

Chapter 1

Numbers to 20

Lesson	Skill Focus
1 Zero-Ten	• Identify the numbers, words, and dot patterns for 0-10
2 Compare Numbers to 10	• Compare sets of 0-10 objects
3 Ten	• Decompose 10 into 2 sets
4 Eleven & Twelve	• Compose and describe 11 and 12 as 10 and some more • Make pairs of objects for the numbers 1-12 to discover even and odd numbers
5 Thirteen-Nineteen	• Compose and describe 13-19 as 10 and some more
6 Compare Numbers to 19	• Compare sets of 0-19 objects • Make pairs of objects for the numbers 1-19 to discover even and odd numbers
7 Twenty	• Understand that 20 is 20 ones or 2 sets of 10 • Practice counting by 1s and by 10s and learn to count by 5s
8 Chapter 1 Review	• Review the concepts presented in Chapter 1 in preparation for the Chapter 1 Test
9 Chapter 1 Test; Kindergarten Review	• Complete the Chapter 1 Test and review concepts from kindergarten

Materials

Items to gather or prepare from the Teacher's Visual Packet, the Teacher's Toolkit CD, the Student Manipulatives Packet, the Worktext Supplement, and the Tests and Tests Answer Key are listed here only once. Each individual lesson provides a complete list of the specific materials needed for that lesson. Additional materials to gather or prepare are also listed here.

Teacher's Visual Packet

- Charts 1-4: *Hundred Chart, Ten-Thirty*
- Stick puppets: *Digit, Cecilia*
- Number Cards 0-20
- Dot Pattern Cards 0-10
- Counters: clowns, vehicles, candies
- Shapes: rectangles, squares, triangles, circles
- Money Kit: pennies
- 2 Ten Frames
- Number Line

Teacher's Toolkit CD

- *Writing 0-5* (optional)
- *Writing 0-10* (optional)
- *Number Lines*
- *Write Numbers*
- *T Chart*
- *Writing 11-20* (optional)
- *Enrichment Activities for Chapter 1*
- *Extended Activities for Chapter 1*

Student Manipulatives Packet

- Number Cards 0-19
- Dot Pattern Cards 0-10
- Red Mat (back of the Tens/Ones Frame)
- Shapes: rectangles, squares, triangles, circles
- Money Kit: pennies
- 2 Ten Frames

Worktext Supplement

- Stick puppet: *Cecilia*
- Counters: seals, vehicles, candies

Tests and Tests Answer Key

- Chapter 1 Test

Other Teaching Aids

- Unifix Cubes
- An erasable writing instrument
- 10 craft sticks and a rubber band
- An empty egg carton
- A doughnut carton with 12 doughnuts drawn inside (3 rows of 4)

Chapter Information

Teacher Notes

As your students count, represent numbers with pictures, recognize patterns in numbers, and make sets of 10, they will develop the foundation of place value. Help your students build number sense as they decompose 10 (and other numbers) into pairs of numbers and describe the numbers 11–19 as 10 and some more. A strong sense of numbers and their flexibility will enable your students to use addition and subtraction strategies to solve problems in the coming chapters.

Develop critical thinking and reasoning skills by encouraging your students to actively participate and offer solutions to you and those around them. Foster a love for math by providing a loving environment where ideas are shared and misconceptions are corrected with positive reinforcement. Encourage the use of math language as your students explain and defend their reasoning.

The interlocking feature of Unifix Cubes makes them a valuable manipulative for teaching number sense and place value. If they are unavailable, use items from the Student Manipulatives Packet and the Teacher's Visual Packet or see Manipulative Alternatives on page A6 for alternative suggestions.

Preparation of Materials

Before starting this chapter, prepare the following materials:

- Remove the Digit and Cecilia puppets from the Teacher's Visual Packet and from the front of each Worktext. Affix a craft stick to the back of each figure.
- Remove Number Cards 0–20 and Dot Pattern Cards 0–10 from the Teacher's Visual Packet and from each Student Manipulatives Packet.
- Remove the clowns, vehicles, candies, circles, squares, rectangles, triangles, pennies, Ten Frames, and Number Line from the Teacher's Visual Packet.
- Remove the Red Mat, circles, squares, triangles, rectangles, pennies, and Ten Frames from each Student Manipulatives Packet.
- Remove the seals, vehicles, and candies from the front of each Worktext.

The gear icon (⚙️) identifies the need for higher-level thinking. If needed, supply prompts or background needed to guide the students to the desired conclusion.

JourneyForth

The trade division of BJU Press, JourneyForth Books, produces books with a biblical worldview for readers of varying abilities and interests.

Rosa la Osa reinforces the theme of counting. The students will learn to count to 10 in Spanish as they learn about playing hide-and-seek the Spanish way!

This book by Anna Turner and Beth Kitching is available at journeyforth.com.



Math Board

Math board suggestions are provided for every chapter and may be used at any time throughout the day. Additional information for the math board is available on the Teacher's Toolkit CD.

- Count 1–20 seals and write the number to name the set
- Make a set of objects for a given number from 0 to 20
- Match dot patterns to numbers
- Make various dot patterns for a given number from 1 to 10
- Make a set to match a given number or dot pattern
- Make a set that has the same number as another set
- Make a set that has 1 more or 1 less than a given number
- Write the number that comes before or after a given number
- Show ways of grouping a set of objects (Example: A set of 10 seals can be grouped into sets of 1 and 9, 2 and 8, 3 and 7, 4 and 6, or 5 and 5.)
- Describe the positions of items using words such as *before*, *after*, *left*, and *right*

A Little Extra Help

The following activities provide reinforcement or reteaching of the concepts taught in this chapter.

Make sets of up to 20 objects

Provide Number Cards 1–20 and a container of objects such as beans or pennies. Instruct the student to choose a card and use the objects to represent the number.

Compare numbers

Provide 4 Ten Frames and plastic resealable bags with the numbers 1–20 written on them and objects such as beans or pennies in the bag to match the number. Direct the student to choose 2 bags and place the correct number of objects on the Ten Frames. Guide him in making statements of comparison, such as "11 is less than 17" and "17 is greater than 11."

Identify numbers before, after, and between

Line up Number Cards 1–10 or 11–20 in order. Remove 1 card. Ask questions using *before*, *after*, or *between*. For example, if you removed Number Card 6, ask which number comes after 5, before 7, or between 5 and 7. Replace the card so the student can check whether he is correct.

Introduce the Theme

Display the Digit puppet as you introduce the theme of *MATH 1*. Then display the Cecilia puppet when she appears in the story.

As you listen to funny stories about Digit the clown, you will learn the important role math plays in everyday events, whether you are working, helping others, or doing something for fun. Digit is eager to meet the people in the community of Madison and learn new skills as he serves others.

Moving Day

BEEP-BEEP! Digit reached over and turned off the beeping clock. He stretched and yawned. Then he suddenly sat straight up in bed.

"I'm moving to my new home in Madison today!" he cried. "And I haven't even finished packing yet!"

Digit got to work right after breakfast. He carefully wrapped his dishes so that they wouldn't break. Then he packed the rest of his household goods. Digit counted the boxes quietly. "One, two, three, four, five, six, seven, eight, nine, ten!"

Farmer and Mrs. Brown helped Digit load the boxes into his red truck.

"Oh, Digit, here's some lunch for you," said Mrs. Brown.

"Call us soon, Digit! Goodbye!" said Farmer Brown. He and his wife waved until Digit's red truck had rattled out of sight.

By the time Digit arrived in Madison, he was hungry. *I am going to eat my lunch at the town park. It'll be nice to relax,* he thought.

Digit spread out a blanket on the grassy bank of the pond and opened the picnic basket Mrs. Brown had packed for him. He found a thick ham sandwich, a container of tea, and a bowl of



cucumber salad. Then he unpacked a bunch of grapes, slices of cheddar cheese and bread, and a homemade cherry pie.

Splash! Just as Digit opened his mouth to take a bite of the ham sandwich, something leaped into the pond right in front of him.

"Hey!" Digit jumped up. "Look what you did—whoever you are! My sandwich is soaked!" He walked to the edge of the pond. "Hello?" he called softly.

"Aroo!" Something flew out of the pond and jumped, wet and wriggling, right into his arms!

"Help!" cried Digit. "A sea monster!"

"Aroo!" cried the thing. It slipped out of Digit's arms and began to sniff at his food.

"Wait a minute. Sea monsters don't eat cherry pies," said Digit. "You're not a sea monster—you're just a seal!"

"Aroo!" said the seal through a mouthful of food.

"You are my first friend in Madison," said Digit. "I'm going to keep you for a pet. How about if I call you Cecilia?"

"Arooooo!" said Cecilia, and she looked very much like she was smiling.



To the Parent

In Chapter 1 your child will learn about the numbers 1–10 as he develops the following skills:

- Count to 10.
- Identify the numbers 1–10.
- Sequence the numbers 1–10.
- Make and compare sets of up to 10 objects.
- Group a set of objects in a variety of ways (example: A set of objects can be grouped into 1 and 9, 2 and 8, and 3 and 7).

Digit and Cecilia

This story your child will have read about Digit, a funny clown who has just moved to the town of Madison and finds a new pet, a seal he names Cecilia. Cecilia offers to accompany Digit on his helpful efforts. There are many kinds of jobs and places to work in the town of Madison. Digit knows that police officers, firefighters, doctors, and teachers are people who serve the community. He also knows that librarians, auto repair shops, flower shops, and bakeries are places where people need to help others. While learning about math this year, your child will learn about people and places that are important in a community.

Math 1—Chapter 1

Math in the Home

Encourage your child to see that accurate counting is a part of everyday life. Invite the child to use counting to do things that require counting. Show the child how to count carefully and being the right number is important to find.

Read out numbers and encourage your child to count objects daily. Let your child tell you the numbers he sees while doing the car washing, feeding, playing games, or reading labels on food products. An oral child counts out items, but questions such as "Are there fewer grapes than there are lemons?" and "Are there more plates than there are bowls?"

Remind the child that being able to count objects and places is important for helping and serving others. Provide simple tasks for your child that require counting, such as adding, "Would you please get 4 plates for each of the 3 tables?"



Lesson 1

Worktext pages 1–4
Reviews pages 1–2

Objectives

- Count sets of 0–10 objects and express each set in number, word, and dot pattern forms
- Represent the numbers 0–10 on a number line

Teacher Materials and Manipulatives

- Number Cards 0–10
- Dot Pattern Cards 0–10
- Shapes: 1 rectangle
- Ten Frame
- Number Line
- 10 Unifix Cubes
- An erasable writing instrument

Choose an erasable writing instrument that works with whatever method you use to display your Number Line.

Student Materials and Manipulatives

- Shapes: 1 rectangle
- Ten Frame
- Writing 0–5 (Teacher's Toolkit CD, optional)
- Writing 0–10 (Teacher's Toolkit CD, optional)
- 10 Unifix Cubes

Practice and Review

- See page xii for the best use of the Practice and Review section provided in most lessons.

Identify a rectangle by its attributes

- Display a rectangle and distribute 1 to each student.
How many sides does this shape have? 4 sides
Are all the sides the same length? No, 2 sides are long and 2 sides are short.
- Point out that the 2 long sides are opposite each other and the 2 short sides are opposite each other. Turn the rectangle 90 degrees and direct the students to do the same. Point out that the short sides and long sides are always opposite each other regardless of the rectangle's orientation.
- Guide the students in locating the corners of the rectangle. Point out that a corner is where 2 sides meet.
How many corners does this shape have? 4 corners
What is the name of this shape? a rectangle
- Choose students to point out objects in the room that are shaped like rectangles.

Count to 10

- Display Number Cards 1–10 in order. Point to each number as you lead the students in counting to 10.

Teach for Understanding

Lesson Focus

In this lesson you will represent the numbers 0–10 using numbers, words, dot patterns, and a number line.

- Direct attention to the picture on Worktext page 2. Read aloud the theme introduction and the theme story in the Chapter 1 Overview.
What are some things that you think Digit packed for his move to a new house? Accept any reasonable answers.

Count sets of 0–10 objects and express each set in number, word, and dot pattern forms

- Distribute a Ten Frame and 10 Unifix Cubes to each student. Display your Ten Frame horizontally and model the steps as the students work with their manipulatives.
- Allow time for the students to explore the Ten Frame and see that each row has 5 spaces and that there are 10 spaces altogether. As the students use their frames to show numbers, instruct them to fill the Ten Frame by filling the top row from left to right and then the bottom row. Using the same pattern to build numbers develops a sense of growth by helping the students see each number as 1 more than the previous number. The Ten Frame helps the students conceptualize the benchmarks of 5 and 10.

- Direct each student to place a cube in the first (far left) space on the first row of the Ten Frame.

If the cube represents the number of boxes Digit has ready to load, how many boxes has Digit packed? 1 box

- Display Number Card 1 and Dot Pattern Card 1. Point to the dot pattern and lead the students in counting the dot. Explain that the dot pattern shows a set of 1.

Name some things in this room that are in sets of 1. possible answers: the teacher, the teacher's desk, the clock, the fan, the classroom calendar

- Lead the students in air-tracing the number 1 several times.
- Turn Number Card 1 over and point to the word *one*. Guide the students in reading and spelling *one* together.

See page A8 for information on PreCursive strokes, air-tracing, and proper writing practices.

- Explain that while Digit was packing his shoes in another box he found a pair of clown shoes.

What is a pair? Accept reasonable answers, but guide the students to the understanding that a pair is 2 similar things or a set of 2 things.



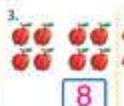









How can you use the Ten Frame to show a pair? There is 1 cube on the Ten Frame. I will need to place 1 more cube on the frame to show a pair.

- Guide the students to conclude that 2 is 1 more than 1 as they place a cube in the next space of the Ten Frame.
- Display Number Card 2 and Dot Pattern Card 2. Point to the dot pattern and lead the students in counting the dots.
- Lead the students in air-tracing the number 2 several times.
- Turn Number Card 2 over and point to the word *two*. Guide the students in reading and spelling *two* together.
What things come in pairs or groups of 2? possible answers: shoes, mittens, hands, feet, eyes, twins
- Follow the same procedure to review the numbers, dot patterns, and number words for the numbers 3–10. Explain that the number 10 is written using the digits 1 and 0. Circle the Ten Frame with your finger and tell the students that the 1 represents 1 set of 10 and the 0 indicates that there are no additional cubes.
- Instruct each student to clear the Ten Frame.
How many cubes are on the Ten Frame? possible answers: none, 0 cubes

Zero-Ten

Chapter 1

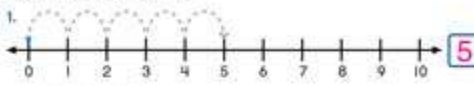
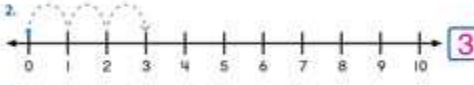
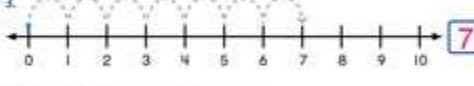
Write the number for the set.

1.  9	2.  4	3.  8	4.  10
5.  5	6.  0	7.  1	8.  3
9.  6	10.  2	11.  7	12.  5










Write the numbers 0-10 below the number words.

13. zero	one	two	three	four	five
0	1	2	3	4	5
six	seven	eight	nine	ten	
6	7	8	9	10	

Trace the jumps. Write the number.


-  5
-  3
-  7

Write the number that matches the dot pattern.

4.  5	7.  1	10.  9
5.  4	8.  7	11.  3
6.  6	9.  8	12.  2

Time to Review

Color the rectangles.

13. 

- Explain that a group of 0 objects is called the empty set because there are no objects to count. Lead the students in thinking of some other examples of empty sets, or groups of 0 things, such as students with purple hair or students wearing clown shoes.
- Display Number Card 0 and Dot Pattern Card 0. Point to the dot pattern.
How many dots are in the dot pattern for 0? 0 dots
- Lead the students in air-tracing the number 0 several times.
- Turn Number Card 0 over and point to and spell the word zero. Guide the students in reading and spelling zero together.
- As time permits, allow the students to arrange cubes on their desks to show various dot patterns for the numbers 1-5 and describe their pictures.
- Use the *Writing 0-5* or *Writing 0-10* pages for further number formation practice as needed.

Represent the numbers 0-10 on a number line

- Display Number Cards 0-10 (word forms showing) and Dot Pattern Cards 0-10 in random order. Display the Number Line. Explain that a number line is a line that is divided into equal parts. Each of the equal parts is numbered.
You can represent a number on a number line.
- Draw a dot at 0 and make an arc from the dot at 0 to 1. As you draw the jump, explain that the distance from 0 to 1 represents the number 1.

- Invite a student to identify the number word for the number 1. Invite another student to identify the dot pattern.
 - Repeat the activity for the numbers 2-10. If desired, you may invite students to draw the jumps.
 - To demonstrate 0 jumps on the number line, draw a clockwise loop up from the dot at 0 and back down again. Choose volunteers to identify the word and dot pattern forms.
- ### Worktext pages 1-4
- Lead a discussion about what the students have learned about the numbers 0-10. Encourage mathematical language as they summarize the key points.
 - Read and guide completion of page 3.
 - Read and explain the directions for page 4. Assist the students as they complete the page independently.
 - Encourage the students to use page 2 to tell someone at home about the Digit story.

Lesson 2 Worktext pages 5–6 Reviews pages 3–4

Objectives

- Make and compare sets of up to 10 objects
- Sequence the numbers 0–10 forward and backward
- Represent numbers up to 10 on a number line

Teacher Materials and Manipulatives

- Stick puppet: *Cecilia*
- Number Cards 0–10
- Shapes: 1 rectangle, 1 square
- 2 Ten Frames
- Number Line
- “Ten Little Children” (A23)
- Several copies of *Number Lines* (Teacher’s Toolkit CD)
- 27 Unifix Cubes

Student Materials and Manipulatives

- Number Cards 0–10
- Shapes: 1 square
- 2 Ten Frames for each pair of students
- 27 Unifix Cubes for each pair of students

Practice and Review

Identify a square by its attributes

- ▶ Display a rectangle and allow the students to identify the shape and describe its attributes.
- ▶ Display a square and distribute 1 square to each student.
How many sides does this shape have? 4 sides.
How are the sides of this shape different from the sides of the rectangle? The sides of this shape are all the same length; the rectangle has 2 long sides and 2 short sides.
How many corners does this shape have? 4 corners.
- ▶ Encourage the students to point to each corner. Point out that the corners are where 2 sides meet.
What is the name of this shape? a square
- ▶ Choose students to point out objects in the room that are shaped like squares.

Count to 10 and back from 10

- ▶ Lead the students in singing “Ten Little Children” to the tune of “Ten Little Indians.”
- ▶ Display Number Cards 1–10 and lead the students in counting to 10 as you point to each number.
- ▶ Lead the students in *counting back* from 10 as you point to each number.

Teach for Understanding

Lesson Focus

In this lesson you will compare and sequence sets of 0–10 objects. You will also represent numbers on a number line.

- ▶ Lead a discussion about helping others. Throughout the year, encourage the students to be helpful and kind as they interact in the classroom.
What do you do when a classmate or a younger brother spills his drink? How could you help?

What do you do when a classmate can’t tie his shoe? How could you help?

How did Farmer and Mrs. Brown help their friend Digit when he was moving? **possible answers: They helped him load his truck; they made him a picnic lunch.**

- ▶ Discuss ways the students can help or serve others. [BATs: 2b Servanthood, 5e Friendliness]

Make and compare sets of up to 10 objects

- ▶ Group the students in pairs and give each pair 2 Ten Frames and 27 Unifix Cubes. As the students work together, help them to develop a sense of cooperation and collaboration. Encourage them to critique each other’s work and reasoning in a helpful and positive manner.
- ▶ Instruct 1 student in each pair to show the number 4 on one Ten Frame and the other student to show the number 5 on the other Ten Frame. Remind them that for ease of counting quickly and accurately, it is best to fill the rows from left to right, beginning with the top row. Model the steps with your manipulatives as the students work with their manipulatives.

Which is more, 5 or 4? 5 is more than 4. How do you know? The Ten Frame that shows 5 has a cube in every space in the top row; the Ten Frame that shows 4 has cubes in only 4 spaces in the top row (1 space is empty).

- ▶ Encourage the students to use *greater than*, *less than*, *1 more*, and *1 fewer* to compare the numbers 4 and 5. Elicit the following statements: 5 is greater than 4; 4 is less than 5; 5 is 1 more than 4; 4 is 1 fewer than 5.
- ▶ Instruct each student to remove his cubes and connect them. Ask them to stand their towers side by side to compare the number of cubes in the towers.
How tall is the taller tower? 5 cubes tall
How tall is the shorter tower? 4 cubes tall
How much taller is the tower of 5 cubes? 1 cube taller
How much shorter is the tower of 4 cubes? 1 cube shorter
- ▶ Repeat the activity with the numbers 2 and 3 and then 9 and 10. Guide the students to the understanding that a difference of 1 between 2 numbers means the numbers are next to each other in the counting sequence.
- ▶ Use a similar procedure to compare the numbers 5 and 7.
- ▶ *Count on* from 5 to 7 by making a fist with 1 hand as you say “5” and then holding up 1 finger on your other hand as you count “6” and 1 more finger as you count “7.” Elicit the following statements: 7 is greater than 5; 5 is less than 7; 7 is 2 more than 5; 5 is 2 fewer than 7.
Does 7 come right after 5 when counting? no
What number comes between 5 and 7? 6
- ▶ Invite a student in each pair to make a tower of 6 and compare 6 with 5 and 7. **6 is greater (more) than 5; 6 is less than 7.**
- ▶ Repeat the activity with the numbers 2 and 4 and then 8 and 10.
- ▶ Guide the students to the understanding that a difference of 2 between 2 numbers means that there is a number that comes between the 2 numbers being compared.

Compare Numbers to 10

Use a different color to draw 1 more shape. Complete the sentence.

1.
 4 is 1 less than 5

2.
 5 is 1 less than 6

3.
 7 is 1 less than 8

4.
 9 is 1 less than 10

Write the number for each set. Circle the set that has more.

5.
 5 3

6.
 2 4

7.
 6 5

Draw the tower that comes next.

8.
 9.
 5

Math 1 • Chapter 1, Lesson 2

Sequence the numbers 0–10 forward and backward

- ▶ Distribute Number Cards 0–10 to each student. Direct each student to order the numbers from least to greatest. After the students are done, display your Number Cards 0–10 in order and allow the students to check their work. Point to each card as you lead the students in counting the numbers from least to greatest.
- ▶ Review that each number in the counting sequence is 1 more than the previous number by displaying 1 cube, a tower of 2 cubes, and a tower of 3 cubes.
 Describe the towers. The towers are in number order: a tower of 1 cube, a tower of 2 cubes, and a tower of 3 cubes. Each tower has 1 more cube than the previous tower.
 What would the next tower in this series look like? The next tower would be 4 cubes tall; it would have 1 more cube than the tower of 3.
- ▶ Invite a student to display a stack of 4 Unifix Cubes to extend the series.
- ▶ Direct the students to mix up the cards and then order them from greatest to least.
- ▶ After the students complete their sequence, show your cards in descending order and allow the students to check their work. Point to each card as you lead the students in counting the numbers from greatest to least.

How many jumps did Cecilia make?

Draw jumps to show the number on the number line.

1.
 6

2.
 8

3.
 3

Time to Review

Match the set to the number.

4.
 3 5 2

Math 1 • Chapter 1, Lesson 2

Represent numbers up to 10 on a number line

- ▶ Display the *Number Lines* page.
- ▶ Invite a student to place the Cecilia puppet above the number 4 on the first number line. Direct the students to count the jumps as you draw a dot at 0 and then draw jumps from 0 to 1, 1 to 2, 2 to 3, and 3 to 4.
- ▶ Follow a similar procedure for the numbers 7 and 10.
- ▶ Guide the students to compare the numbers 7 and 10. Elicit the following statements: 10 is greater than 7; 7 is less than 10; 10 is 3 jumps more than 7; 7 is 3 jumps fewer than 10.
- ▶ Use extra copies of the *Number Lines* page to provide additional practice comparing the numbers shown on 2 number lines.

Worktext pages 5–6

- ▶ Lead a discussion about representing sets of 0–10 objects and then comparing the sets and numbers. Encourage mathematical language as the students summarize the key points.
- ▶ Read and guide completion of page 5.
- ▶ Direct attention to the discussion question at the top of page 6 and guide the students to the conclusion that Cecilia jumped 4 spaces. Read and explain the directions for the page and assist the students as they complete it independently.

CHAPTER REVIEW

Objectives

- Review making and comparing sets of up to 20 objects
- Review decomposing 10 into 2 sets
- Review 11–19 as 10 and some more and 20 as 2 sets of 10
- Review sequencing the numbers 0–20
- Review identifying numbers up to 20 as even or odd

Teacher Materials and Manipulatives

- Number Cards 0–20
- Dot Pattern Cards 0–10

Student Materials and Manipulatives

- Red Mat (back of the Tens/Ones Frame) for each pair of students
- Counters: 20 seals for each pair of students
- Money Kit: 20 pennies for each pair of students
- 2 Ten Frames for each pair of students

Check for Understanding

- ▶ Use this lesson to review concepts presented in Chapter 1 and prepare the students for the chapter test. Generate discussions that engage the students in modeling their answers and encourage them to explain their work using math vocabulary learned in the chapter.

In this chapter you have counted many things. Counting things in the world around you can help you do the things God has planned for you to do. Many Bible accounts tell of people who had to count in order to do what God told them to do.

Counting accurately is a skill you will need for life. You may count silverware as you help set the table. You may count crayons to pass them out to friends. Whatever you do—counting carefully, obeying your parents, or showing love to others—you should do for the Lord.

- ▶ Remind the students that as they thoughtfully work on understanding numbers, they are learning skills that will help them as they serve the Lord. [Bible Promise: I. God as Master]

Review making and comparing sets of up to 20 objects

- ▶ Group the students in pairs and distribute 2 Ten Frames and 20 pennies to each pair. Circulate among the students and give guidance as needed throughout the lesson.

- ▶ Direct one student in each pair to show 4 pennies on the top row of his Ten Frame and direct the other student to show 6 pennies on his Ten Frame.

Compare the pennies using *more than* and *fewer than*. *6 pennies is more than 4 pennies; 4 pennies is fewer than 6 pennies.*

Compare the numbers using *greater than* and *less than*. *6 is greater than 4; 4 is less than 6.*

How much more than 4 is 6? *6 is 2 more than 4.*

- ▶ Follow a similar procedure to compare 5 and 4, 7 and 6, and 8 and 10.

Review decomposing 10 into 2 sets

- ▶ Direct each pair to place their Ten Frames side by side and to count out 10 pennies to use. Ask them to put the remaining pennies aside.

- ▶ Direct the students to place 10 pennies on the left Ten Frame. Circulate to check the pictures as they work.

- ▶ Direct attention to the full Ten Frame.

What number is represented by the pennies in this set? *10*

- ▶ Direct attention to the empty Ten Frame.

What number is represented by the pennies in this set? *0*

- ▶ Write “10 is 10 and 0 more” for display.

- ▶ Instruct a student in each pair to move the last penny to the first space in the top row of the right Ten Frame.

What number is represented by the number of pennies altogether? *10*

Describe how this picture of 10 is different from the first picture. *The first picture showed 10 as a set of 10 pennies. This picture shows 10 in 2 sets: a set of 9 and a set of 1.*

- ▶ Write “10 is 9 and 1 more” for display.

- ▶ Allow the students to explore all the different ways 10 can be placed into 2 sets as they continue moving 1 penny at a time from the left frame to the right. For each combination, ask a student to describe the new picture of 10 and write each statement for display: 10 is 8 and 2 more, 10 is 7 and 3 more, 10 is 6 and 4 more, 10 is 5 and 5 more, 10 is 4 and 6 more, 10 is 3 and 7 more, 10 is 2 and 8 more, 10 is 1 and 9 more, and 10 is 0 and 10 more.

- ▶ Conclude together that 10 can be shown in various ways.

Review 11–19 as 10 and some more and 20 as 2 sets of 10

- ▶ Direct the students to move the full Ten Frame to the left of the empty Ten Frame. Direct them to select 1 more penny from the set they set aside.

Where can you place this penny to show the number that comes after 10? *It can be placed on the right frame.*

Describe 11 as 10 and some more. *11 is 10 and 1 more.*

- ▶ Write the number 11 for display and point out that the first 1 represents the 10 on the left Ten Frame (1 ten) and the second 1 represents the 1 on the right Ten Frame (1 additional one).

- ▶ Continue to add 1 penny at a time, up to 19 pennies, and describe the number as 10 and some more. Write each number for display and allow the students to tell what each digit stands for.

- ▶ Invite the students to place the last penny on the right Ten Frame.

What number comes just after 19? *20*

- ▶ Lead the students in counting all the cubes by *counting on* from 10.

- ▶ Remind the students that there are 20 individual cubes on the 2 Ten Frames. Write the number 20 for display.

What is another way to describe 20? *20 is the same as 2 tens.*

What does the 2 tell you? *The 2 tells that there are 2 sets of 10.*

What does the 0 tell you? *The 0 tells that there are no additional ones.*

Chapter 1 Review

Draw dots to represent each number. Circle the number that is greater.

1. 2. 3. 4.

Count the objects and complete the sentences.

5. Digit has on shoes.

6. Cecilia has on hats.

7. There are numbers.

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Review sequencing the numbers 0–20

- ▶ Display Number Cards 0–20 in random order. Allow the students to put them in order by inviting 1 student at a time to move only 1 card.
- ▶ Repeat the procedure but this time with the word forms on the backs of the Number Cards displayed.
- ▶ Follow a similar procedure using Dot Pattern Cards 0–10. Sequence the numbers from least to greatest and then from greatest to least.

Review identifying numbers up to 20 as even or odd

What do you remember about how to tell whether a number is even? Elicit that the objects that represent an even number can be grouped in pairs with no object left over.

How is an odd number different from an even number? An odd number always has 1 object left over after all pairs have been made. An even number has no object left over.

- ▶ Distribute a Red Mat and 20 seals to each pair of students. Direct the students to place 1 seal on the mat.
Is 1 an even number or an odd number? 1 is an odd number. How do you know? There is no matching seal.
- ▶ Direct the students to place a different-colored seal below the first seal. Lead the students in counting the seals and

Even and odd numbers will not be tested in this chapter. This activity provides another opportunity to practice the concept for later use.

Draw more circles to make 10. Complete the sentence.

8. 10 is and more.

9. 10 is and more.

Draw more boxes to represent the number. Complete the sentence.

10. 15 is and more.

11. 20 is and more.

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guide them to the conclusion that the number 2 is even because the 2 seals make a pair with no seal left over.

- ▶ Direct the students to place another seal (same color as the first) in the top row. Guide the students in counting the seals and determining that the number 3 is odd.
- ▶ Continue until all 20 seals are displayed and the students have identified each number up to 20 as even or odd.

Worktext pages 17–18

- ▶ Review that understanding numbers helps the students count accurately, which in turn helps them better describe the world and deal fairly with others.
- ▶ Read and explain the directions for the pages. Allowing the students to work as independently as possible on review pages will help you better assess their knowledge and understanding of the concepts presented in this chapter, but give immediate assistance as needed.
- ▶ Worktext pages 17–18 and Reviews pages 15–16 provide the students with an excellent study guide for the Chapter 1 Test.