



1. Begin near the top; swing right and down to the left; glide right.
- Lead the students in air-tracing the number 2 several times. Encourage them to repeat the stroke description with you as you write the 2s.
 - Distribute the 1-2-3 Write page. Direct the students to point to each rabbit as you count them together. *How many rabbits are on the page? 2 rabbits*
 - Choose volunteers to make up a sentence about the picture. (Example: There are 2 rabbits eating vegetables from Farmer Brown's garden.)
 - Instruct the students to use their pencils to trace the row of dashed 2s. Remind them of the stroke description as they trace.
 - Instruct the students to practice writing the number 2 on the row below the 2s they traced. Assist the students as they write. (Note: The last row of 2s may be completed as practice at home or as review in Lesson 11.)
 - Direct the students to use their fingers to demonstrate 2. Allow students to show their neighbor 2 fingers.

Lesson 10

- Distribute the Farm Number Book page and the goats to each student.
- Direct attention to the word to the right of the number 2 and remind the students that two is the number word for 2. *How many goats will you need to make a set for the number on this page? 2 goats*
- Are there more than 2 goats in the bag I gave you? *yes*
- Count out 2 goats. Place the goats so your picture looks like the dot pattern for 2.
- Check the students' responses. Instruct them to glue the goats in the pen on the page.
- Allow time for the students to practice writing 2s below the picture.
- Encourage the students to complete the page by coloring the farm scene.
- Collect the pages to assemble the books in Lesson 23.

Worktext pages 19–20

- Read and guide completion of the pages.

Involve the students in interactive learning through discussion that encourages them to construct reasonable proof for their solutions.

Notes contain helpful information for lesson planning and preparation.

New to This Edition

1. Studies show that retention increases by 23 percent when students know what is expected of them. This book offers a Lesson Focus for every lesson. This statement is to be conveyed to your students before the lesson begins. Some lessons give a process the students will use to learn the new skill; other lessons tell the students how previous knowledge will be applied to the new concept.
2. To help your students become lifelong problem solvers, more focus has been placed on processing word problems. Encourage the students to become active listeners by asking them to listen for who the problem is about and what action is taking place before you read through a word problem the first time. Next, encourage them to visualize the problem by breaking it into shorter, more manageable parts: reread one sentence at a time and ask the students to show the action with manipulatives or drawings. After all sentences have been reread and the students have pictured the problem, ask them to translate the picture into a number sentence and retell the story in their own words. Finally, a summary sentence should be crafted to explain the solution.
3. Answers to questions are modeled with full answers using math terminology from the lesson. It may take additional questioning to draw more complete answers and explanations from your students at the beginning of the year. Set high expectations! A pattern is established in the lessons of asking the students to explain their answers or reasoning. You will notice that the reasoning is often included in answers even when the question does not specifically ask for it. It is expected that the students will give their reasoning for all answers where appropriate.
4. More group work is included to allow collaboration among peers. For optimal learning for all students, each group should include students with varying strengths and abilities. Groups may vary for each instructional strand.
5. Keep math in front of your students continuously. Every chapter includes math board suggestions, which are designed to be used any time of day.
6. Provide a loving and positive learning environment that encourages your students to participate. Remember that all your students are made in God's image (Genesis 1:26–27). Therefore, all your students should be important to you, and each student should be concerned for the success and well-being of the other students. Circulate among the students as they work, gently guiding them to correct thinking and giving individual attention as needed. Praise students who do well, and praise those who help others to do well. Many real-life connections for math are made as Farmer and Mrs. Brown work on the farm that God has provided for them. Teach your students to be diligent, and portray Christ's love, grace, and forgiveness to your students as they work, make mistakes, and fall short of your expectations.



Lesson Plan Overview

Lesson	Worktext Pages	Practice & Review Objectives	Lesson Objectives
Chapter 1: Classifying & Sorting			
1	1-2		<ul style="list-style-type: none"> Identify objects in a set that are exactly the same Identify objects in a set that are different Compose sets with objects that are exactly the same
2	3-4	<ul style="list-style-type: none"> Count 1-10 	<ul style="list-style-type: none"> Compare the colors of objects in a set Compose sets of objects that are the same color
3	5-6	<ul style="list-style-type: none"> Count up to 10 objects 	<ul style="list-style-type: none"> Compare the sizes of objects in a set Compose sets of objects that are the same size
4	7-8	<ul style="list-style-type: none"> Count up to 10 objects 	<ul style="list-style-type: none"> Compare the shapes of objects in a set Compose sets of objects that are the same shape Sort by 1 attribute
5	9-10	<ul style="list-style-type: none"> Count 1-10 	<ul style="list-style-type: none"> Sort by more than 1 attribute Compose a set of objects that are the same color, size, and shape
6	11-12	<ul style="list-style-type: none"> Count 1-10 	<ul style="list-style-type: none"> Identify the common characteristic of objects in a set Determine an object that could be included in a set based on a common characteristic Identify the object in a set that does not share the common characteristic Sort by more than 1 attribute
7	13-14	<ul style="list-style-type: none"> Count 1-10 Count up to 10 objects 	<ul style="list-style-type: none"> Determine sets that have the same number of objects Identify the set that has more or fewer objects Make comparison statements for sets of objects
8	15-16		<ul style="list-style-type: none"> Identify objects that are the same color, size, or shape Identify objects that are different in color, size, or shape Compare sets of objects using one-to-one matching Determine the set that has more or fewer objects
Chapter 2: Numbers 0-5			
9	17-18	<ul style="list-style-type: none"> Count 1-12 Identify the object in a set that is different 	<ul style="list-style-type: none"> Understand the relationship between the number 1 and quantities of 1 Construct stories and pictures for the number 1
10	19-20	<ul style="list-style-type: none"> Count up to 12 objects Determine the set with more or fewer objects 	<ul style="list-style-type: none"> Understand the relationship between the number 2 and quantities of 2 Reason that 2 is 1 more than 1 Construct stories and pictures for the number 2
11	21-22	<ul style="list-style-type: none"> Count 1-15 Sort objects according to shape 	<ul style="list-style-type: none"> Understand the relationship between the number 3 and quantities of 3 Reason that 3 is 1 more than 2 Construct stories and pictures for the number 3
12	23-24	<ul style="list-style-type: none"> Count up to 20 objects Identify numbers before and after Match the numbers 1-3 to the correct dot pattern 	<ul style="list-style-type: none"> Understand the relationship between the number 4 and quantities of 4 Reason that 4 is 1 more than 3 Construct stories and pictures for the number 4
13	25-26	<ul style="list-style-type: none"> Identify dot patterns 1-4 Count up to 20 objects Identify left and right 	<ul style="list-style-type: none"> Understand the relationship between the number 5 and quantities of 5 Reason that 5 is 1 more than 4 Construct stories and pictures for the number 5
14	27-28	<ul style="list-style-type: none"> Count 1-20 Sort objects according to color 	<ul style="list-style-type: none"> Understand the relationship between the number 0 and the empty set Reason that 0 is 1 less than 1 Construct stories and pictures for 0
15	29-30	<ul style="list-style-type: none"> Identify dot patterns 0-5 Count up to 20 objects Write the numbers 0-5 	<ul style="list-style-type: none"> Associate the numbers 1-5 with the ordinal numbers first-fifth Locate objects in the positions first-fifth

Lesson	Worktext Pages	Practice & Review Objectives	Lesson Objectives
16	31–32		<ul style="list-style-type: none"> Understand the relationship between the numbers 0–5 and their quantities Identify and write the numbers 0–5 Identify numbers that are 1 more or 1 less Identify the ordinal positions first–fifth
17	33–34		Cumulative Review
Chapter 3: Numbers 6–10			
18	35–36	<ul style="list-style-type: none"> Count 1–20 Identify dot patterns 0–5 Identify same and different sizes 	<ul style="list-style-type: none"> Understand the relationship between the number 6 and quantities of 6 Reason that 6 is 1 more than 5 Construct stories and pictures for the number 6
19	37–38	<ul style="list-style-type: none"> Count 1–20 Locate top, middle and bottom Identify dot patterns 0–6 	<ul style="list-style-type: none"> Understand the relationship between the number 7 and quantities of 7 Reason that 7 is 1 more than 6 Construct stories and pictures for the number 7
20	39–40	<ul style="list-style-type: none"> Identify dot patterns 0–7 Recognize first, next, and last Count 1–20 	<ul style="list-style-type: none"> Understand the relationship between the number 8 and quantities of 8 Reason that 8 is 1 more than 7 Construct stories and pictures for the number 8
21	41–42	<ul style="list-style-type: none"> Count 1–20 Play ticktacktoe with dot patterns 0–8 	<ul style="list-style-type: none"> Understand the relationship between the number 9 and quantities of 9 Reason that 9 is 1 more than 8 Construct stories and pictures for the number 9
22	43–44	<ul style="list-style-type: none"> Count 1–20 Locate the positions before and after Identify dot patterns 0–9 	<ul style="list-style-type: none"> Understand the relationship between the number 10 and quantities of 10 Reason that 10 is 1 more than 9 Construct stories and pictures for the number 10
23	45–46	<ul style="list-style-type: none"> Identify left and right Count 1–20 Match the numbers 0–10 to the correct dot pattern Write the numbers 6–10 	<ul style="list-style-type: none"> Associate the numbers 1–10 with the ordinal numbers first–tenth Locate objects in the positions first–tenth
24	47–48		<ul style="list-style-type: none"> Understand the relationship between the numbers 6–10 and their quantities Identify numbers that are 1 more or 1 less Identify the ordinal positions first–tenth Write the numbers 0–10
25	49–50		Cumulative Review
Chapter 4: Geometry			
26	51–52	<ul style="list-style-type: none"> Count to 10 and back from 10 Identify numbers before and after 	<ul style="list-style-type: none"> Identify and trace a circle Identify position using the terms <i>next to</i>, <i>before</i>, and <i>after</i> Extend a color pattern
27	53–54	<ul style="list-style-type: none"> Count 1–20 Count up to 10 objects 	<ul style="list-style-type: none"> Identify and trace a rectangle Identify circles and rectangles by their attributes Identify position using the terms <i>before</i>, <i>after</i>, <i>above</i>, and <i>below</i> Extend a size pattern
28	55–56	<ul style="list-style-type: none"> Count 1–30 	<ul style="list-style-type: none"> Identify and trace a square Identify circles, rectangles, and squares by their attributes Extend a shape pattern
29	57–58	<ul style="list-style-type: none"> Count up to 30 objects 	<ul style="list-style-type: none"> Identify and trace a triangle Identify circles, rectangles, squares, and triangles by their attributes Identify, copy, and extend a shape pattern
30	59–60	<ul style="list-style-type: none"> Identify and copy a sound pattern Identify and copy an action pattern 	<ul style="list-style-type: none"> Compose shapes and objects Identify, copy, and extend color and shape patterns Compose a pattern using shapes
31	61–62		<ul style="list-style-type: none"> Identify circles, rectangles, squares, and triangles by their attributes Identify, copy, and extend sound, shape, and color patterns Identify position using the terms <i>before</i> and <i>after</i>
32	63–64		Cumulative Review