Simply

Good and Beautiful

MATH

1

COURSE BOOK

The Good and the Beautiful CURRICULUM

Table of Contents

ABOUT THE COURSE

Supplies Needed

- *Simply Good and Beautiful Math 1 Course Book*
- *Simply Good and Beautiful Math 1 Box*
- Pencil
- Crayons or colored pencils
- Whiteboard and dry-erase marker

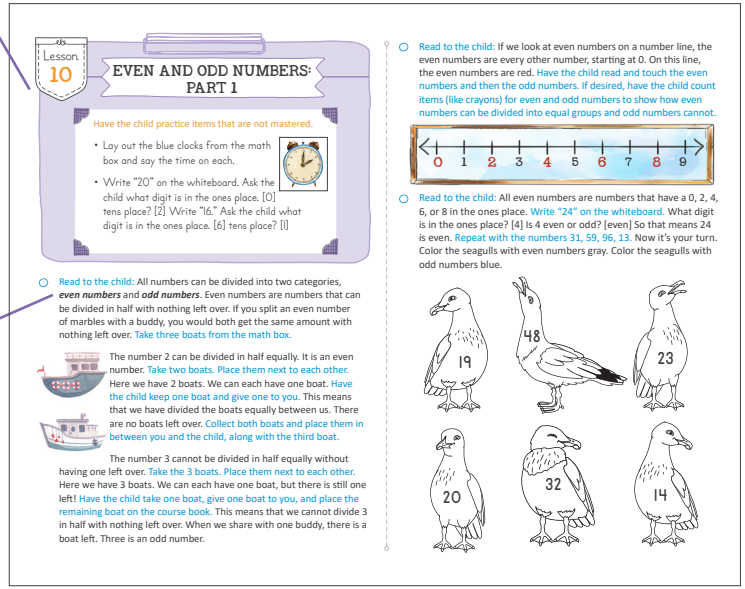
The course book will not list when you need the math box or a whiteboard and dry-erase marker, but you will use them in most lessons, so always have them on hand. Because the math box is organized into easy-to-access compartments, individual math box items needed are not listed at the beginning of the lessons.

Course Organization

- The course book serves as the teacher's guide and the student book.
- The course has 120 lessons divided into three units. Each unit has an assessment at the end of the unit.
- If you complete four lessons a week, you will finish in a normal school year and have about four weeks left over that can account for normal breaks, sickness, and vacations.

Daily Lessons

- **Review Box**—You can choose to review these concepts at the beginning of the lessons, or you can skip them if the child has mastered the concepts.
- **Lesson**—Blue text is instructions to the parent or teacher. Black text is read to the child. Each lesson contains instruction and practice on a new concept.
- **Review**—Each lesson includes one or more pages of review. The review pages can usually be done independently by the child after the instructions are explained to him or her. The concepts reviewed are from previous lessons. This means the child can complete the review page before the lesson or while you work with another child, if needed.


Lesson 10

EVEN AND ODD NUMBERS: PART 1

Have the child practice items that are not mastered.

- Lay out the blue clocks from the math box and say the time on each.
- Write "20" on the whiteboard. Ask the child what digit is in the ones place. [0] tens place? [2] Write "16." Ask the child what digit is in the ones place. [6] tens place? [1]

Read to the child: All numbers can be divided into two categories, ***even numbers*** and ***odd numbers***. Even numbers are numbers that can be divided in half with nothing left over. If you split an even number of marbles with a buddy, you would both get the same amount with nothing left over. Take three boats from the math box.

The number 2 can be divided in half equally. It is an even number. Take two boats. Place them next to each other. Here we have 2 boats. We can each have one boat. Have the child keep one boat and give one to you. This means that we have divided the boats equally between us. There are no boats left over. Collect both boats and place them in between you and the child, along with the third boat.

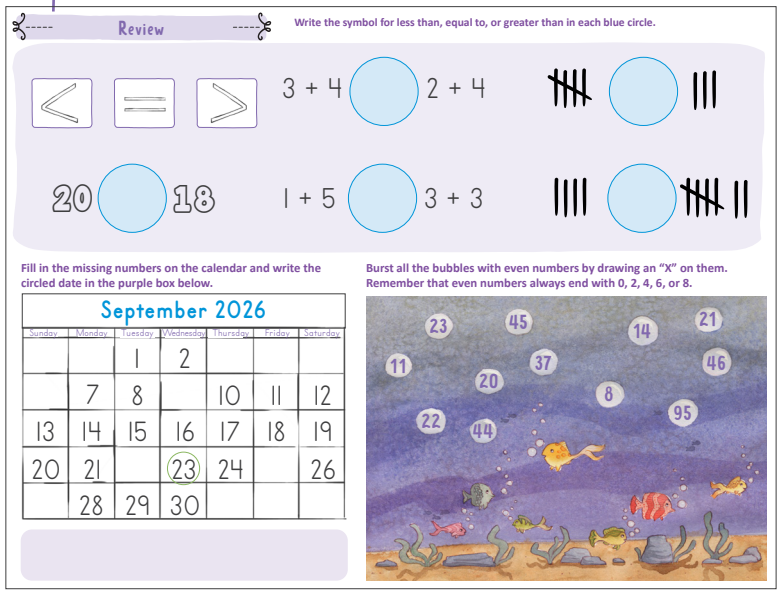
The number 3 cannot be divided in half equally without having one left over. Take the 3 boats. Place them next to each other. Here we have 3 boats. We can each have one boat, but there is still one left! Have the child take one boat, give one boat to you, and place the remaining boat on the course book. This means that we cannot divide 3 in half with nothing left over. When we share with one buddy, there is a boat left. Three is an odd number.

Read to the child: If we look at even numbers on a number line, the even numbers are every other number, starting at 0. On this line, the even numbers are red. Have the child read and touch the even numbers and then the odd numbers. If desired, have the child count items (like crayons) for even and odd numbers to show how even numbers can be divided into equal groups and odd numbers cannot.

0 1 2 3 4 5 6 7 8 9

Read to the child: All even numbers are numbers that have a 0, 2, 4, 6, or 8 in the ones place. Write "24" on the whiteboard. What digit is in the ones place? [4] Is 4 even or odd? [even] So that means 24 is even. Repeat with the numbers 31, 59, 96, 13. Now it's your turn. Color the seagulls with even numbers gray. Color the seagulls with odd numbers blue.

19 48 23 20 32 14


Review

Write the symbol for less than, equal to, or greater than in each blue circle.

3 + 4 ○ 2 + 4

20 ○ 18

1 + 5 ○ 3 + 3

Fill in the missing numbers on the calendar and write the circled date in the purple box below.

September 2026

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
		1	2			
	7	8		10	11	12
13	14	15	16	17	18	19
20	21		23	24		26
	28	29	30			

Burst all the bubbles with even numbers by drawing an "X" on them. Remember that even numbers always end with 0, 2, 4, 6, or 8.

23 45 14 21 11 37 46 20 8 22 44 95

Frequently Asked Questions

How do I get started?

Gather the supplies needed. You are then ready to open to the first lesson and follow the instructions. You do not need to read the lessons before teaching them.

How long are lessons?

For children right on level with the lessons, most lessons take 15–20 minutes.

- If your child takes longer than 15–20 minutes per lesson but is understanding and retaining the information, don't worry; complete as much of a lesson as your child's attention span allows each day. It is OK if this course takes longer than a school year to complete.
- If your child takes less than 15–20 minutes per lesson and is learning new things, we suggest not moving to Math 2 so that your child doesn't have holes in his or her math foundations. Rather, consider having the child do multiple lessons a day to move through the course quickly, and then start Math 2.
- If your child takes less than 15–20 minutes per lesson and seems to know all the information already, consider having the child take the assessments in the course (see the Table of Contents) to see if the child can skip any units or the whole course.

Our thorough piloting program proved that most children in Math 1 thrive with having math for 15–20 minutes a day as this curriculum is carefully designed to maximize time and effectiveness. If you or the child feels more time is needed, consider doing two lessons a day.

Is Math 1 a spiral or mastery program?

Math 1 is mainly a spiral curriculum, constantly reviewing concepts your child has learned to ensure he or she understands and retains the information.

Do you include any specific doctrine?

No, the goal of our curriculum is not to teach doctrines specific to any particular Christian denomination but to teach general principles such as honesty, hard work, and kindness. All Bible references in our curriculum use the King James Version.

Is there an answer key?

Yes, you can find the answer key by clicking on the "FAQs and Extras" button from the Math 1 page on goodandbeautiful.com. The answer key is a free download. Physical copies of the answer key are not provided for Math 1.

UNIT 1 OVERVIEW

LESSONS 1–40

Extra Supplies Needed

none

New Concepts Taught

- Addition strategies
- Calendar
  - Days of the week
  - Months of the year
  - Writing the date
  - Yesterday, tomorrow, last week, next week
- Collect and sort data
- Colors
- Comparisons
- Counting forward and backward
- Counting by 5s and 10s
- Dividing in half
- Even/odd
- Greater than, less than, equal to
- Left/right
- Money
  - Counting and writing amounts
  - Pennies, nickels, dimes
  - Representing different amounts
- Number lines: 1–39
- Number word form: 1–3
- One more, one less
- Order of events
- Ordinal numbers
- Pairs and matching
- Patterns
- Place value
- Shapes
- Subitizing
- Subtraction strategies
- Time to half hour
- Writing numbers: 0–39

Parent/Teacher Tips

- If the child cannot read the instructions for the review sections at the end of each lesson, go over each activity with the child and make sure he or she understands the instructions before he or she begins the review. Most review activities can be completed independently by the child. Consider training the child to complete all the activities he or she can, skipping those that he or she needs help with. This will allow you time with another child before coming back and helping with any items that were skipped.
- If days of the week are not memorized, have the child watch the "Days of the Week Song" video on The Good and the Beautiful Kids YouTube channel daily until mastered.
- This course refers often to optional videos on The Good and the Beautiful Kids YouTube channel. Consider getting the free YouTube app on your phone and liking the videos. Then you can quickly access your liked videos from the library button at the bottom of your app.

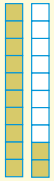
Lesson 5

PLACE VALUE: 10–16/ WRITING 10–16

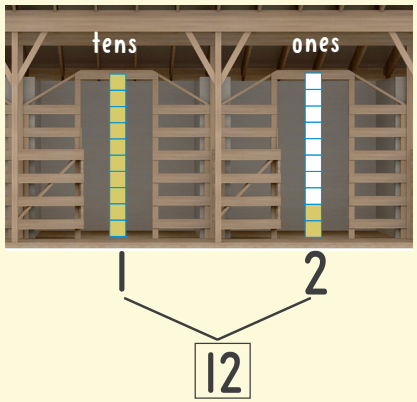
Have the child practice items that are not mastered.

- Draw a circle going clockwise.
- Count from 60 to 80.

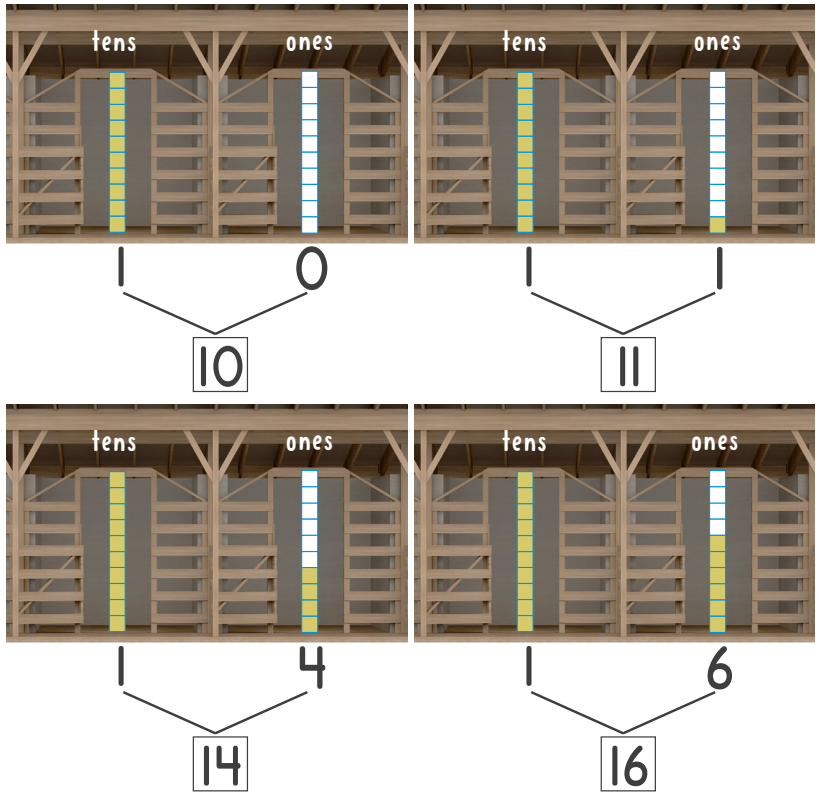
○ Cut out the stable and the 8 ten sticks on page 15. Read to the child: Let's learn about ***place value*** in a fun way. The horses at the right are named Molly and Toby. Let's see how many bales of hay are put in their stables every month. Lay out the stable you cut out on a whiteboard or piece of paper. Point to the ones stable. This is the stable that shows the ones place. In the ones place, we put a ten stick that does not have all ten of its blocks filled in. Point to the tens stable. This is the stable that shows the tens place. Once a ten stick has all ten blocks filled in, we move it from the ones place to the tens place.



Hand the child these pieces. Have the child put the ten stick that is not full in the ones stable and the full ten stick in the tens stable. Have the child tell you how many blocks are filled in on the ten stick in the ones place [2] and write "2" below that stable. Then have the child tell you how many full ten sticks are in the tens place [1] and write "1" below the tens stable. Ask the child what number has been created. [12] Explain to the child that the number 12 means that it has one ten and two ones. Have the child count the number of blocks to see that there are 12 total blocks, or bales of hay, in the stables.

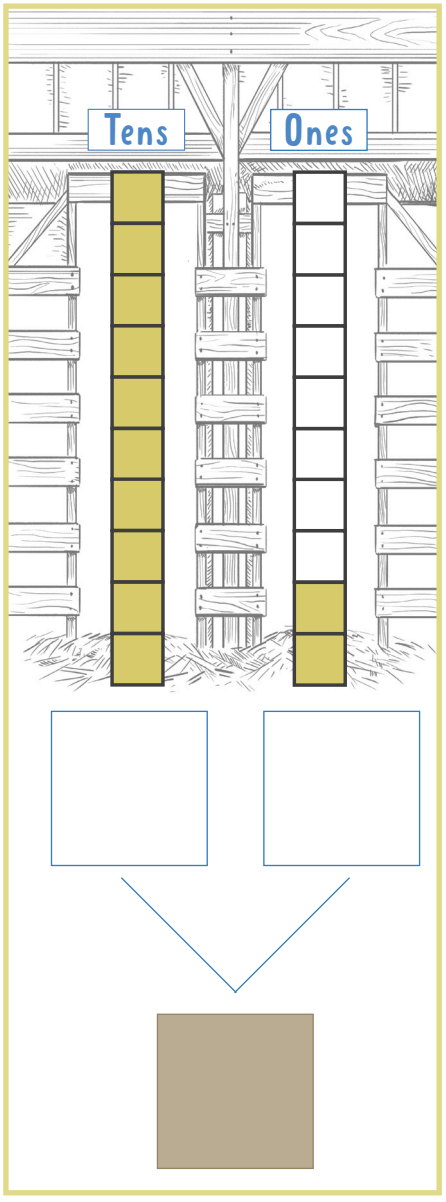


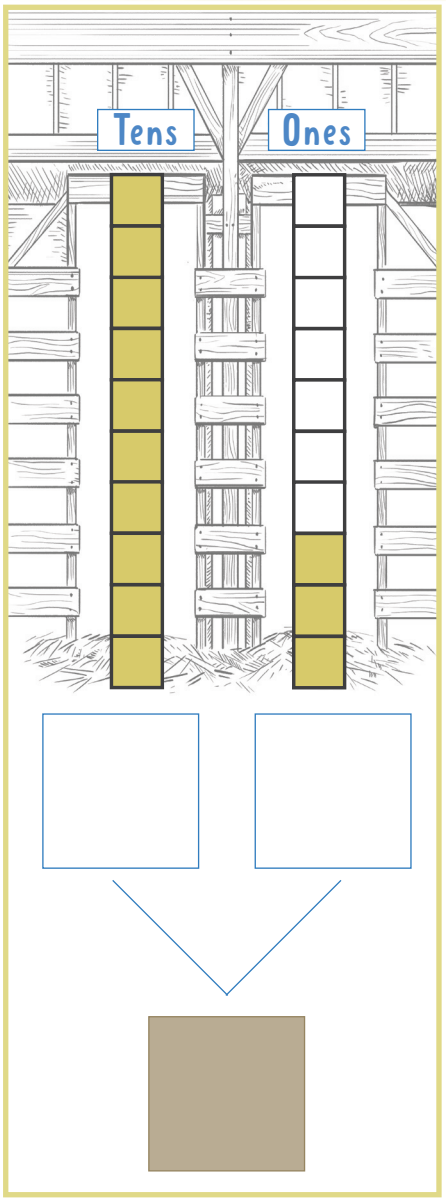
○ Repeat the activity for all the ten sticks you have cut out, having the child write on the whiteboard or paper. Here is how some of the stables will look when completed.

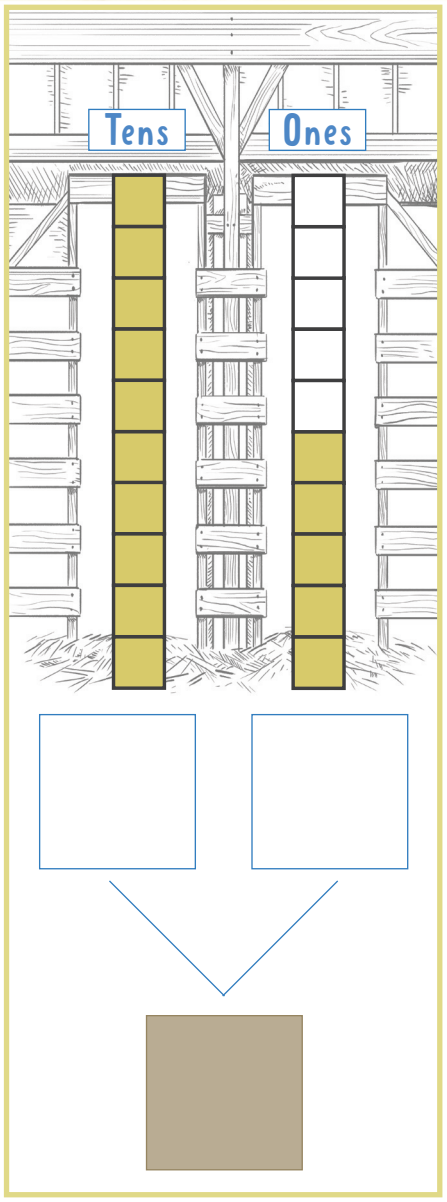


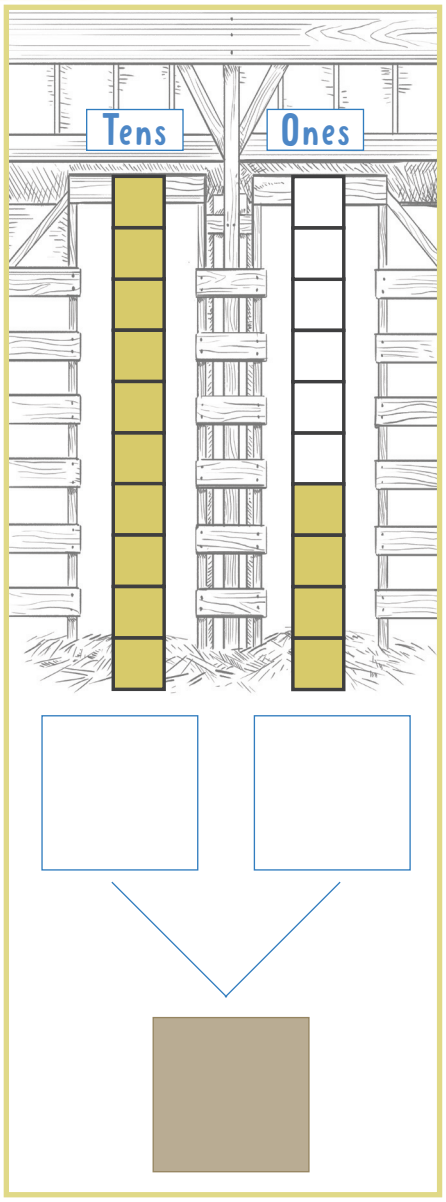
How Many BALES of HAY?

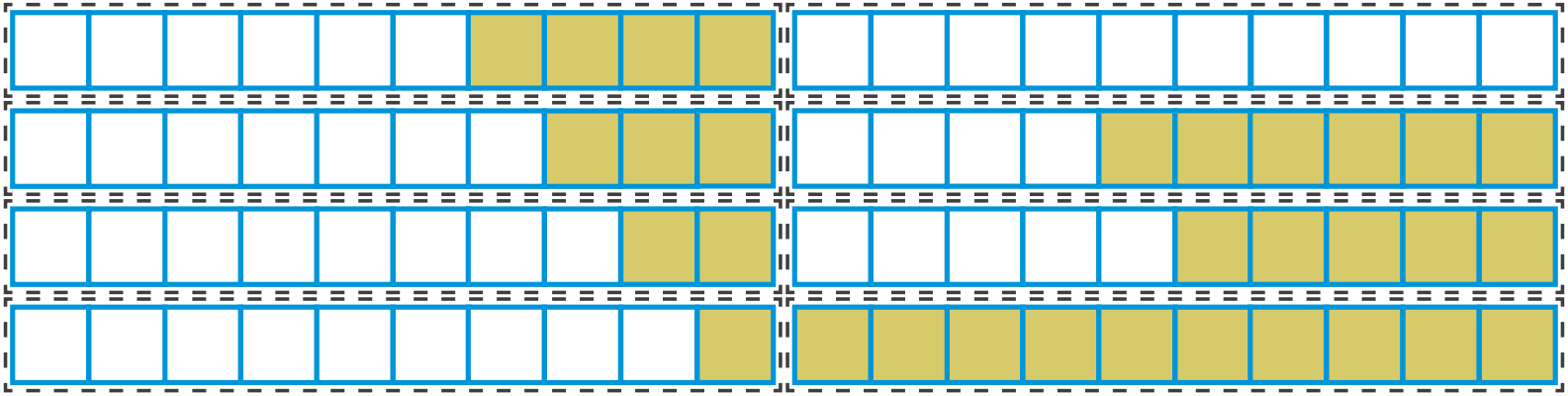
- Have the child write how many blocks are filled in the ones column, how many full ten sticks are in the tens column, and then the number that is represented by all the blocks.











REVIEW

Complete each problem.

1	1	0	2
+ 5	+ 3	+ 5	+ 2

Fill in the missing numbers on the calendar and write the circled date in the purple box below.

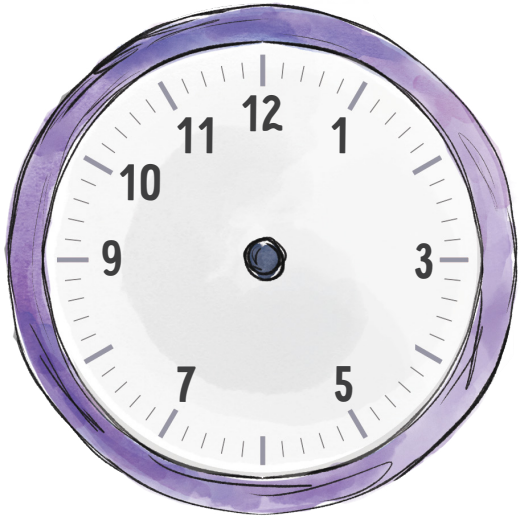
March 1910

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
		1	2			
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

Complete each problem.

4	3	5
+ 1	+ 1	+ 1

On each clock fill in the missing numbers and draw the clock hands to show the time given.



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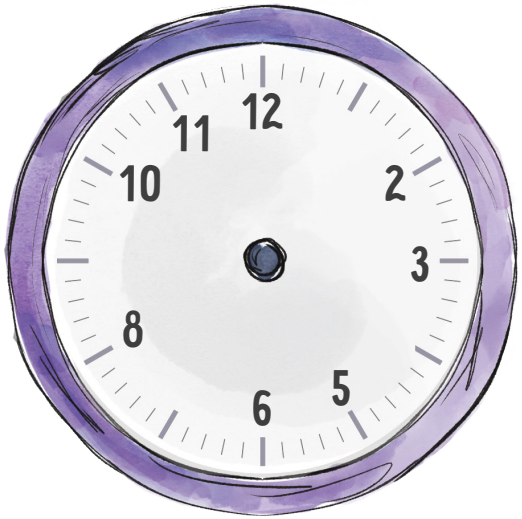


7:00

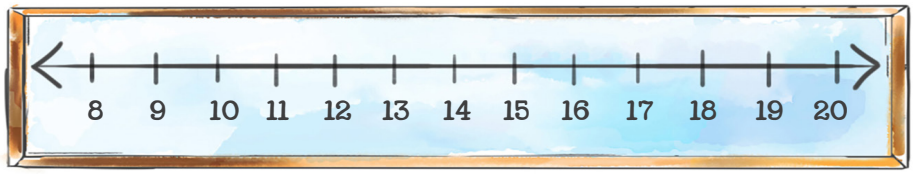
Lesson 6

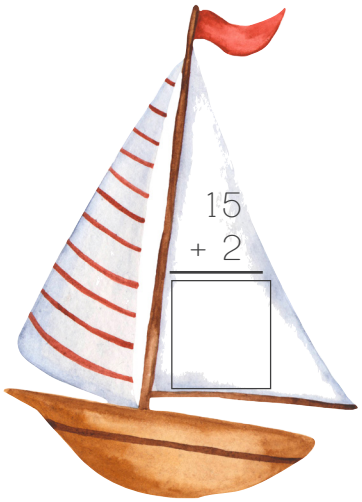
ADDING ON 2/ WRITING 17–20

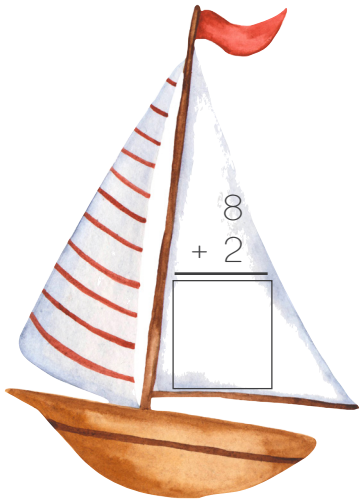
Have the child practice items that are not mastered.

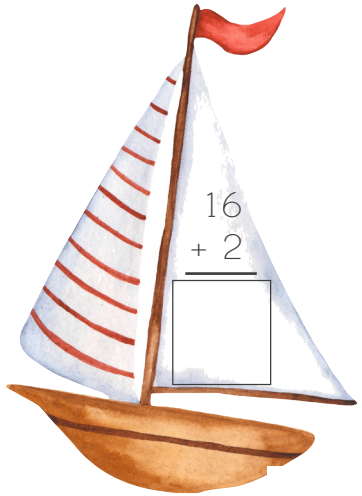
- Count from 80 to 100.
- Watch the "Months of the Year Song" video.

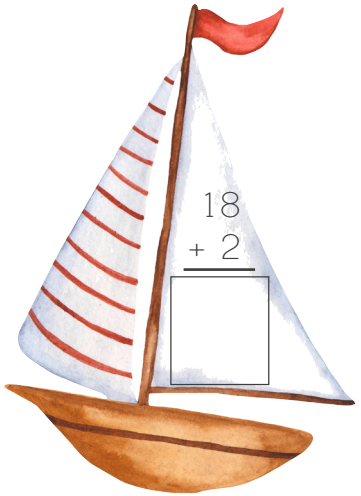
○ Read to the child: Let's practice adding 2 to a number. Place your finger on number 8 on the number line. Figure out what 8 + 2 is by counting up 2 numbers from 8. [10] Repeat for 12 + 2, 15 + 2, 18 + 2. Have the child complete the problems on the boats. Use the number line if needed. Make sure the child forms the numbers correctly.

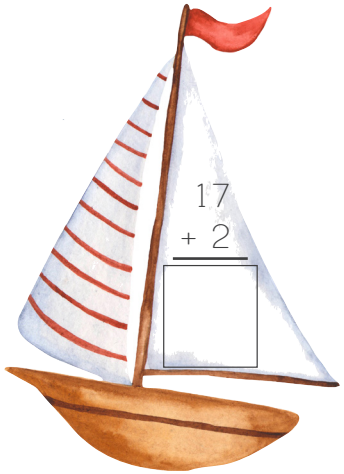


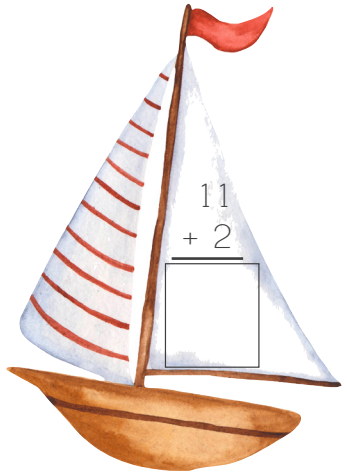












○ **That's My Island Game:** Have the child choose any boat from the math box. Read to the child: We are going to play a game called "That's My Island!"

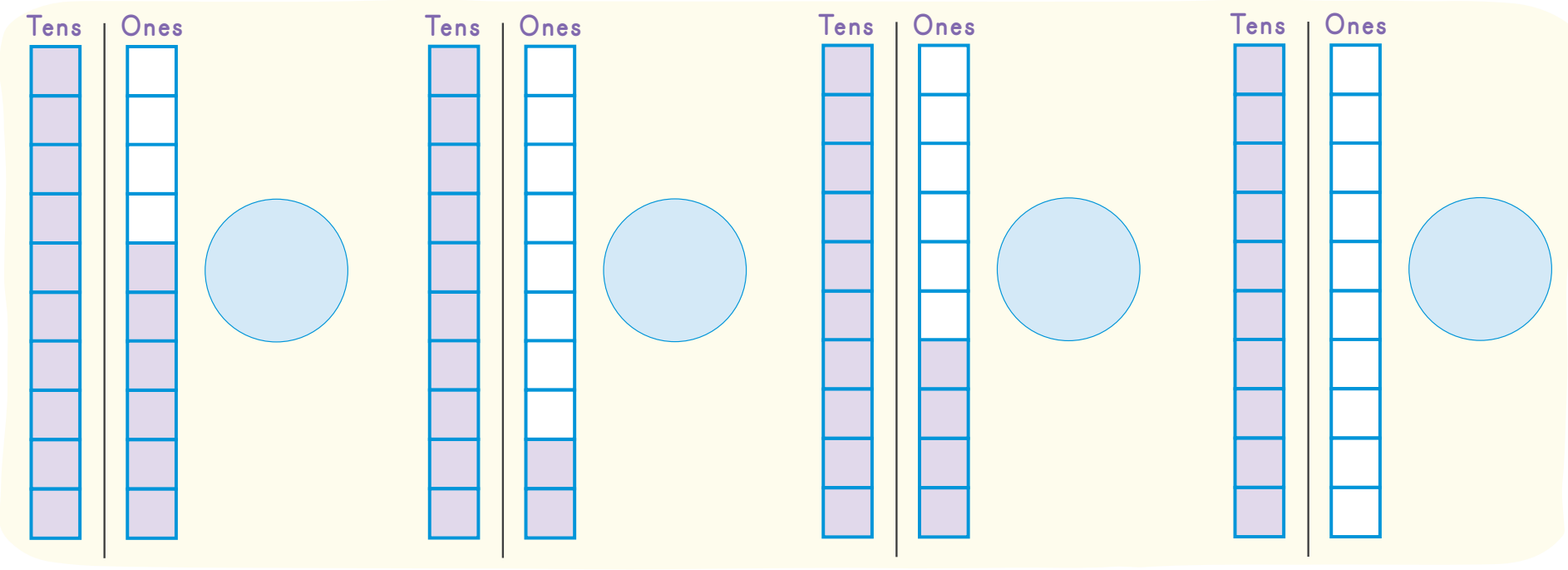
1. On a piece of paper, write down a number between 12 and 20 and don't let me see it. Place your boat on "Start" on the next page.
2. I will say an addition problem aloud. You sail your boat to the island that has the answer to the problem. Use the number line if needed. Once you land on the island that has the number you wrote down, say, "That's my island!" and the game is over. Play as many times as desired.

   Say the following aloud in any order: 10 + 2, 11 + 2, 12 + 2, 13 + 2, 14 + 2, 15 + 2, 16 + 2, 17 + 2, 18 + 2.

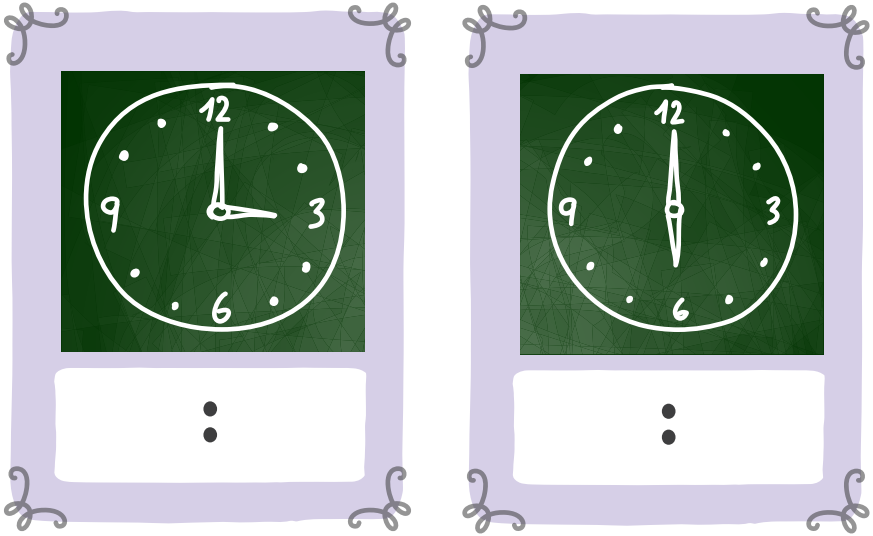
That's My Island!

REVIEW

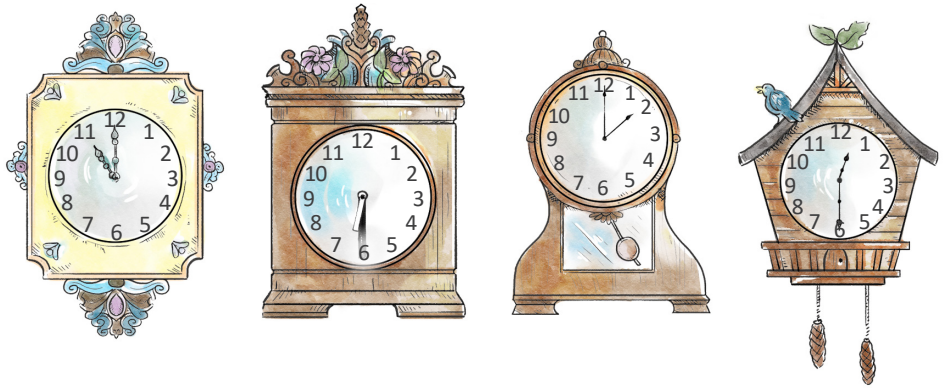
In each blue circle, write the number represented by each set of ten sticks.



Write the time shown by each clock.



Draw a line from the clock to the matching time.



2:00 12:30 6:30 11:00

Lesson 11

WRITING ONE, TWO, THREE/ORDER OF EVENTS

Have the child practice items that are not mastered.

- Write "24" on the whiteboard. What digit is in the ones place? [4] Tens place? [2]
- Count by 10s from 10 to 100.
- Count from 60 to 80.

○ Read to the child: Today, we are going to learn how to spell the numbers 1, 2, and 3.

○ Watch the "How to Spell Numbers 1, 2, 3" video three or more times on The Good and the Beautiful Kids YouTube channel.

○ Have the child write the answer to each addition problem with a number word from the purple box.

one two three

1 + 1 = _____

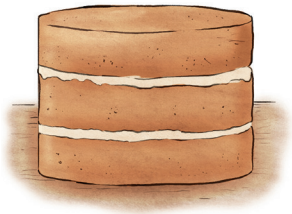
2 + 1 = _____

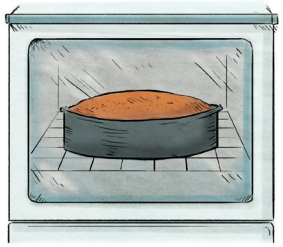
0 + 1 = _____

○ Read to the child: Events happen in a certain order. For example, you have to get out of bed before you can ride your bike in the morning. For each set of images below, determine in which order the events happen. Write "one," "two," or "three" below each picture to show the order in which it happens.



_____ _____ _____



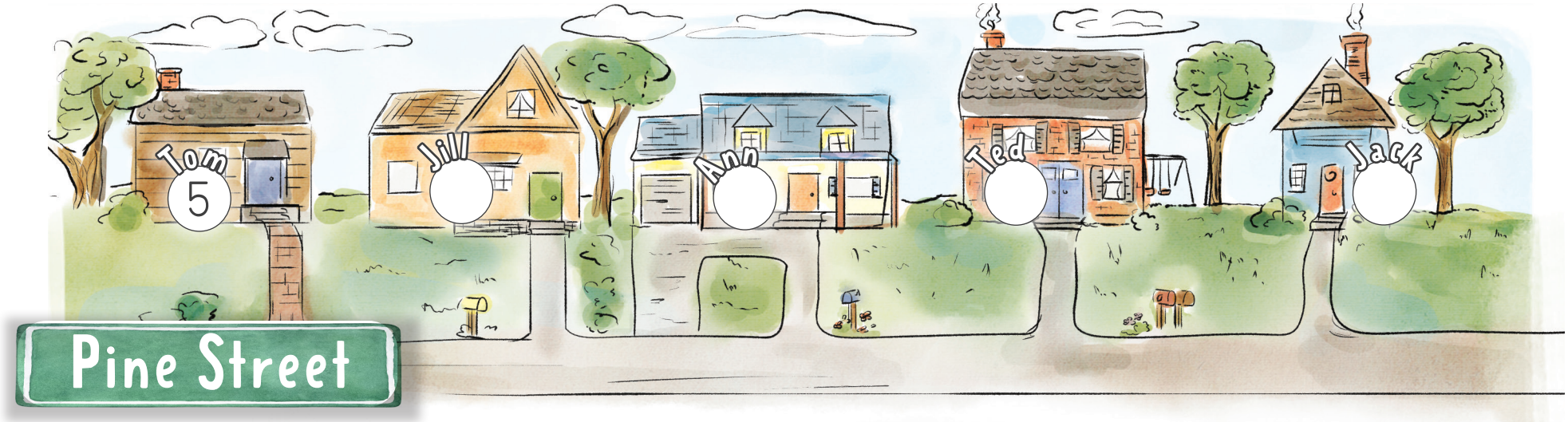


_____ _____ _____

○ Have the child circle the right word answer for each problem.

1 + 2 = one two three

1 + 1 = one two three



1. **Write the house numbers for each house on Pine Street. The house numbers skip count by 5s and go in this order: 5, 10, 15, 20, 25.**

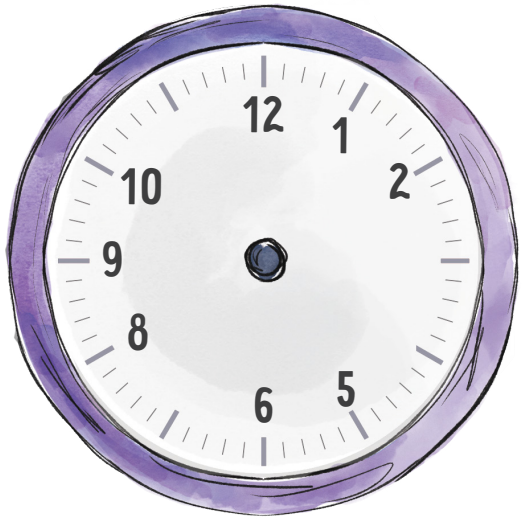
2. **Solve each addition problem by using skip counting. The answer is a house number. Circle whose house belongs to that house number.**

5 + 0	5 + 5	5 + 5 + 5	5 + 5 + 5 + 5
Jill Tom	Jill Ann	Jill Ann	Ted Jack

In the circles write the house numbers for each house on Oak Street. The house numbers skip count by 2s and go in this order: 2, 4, 6, 8, 10.

REVIEW

Fill in the missing numbers and draw the clock hands to show the time given.



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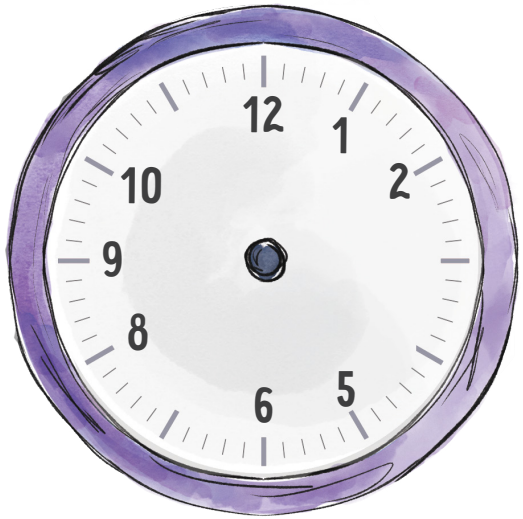
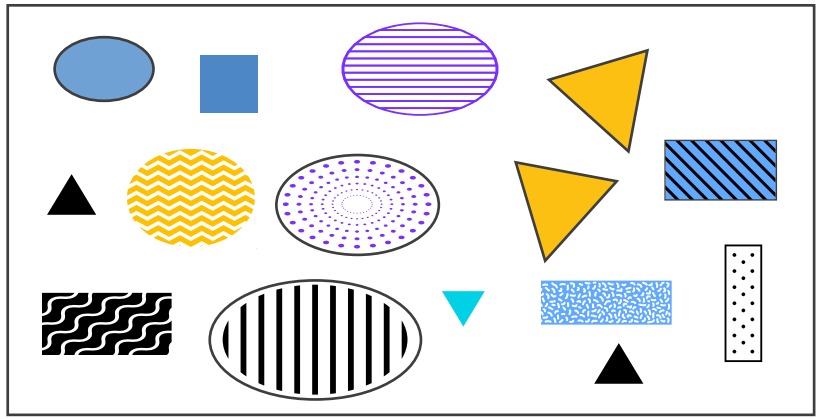


2:00

Complete each problem.

2	7	4	6
+ 3	+ 1	+ 2	+ 1
☐	☐	☐	☐

Count each type of shape in the box, and then fill in the chart with tally marks to show how many of each shape are in the box.



Rectangles (without 4 equal sides)		Triangles	
Ovals		Squares (rectangles with 4 equal sides)	

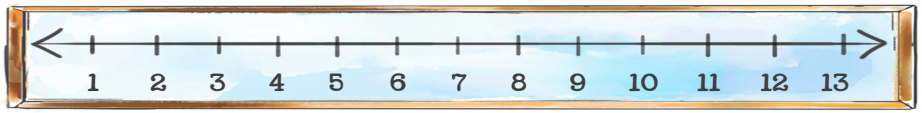
Lesson 18

SUBTRACTION: PART 2

Have the child practice items that are not mastered.

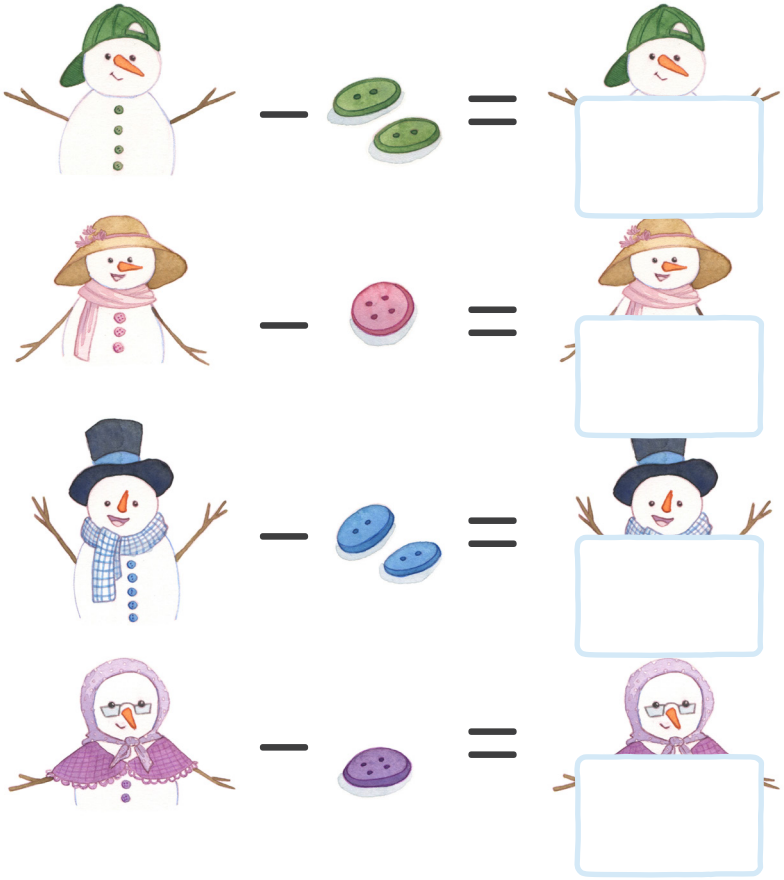
- Watch the video titled "How to Spell Numbers 1, 2, 3" one or more times.
- Say what day of the week it was yesterday and what day it will be tomorrow and one week from today.
- Count by 10s from 10 to 100.

○ Read to the child: Crossing out was the subtraction strategy we used last time. We will use the subtraction strategy of counting backward today. Let's practice taking away 1 from a number. When we do this, we go to the number just before, which means we move backward on a number line by 1. Have the child place his or her pencil on number 9. If we start at number 9 and take away 1, which number do we land on? [8] Have the child place his or her pencil on number 5. If we start at number 5 and take away 1, which number do we land on? [4]



○ Read to the child: It works the same way when we take away 2. We go backward on the number line, but this time it is by 2 numbers! Have the child place his or her pencil on number 8. If we start at 8 and take away 2, which number do we land on? [6] Have the child place his or her pencil on number 3. If we start at 3 and take away 2, which number do we land on? [1] Write these problems on the whiteboard and have the child solve them: 5 – 2 =, 7 – 1 =, 4 – 2 =, 8 – 2 =.

○ Read to the child: These snowmen have lost some of their buttons. Count how many buttons are on each snowman. Then decide how many buttons are left after some fall off and write that number in the box. You can cross out the buttons that fell off and count the ones that are left if it is helpful.



○ Read the following story problems aloud. On a whiteboard have the child write a problem and answer for each story. If needed, complete the first one for the child as an example.

1. Three birds are in a nest, and 1 flies away. How many birds are left?
2. Ten birds are sitting on a fence, and 2 fly away. How many are left?
3. Five birds are drinking in a birdbath, and 1 flies away. How many are left?

Snowflake Subtraction

For each subtraction problem, count the snowflakes in each group and write that number in the blue box. Complete each subtraction problem and write the answer in the white box. If needed, cross out the number of snowflakes you are subtracting and count the snowflakes that are left.

Lesson 30

PLACE VALUE PRACTICE

Have the child practice items that are not mastered.

- Draw a circle going clockwise.
- Count from 189 to 210.
- Answer the doubles addition facts.

6	4	5	3	7	9	8
+ 6	+ 4	+ 5	+ 3	+ 7	+ 9	+ 8

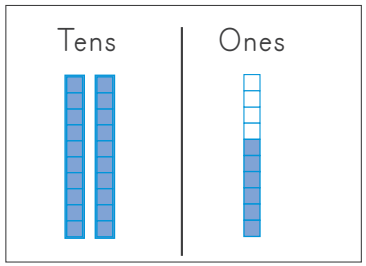
○ Read to the child: Jesus said, "I am the good shepherd." A good shepherd loves his sheep, watches over them, and keeps them safe. Jesus truly is our good shepherd, and we are like His sheep. Today, we are going to use sheep in our lesson to practice place value.

Have the child complete the page in this lesson titled "How Many Sheep Are in Each Barn?" while you cut out the items on the next page. (Remove the page before cutting.)

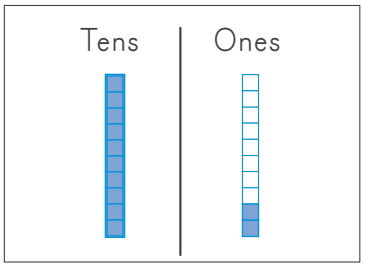
○ Write the following on scratch paper:

Tens	Ones

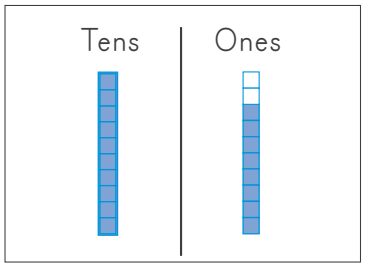
○ Give the child the ten sticks and the boxes with purple font that you cut out. Read to the child: Let's figure out how many sheep each farm has by using ten sticks. First, choose a box with a person's name on it and how many sheep are on his or her farm. Then, on the paper, show that number using ten sticks. Remember to put the full tens in the tens column and the ones in the ones column. Here are some examples of how the child should place the ten sticks.



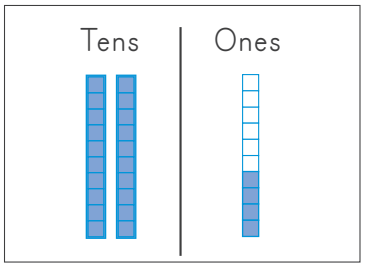
Jane's Farm
26 sheep



Marco's Farm
12 sheep



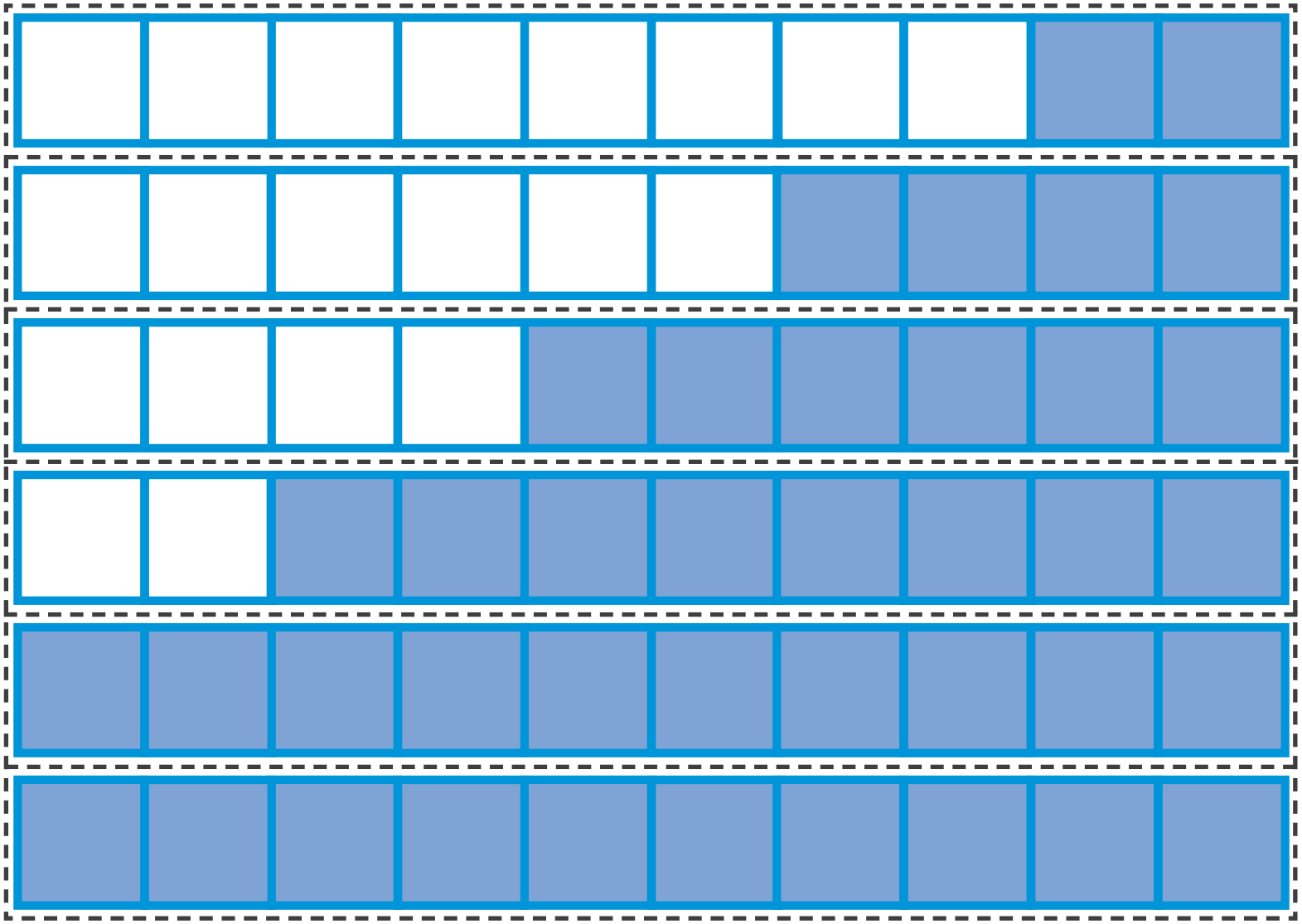
Abe's Farm
18 sheep



Vanessa's Farm
24 sheep

You will be directed to cut these out during the lesson.
You do not need to prepare them before the lesson.

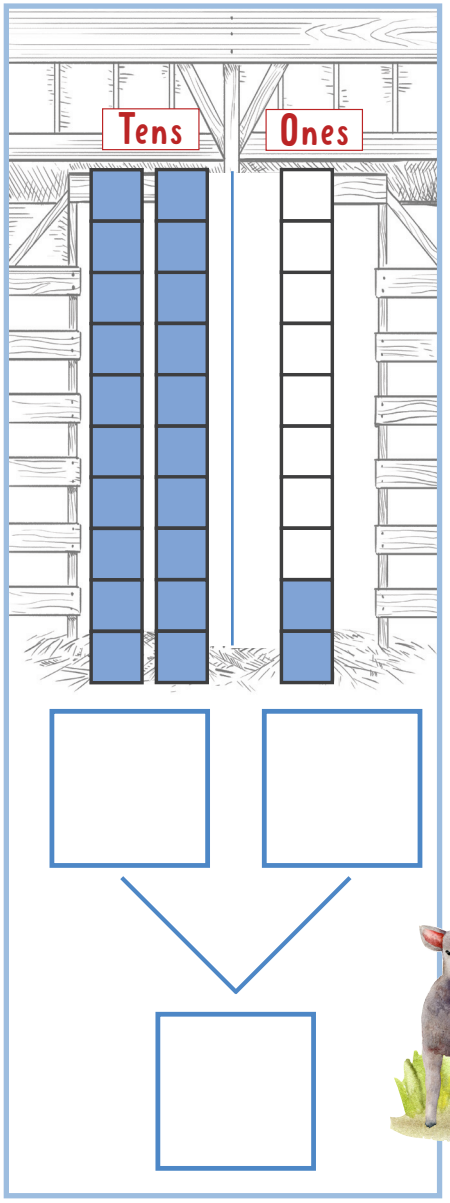
Jane's Farm 26 sheep	Marco's Farm 12 sheep	Abe's Farm 18 sheep	Vanessa's Farm 24 sheep	Seth's Farm 16 sheep



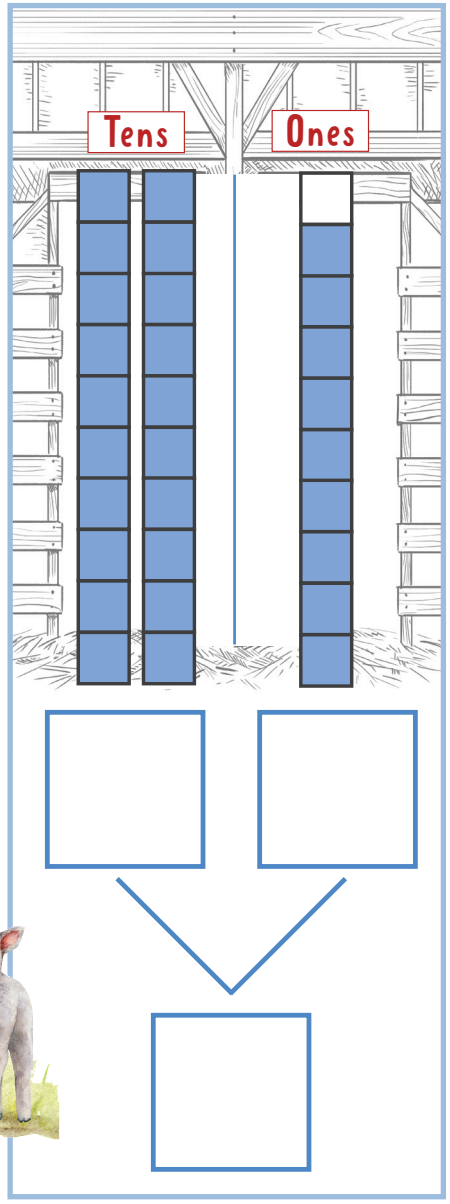
- Have the child write how many blocks are filled in the ones column, how many full ten sticks are in the tens column, and then the number that is represented by all the blocks.

How Many Sheep Are in Each Barn?

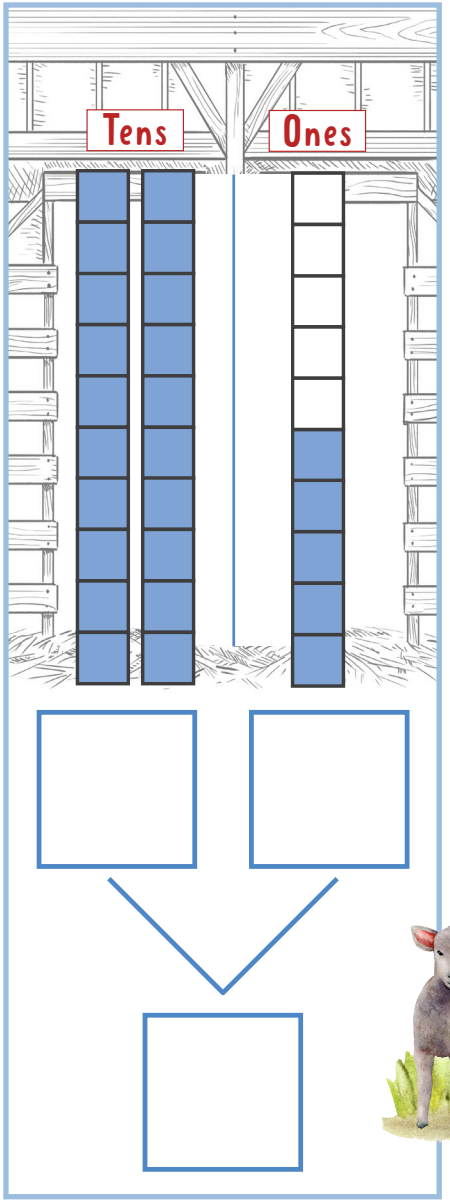
Tim's Barn



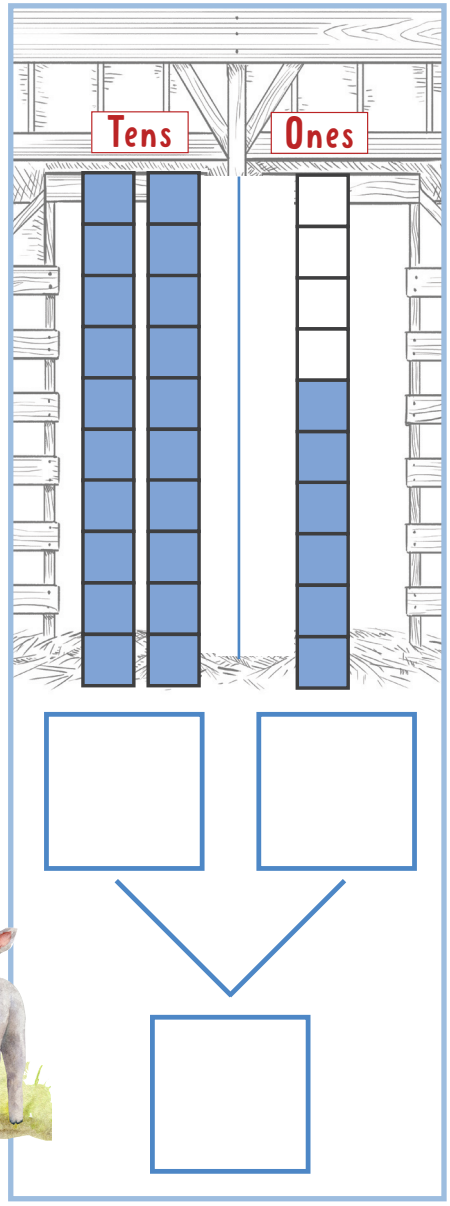
Beth's Barn



Bill's Barn



Mindy's Barn



LESSONS 39-40

UNIT ASSESSMENT

Parent/Teacher

Read to the child: Unit assessments give you practice with the math concepts learned in this unit without over practicing. This formal assessment covers only concepts that are expected to be mastered at this point. It also gives practice with concepts that still need work.

For Lesson 39 have the child complete the exercises with purple headers only. If the child does not have the concept mastered, check the orange "Additional Practice" checkbox for that section and review the concept with the child.

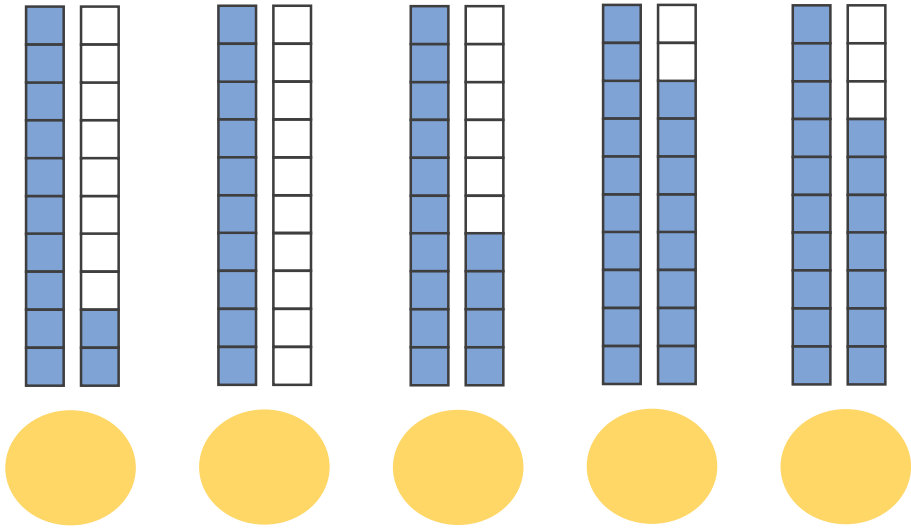
For Lesson 40 have the child complete all the orange sections **that are checked**. All the principles will be reviewed again, so if the child is still struggling with a concept, you may either 1) continue to work on that concept before moving on, or 2) move on and work more on the concept when it is reviewed. If the child has only a few or no orange sections to practice, feel free to move on to the next lesson.

Note: All concepts in Unit 1 will be reviewed throughout the rest of the course, but less frequently.

Student

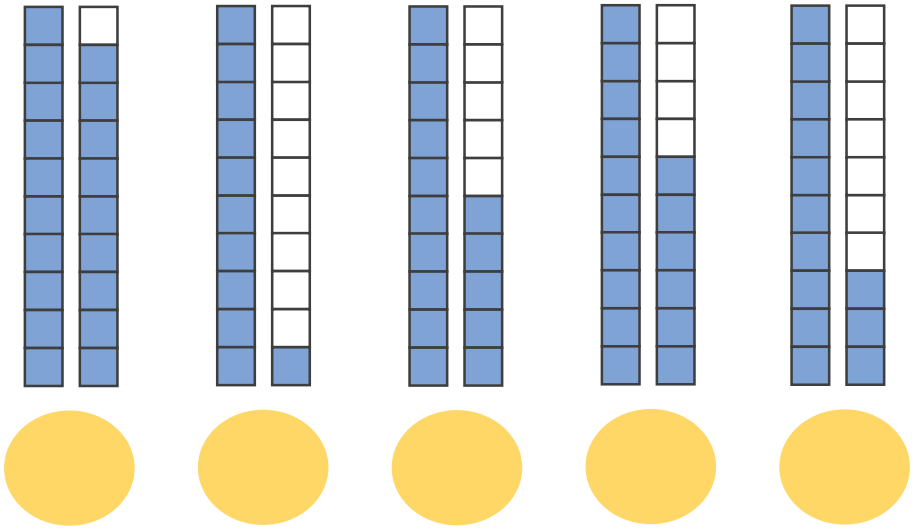
WRITING NUMBERS 11 TO 19 & PLACE VALUE

Write the number shown by each set of ten sticks.



Additional Practice

Write the number shown by each set of ten sticks.

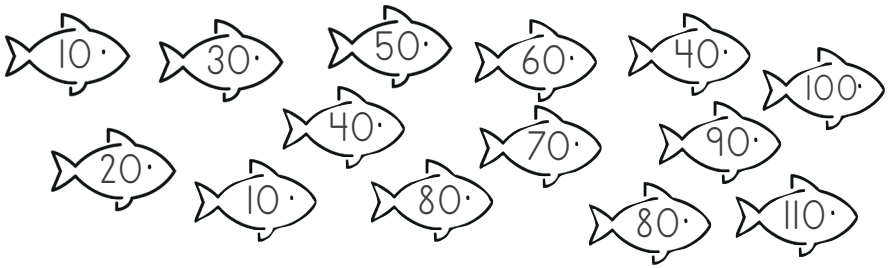


SKIP COUNTING

Fill in the blank boxes to skip count by 5s.

5		15		

Draw a line from fish to fish that shows skip counting by 10s.

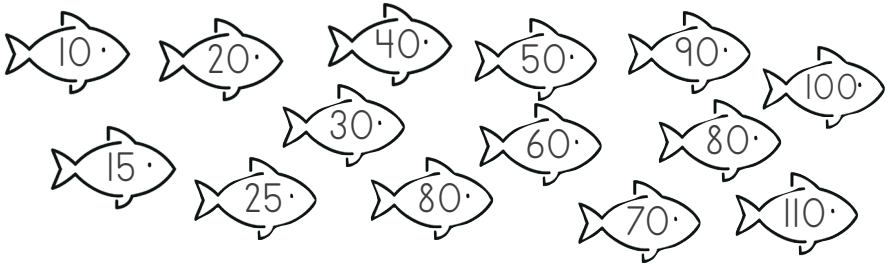


Additional Practice

Fill in the blank boxes to skip count by 5s.

	10			

Draw a line from fish to fish that shows skip counting by 10s.



ADDING ON 2 AND 3 & GREATER THAN, LESS THAN, EQUAL TO

Solve the addition problems, and then write the correct greater than, less than, or equal to sign between each set of problems.

16 + 3		17 + 2	
14 + 2		16 + 3	

Additional Practice

Solve the addition problems, and then write a greater than, less than, or equal to sign between each set of problems.

13 + 3		15 + 2	
16 + 2		12 + 3	

SUBTRACTION & CENTS

Subtract the cents. Include the cent sign with your answer.

6¢	5¢	7¢	6¢
- 2¢	- 3¢	- 1¢	- 4¢

Write the number of cents each coin is worth.



Additional Practice

Subtract the cents. Include the cent sign with your answer.

3¢	4¢	5¢	6¢
- 1¢	- 2¢	- 4¢	- 3¢

Write the number of cents each group is worth.




TELLING TIME

Circle the time shown by each clock below.



6:00	12:30	12:30
11:30	11:30	5:00
12:00	6:00	6:00

Additional Practice

Circle the time shown by each clock below.



10:30	3:00	6:30
4:30	12:00	5:00
6:00	3:15	5:30

CALENDARS

Write the date circled in green in the green box. In the purple box, write the date ONE WEEK FROM the date circled in green.

April 2025						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30			

Additional Practice

In the green box, write the date ONE WEEK FROM the date circled in red on the calendar above.

ORDINAL NUMBERS

Label each plant with its position in the row from left to right: **1st, 2nd, 3rd, and 4th.**

Additional Practice

Label each popsicle with its position in the row: **1st, 2nd, 3rd, and 4th.** The yellow popsicle is first.

UNIT 2 OVERVIEW

LESSONS 41–80

Extra Supplies Needed

ruler

New Concepts Taught

- Addition word problems
- Bar graphs
- Calendar
  - Holidays
  - Identifying dates
  - Month before, month after
- Count to 400
- Counting by 2s, 4s, and 25s
- Data collection and sorting
- Dozens
- Estimation
- Fact families
- Fractions
- Hundreds chart
- Measurement
  - Drawing line segments
  - Inches and centimeters
- Money
  - Fewest coins to pay
  - Quarters and half-dollars
- Morning, afternoon, evening
- Number bonds
- Number lines: 40–70
- Number patterns
- Number word form: 4–6
- Pictograph
- Position
- Seasons
- Subtraction word problems
- Ten more, ten less
- Time to quarter hour
- Weight comparisons
- Writing numbers: 40–70

Parent/Teacher Tips

- If the child really enjoys a math game and wants to play it again, it is suggested that you do so, even if it results in not completing the entire lesson that day. Consistency with a schedule is good, but it is also good for learning to be about exploring and enjoying, not just checking a lesson off the list.
- Go at the pace of the child. If the child is progressing slowly and is overwhelmed by the length of the lessons, consider not completing a full lesson each day. You can catch up by doing five days of school a week instead of four or by doing some lessons during summer break. If the child finishes a lesson quickly and is ready to do more, consider doing more than one lesson in a day.

Lesson 45

ONE LESS AND ONE MORE

Have the child practice items that are not mastered.

- Watch the video "How to Spell Numbers 4, 5, 6," and then write the words "four," "five," and "six" on the whiteboard.
- Count backward from 20 to 0. Count by 5s from 5 to 30.
- Say the name of each coin and its value:

○ Take the 1–6 dice from the math box and make sure you have a whiteboard and dry-erase marker. Read to the child: We are going to play a game to practice identifying one more and one less than a number. To play, you point to any red box and roll the dice, keeping your finger on the box. We will add the number you roll to 40, and I will write the number on the whiteboard. You determine if the number on the whiteboard is one more or one less than any of the numbers you are pointing to. If not, your turn is over. If so, write the number under the section titled "Student," and your turn is over. I will do the same steps for my turn. The first person to fill all of his or her boxes for the round wins. Play two rounds.

One More One Less Game

42, 43	44, 45
46, 47	42, 45
45, 46	41, 43

Round 1

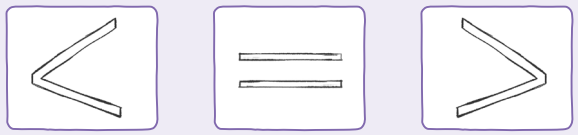
Student	Parent/Teacher

Round 2

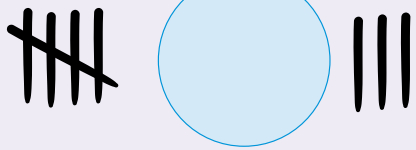
Student	Parent/Teacher

Review

Write the less than, greater than, or equal to symbol (<, >, =) in each blue circle to compare the two sides.

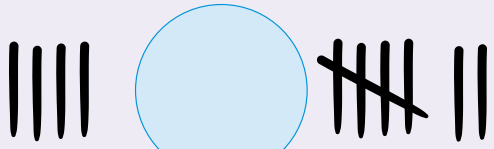


3 + 2 ○ 4 + 1



34 ○ 40

16 + 3 ○ 15 + 3



Complete each problem.

25	36	46	33	14	13	43	42
+ 21	+ 23	+ 22	+ 23	+ 14	+ 2	+ 5	+ 4

Write the number of cents shown by each coin or group of coins. Don't forget the cent sign.

Lesson 47

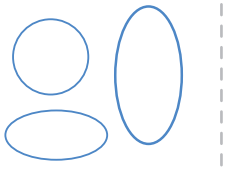
IDENTIFYING SHAPES: PART 1

Have the child practice items that are not mastered.

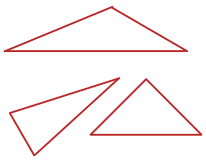
- Watch the video "How to Spell Numbers 4, 5, 6."
- Write "four," "five," and "six" on the whiteboard.

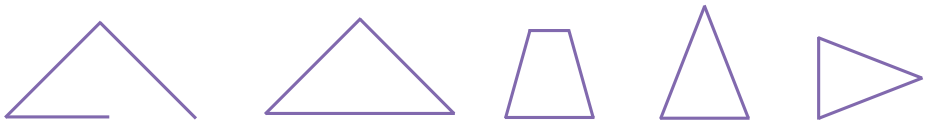
Read to the child: Shapes are all around you. Circles can be different sizes, but they are always the same shape—perfectly round. Look at these circles in green. Which one is the smallest? Largest?

Ovals can be shaped differently. They are like circles, except they are not perfectly round. Look at these blue shapes. One is a circle, and the rest are ovals. Point to the ovals. Point to each food item below and say if it is shaped as an oval or a circle.

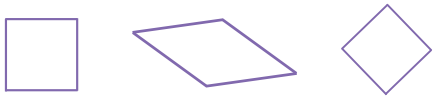


A triangle has 3 straight sides that connect at the corners. Look at the different kinds of triangles in red. Circle all the shapes below that are triangles. To figure out if it is a triangle, ask the following: 1) Does it have 3 sides? 2) Do the sides connect at the corners?





Read to the child: A rhombus is a shape made with 4 straight sides that are equal in length and connect at the corners. These are all rhombuses:

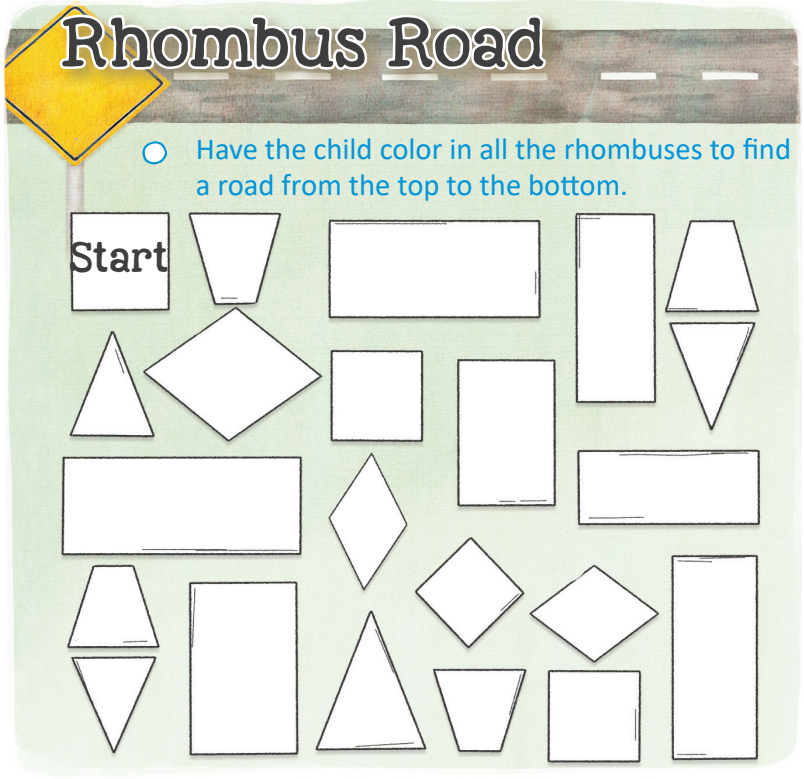


All squares are rhombuses. Diamond shapes are rhombuses if they have 4 equal sides. Circle all the shapes below that are rhombuses. To figure out if it is a rhombus, ask the following: 1) Does it have 4 sides? 2) Are the sides all equal in length? 3) Do the sides connect at the corners?

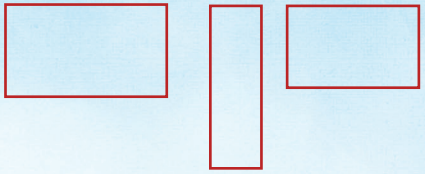
Take the shapes from the math box. Ask the child to find a triangle, a rhombus that is a square, a rhombus that is a diamond (turn the square), a circle, and an oval.

Rhombus Road

Have the child color in all the rhombuses to find a road from the top to the bottom.



Washing Windows



Read to the child: The red shapes in the upper right-hand corner are rectangles. They are not squares because all four sides are not equal. Two brothers are washing windows in the town. Frank will wash all the windows shaped as rectangles. Find seven rectangular-shaped windows and color them blue. Hank will wash all the windows that are rhombuses. Find at least five square windows and color them yellow. Find at least three triangles in the image and color them brown. Triangles do not have to be windows.

Lesson 49

FACT FAMILIES: PART 2

Have the child practice items that are not mastered.

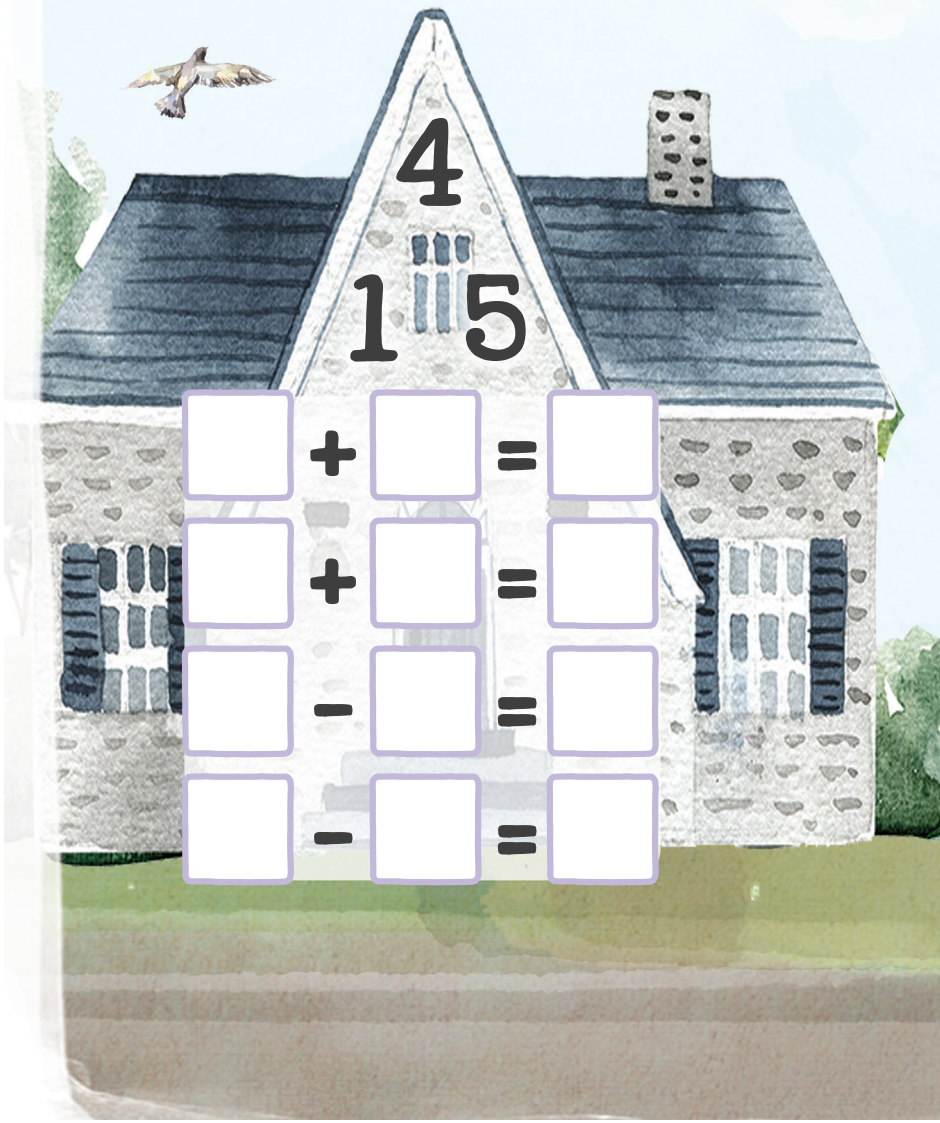
- Watch the video "How to Spell Numbers 4, 5, 6."
- Write "four," "five," and "six" on the whiteboard.
- Count from 280 to 300.

○ Read to the child: We are going to practice fact families today. First, let's take a look at the Martin family, who lives in the house on this page. The age of each person in the family is written below him or her. Circle all the family members who have an age that is an odd number. Remember that odd numbers always end with 1, 3, 5, 7, or 9.

Point to the family member who is the oldest, youngest, and tallest. What are the ages of the youngest two children combined?

Fact Family Village 2

○ Read to the child: Using the three numbers at the top of each house, create the fact family by writing four math equations in the spaces provided.



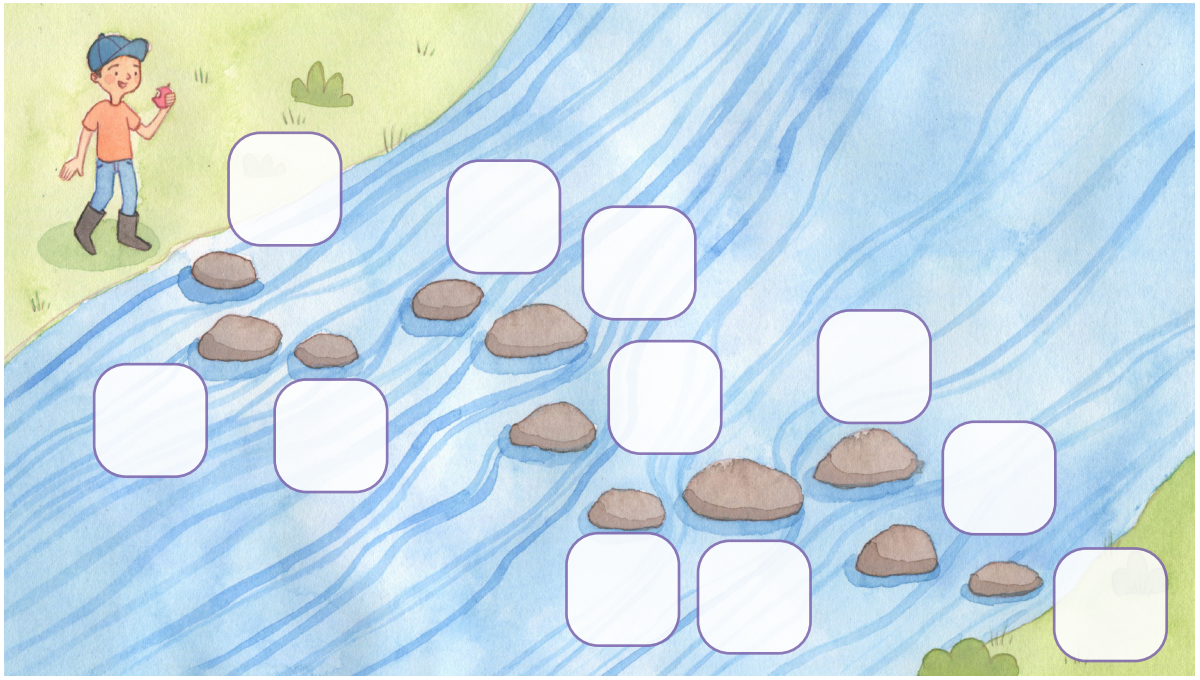
Lesson 51

WRITING NUMBERS 50 TO 60

Have the child practice items that are not mastered.

- Say the digits that all even numbers end with.
- Count backward from 20 to 0. Count by 5s from 5 to 30.
- Say the name of each coin and its value:

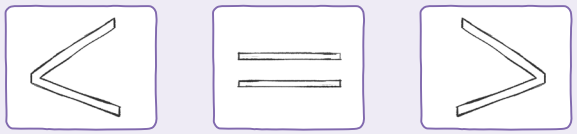
○ Read to the child: Write the numbers 50–60 in the boxes next to the stepping stones to get across the water. Refer to the number line at the bottom as needed.



○ Read to the child: Write one number less and one number more than the given number. You may look at the number line as needed.

Review

Write the less than, greater than, or equal to symbol (<, >, =) in each blue circle to compare the two sides.

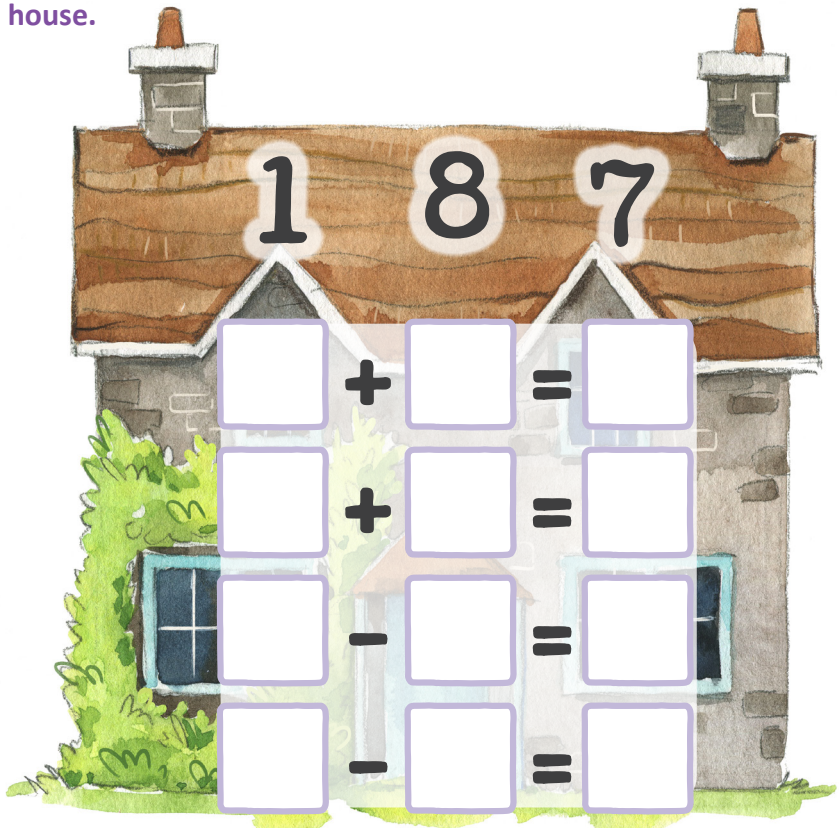


5 + 0 ◯ 4 + 1

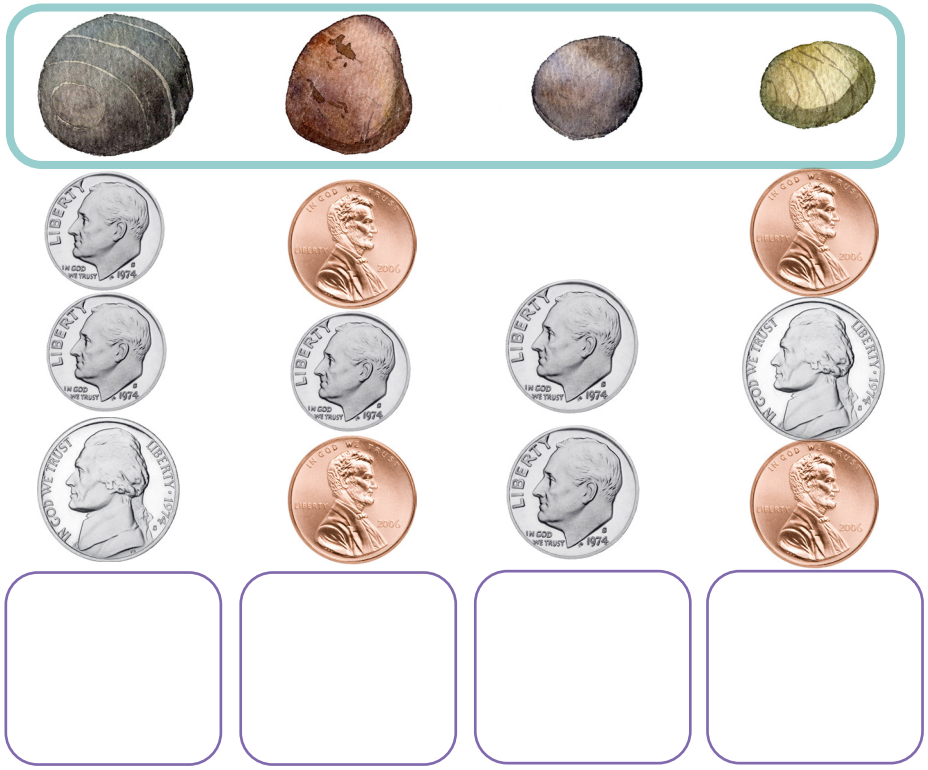
39 ◯ 23

16 + 3 ◯ 15 + 3

Complete the fact family using the numbers on the roof of the house.



In each box write the number of cents shown that are needed to buy each rock. Then circle your favorite rock. Don't forget the cent sign.

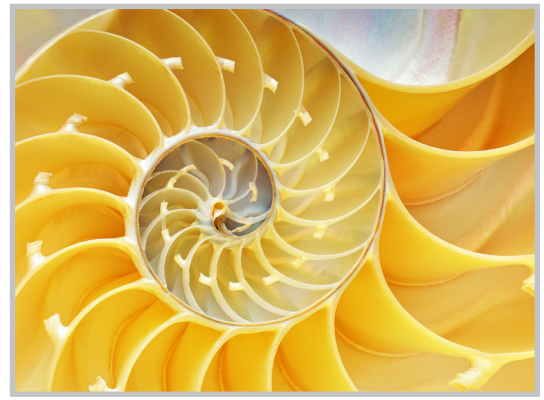


Lesson 58

COPYING AND EXTENDING PATTERNS

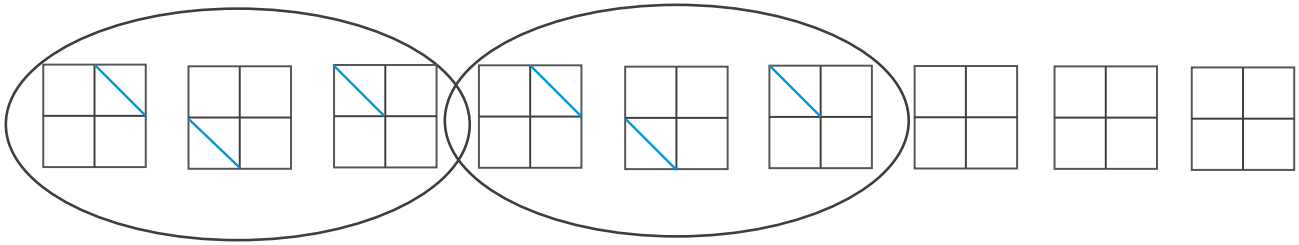
Have the child practice items that are not mastered.

- List all the odd numbers from 0 to 10.
- Count by 5s from 5 to 30.
- Draw a circle going clockwise.

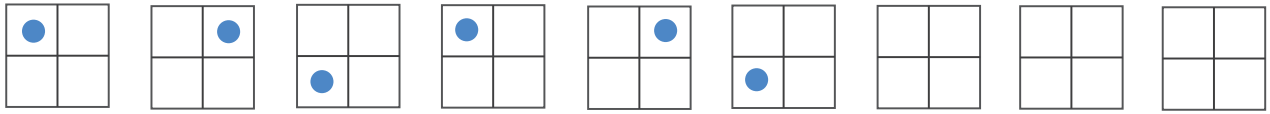


○ Read to the child: Patterns are found all over in nature and show us God's incredible designs. Let's look at each image in the next column and see some of the patterns we can find in nature.

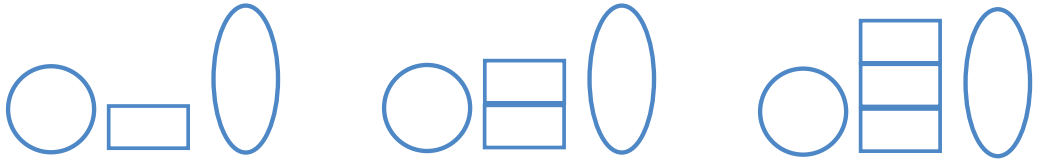
Today, you are going to do your own practice with patterns. If you are going to copy a pattern, you first need to figure out what the pattern is. In this row the pattern is circled. After every three boxes, the pattern repeats. In the last three blank boxes, copy the pattern by drawing lines in the boxes with a blue colored pencil.



○ Read to the child: For the pattern in the next row, determine when the pattern starts repeating again. Is it after 2 squares, 3 squares, or 4 squares? Circle each group of patterns, and then fill in the blank boxes to copy the pattern.



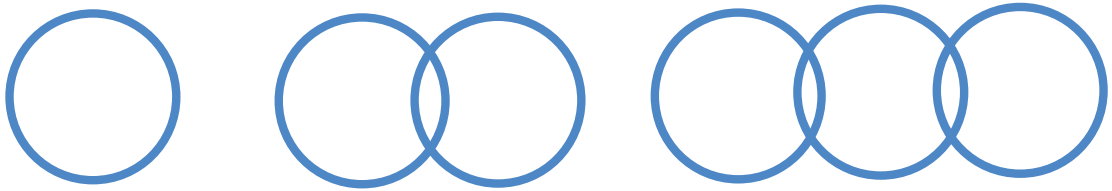
○ Read to the child: Some patterns don't repeat the exact same thing. Instead, they repeat a growing pattern. For example, look at how this pattern adds one more rectangle each time the pattern repeats. Discover where the pattern starts repeating by circling the group of patterns. Then extend the pattern by drawing the pattern on the blank lines. Don't forget to grow the rectangle by one.



_____ _____

○ For each group below, have the child identify the part of the pattern that is growing. Then have the child circle each group of patterns and extend the pattern.

1 + 1 1 + 2 1 + 1 1 + 3 1 + 1 _____ _____



_____

0 1 0 2 0 3 0 _____ _____ _____ _____

_____ _____

Lesson 65

COUNTING BY 2s to 70

Have the child practice items that are not mastered.

- List all the even numbers from 0 to 10.
- Count by 5s from 30 to 50.
- Recite a parent's phone number.
- Take the left/right dice from the math box. Roll the dice and point left or right, according to what was rolled. Repeat several times.
- Count from 280 to 300.

○ Read to the child: Find the number 2 on the chart below. We are going to count by 2s from 2 to 60. Using the chart, skip a number and say every other number aloud. Repeat two times.

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60

○ Read to the child: The number lines below count by 2s from 50 to 70. Write in the numbers that are missing. Remember to count by 2s.

○ Take two dimes from the math box. Read to the child: On the next page, we are going to play a game called "I Am Thinking of an Animal." I am going to write down a number between 42 and 70, like the numbers on the animals. Place the dimes on two different animal pairs whose numbers you think I might have written down. Then you will start at the top of the path and count down by 2s. When you reach the animal I chose, I will say, "That's my animal!" If there is a dime on it, then you win. We will play again, but this time you will write down the number, and I will put the dimes on the animals. We will play as long as we want.

Lesson 72

GRAPHING

Have the child practice items that are not mastered.

- Spell FOUR, FIVE, and SIX aloud. Watch the "How to Spell Numbers 4, 5, 6" video one or more times if needed.
- Count by 10s from 150 to 300.

Read to the child: This is Dave with his horse, Einstein. They love to ride up and down the hills of the farm where Dave lives, and Dave loves to watch the wild animals.

Dave's mom just taught him a math lesson about graphing. Dave thought it would be fun to find out which wild animal his family thought was the cutest. They could choose between a squirrel, duck, deer, or rabbit. He asked each family member to choose the two animals he or she thought were the cutest. It was a hard decision because all the animals were cute, but these were the animals they chose:

Dave 

Mom 

Ben 

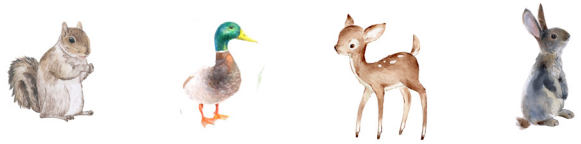
Dad 

Kim 

Ann 

Read to the child: Graphing allows us to see and compare amounts easily. On the bar graph below, fill in one box above each animal for each person who chose the animal as one of the cutest.

6				
5				
4				
3				
2				
1				



Read to the child: Using the graph, we can see how many times each animal was chosen as the cutest. Circle the animal by Dave's farm that his family thinks is cutest overall. Which animal received the fewest votes? Which animals received the same number of votes? Did the duck get more votes or fewer votes than the deer?

○ Read to the child: Another kind of graph is called a pictograph. This kind of graph shows information by using images or pictures. Owls have been coming around Dave's farm recently. The pictograph below shows how many times Mom, Dad, and Dave saw an owl in the last month. The key below the pictograph shows what each picture represents. According to the pictograph, write the answers to the questions using number words (e.g., "one" not "1").

Person	Number of Owls Seen
Mom	
Dad	
Dave	

 = 1 owl

How many owls did Dad see?

How many owls did Mom see?

How many owls did Dave see?

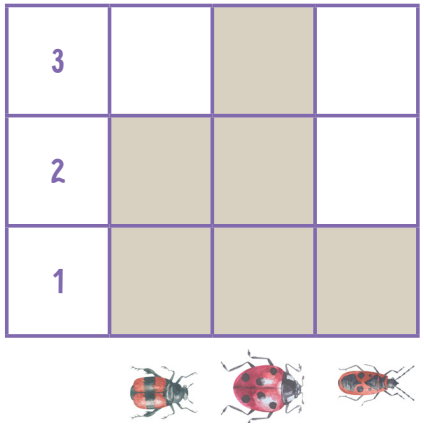
○ Take the left/right dice from the math box. Read to the child: You get to make your own pictograph. Roll the left/right dice 7 times. Each time you roll, draw a box on the graph under "Number of Times Rolled" in either the "Right" or "Left" rows. Then answer the questions aloud.

Sides on Dice	Number of Times Rolled
Right	
Left	

☐ = 1 roll

1. How many times did you roll "left"?
2. How many times did you roll "right"?
3. Did you roll "left" or "right" more times?

○ Read to the child: Point to the bar graph below. Point to the pictograph below.



Person	Number of Bugs Seen
Jack	
Jess	

 = 1 bug

UNIT 3 OVERVIEW

LESSONS 81–120

Topics introduced in Unit 2 are reviewed and expounded upon in Unit 3.

Extra Supplies Needed

- ruler
- stopwatch
- tape or glue
- timer
- $\frac{1}{2}$-cup and 1-cup measuring cups

New Concepts Taught

- Addition up to 3 numbers
- Counting by 100s
- Greatest and least
- Interpreting data and making conclusions
- Measurement
  - Centimeter
  - Foot
  - Inch
  - Meter
- Money: making a dollar with coins
- Number line: up to 100
- Number word form: 7–12
- Ordinal position
- Plotting data on bar graphs and pictographs
- Rounding to the nearest ten
- Symmetry
- Three-dimensional shapes
- Time
  - Time conversions
  - Time to 5-minute intervals
- Two-dimensional shapes
- Volume
  - Comparisons
  - Cups
  - Finding and estimating capacity
- Word problems
- Writing numbers: 80–100

Parent/Teacher Tips

- If the child asks why he or she has to practice something he or she already knows (like addition problems), explain that practice helps us not to forget things and also helps us to get faster at them.
- Math I provides a basic introduction to measurement. The child does not need to memorize how many inches are in a foot or anything that deals with measurement. Measurement will be covered in greater detail in later courses.

Lesson 84

STORIES WITH ADDITION AND SUBTRACTION

Have the child practice items that are not mastered.

- Count by 10s from 150 to 170. Then answer these questions: What comes after 149? 159? 169?
- Watch the video "How to Spell Numbers 7, 8, 9."

○ Read to the child: Look at the next page. Lin loves working in her family's garden. In the summer the garden fills with lotus blossoms. Is there an even or odd number of fish in the stream? Is there an odd or even number of birds in the sky? Point to something to the left of the bridge.

Working in a garden requires addition and subtraction. As we go through stories about Lin and her garden today, first determine whether you need to add or subtract. For addition, you have some, and then you have some more. For subtraction, you have some, and then some go away. I will read each story as many times as you need. On a whiteboard write and complete the problem in each story.

Lin sees 5 koi fish in the water when she goes out to pick weeds in the morning. When she waters the plants later in the day, she sees 4 additional koi fish. How many total fish did she see?

When Lin goes into the garden in the evening, she sees 7 birds sitting on the pagoda. As she watches, 3 of the birds fly away. How many birds are sitting on the pagoda now?

On her way to the garden, Lin decides to count the number of stepping stones in the path. She counts 3 before the bridge and 6 more after the bridge. How many stepping stones did she count?

Lin had 6 seeds on the ground, but a bird came and snatched 2 of the seeds away. How many seeds does she have now?

○ Have the child write and complete a subtraction problem and an addition problem of his or her own based on something in the picture.

Boat LOGIC

Take the boats from the math box and follow the clues to place the boats shown in each puzzle on the correct boxes.

PUZZLE 1

Clue 1: The number 8 boat is to the left of the number 14 boat.

Clue 2: The number 16 boat is not next to the number 8 boat.

PUZZLE 2

Clue 1: The number 10 boat is in the middle of the other two boats.

Clue 2: The number 12 boat is to the right of the number 10 boat.

Lesson 89

ADDING 10 TO A NUMBER: PART 1

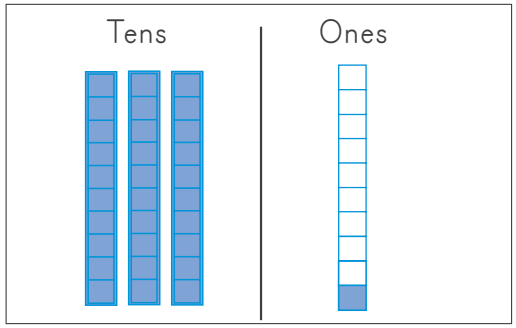
Lay out the math clocks on the table with the blue sides showing. Without looking, you and the child each choose a clock, turn it over, and say what time the clock shows. Assuming that all times are in the morning, have the child determine who has the clock with the earlier time. That person gets to keep the clock. The other clock is returned to the table with the rest of the clocks for the next round. Continue playing until there is only one clock left. The person with the most clocks wins. Explain that this is a game of chance, and it doesn't matter who wins. It is just a fun way to practice telling time.

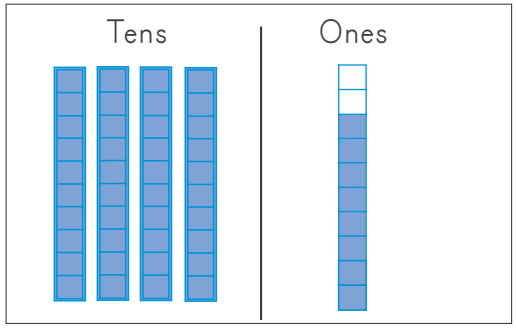
Have the child practice items that are not mastered.

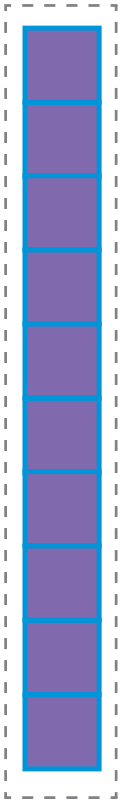
- Watch the video "How to Spell Numbers 10, 11, 12."
- Say how many are in a dozen. [12]
- Spell FOUR, FIVE, and SIX aloud.
- List all the odd numbers from 0 to 10. [1, 3, 5, 7, 9]

On the dashed lines, cut out the ten stick on the right-hand side of this page. Read to the child: Today, we are going to have fun working with place value pieces to practice adding 10 to a number. First, let's review.

For each of the following boxes, write in the purple box the number of ten sticks under the tens column and the number of one blocks under the ones column. Then tell me which digit is in the tens place, which digit is in the ones place, and what number they create.







- Have a whiteboard and dry-erase marker ready. Read to the child: Look at Chart #1. How many full ten sticks are in the tens column? [2] How many one blocks are in the ones column? [2] What number is represented? [22] Write 22 on the whiteboard.
- Give the child the full ten stick you cut out. Read to the child: Place this full ten stick on Chart #1. We always place full ten sticks in the tens column. By adding the ten stick, we added 10 more. Now what number is represented on the chart? [32] Erase the first 2 in the number 22 and replace it with a 3 to show that we now have the number 32.

When you add 10 to a number, the digit in the tens place increases by 1, and the digit in the ones place stays the same.

Take the ten stick off Chart #1. Repeat the same steps for the other charts.

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Chart #1

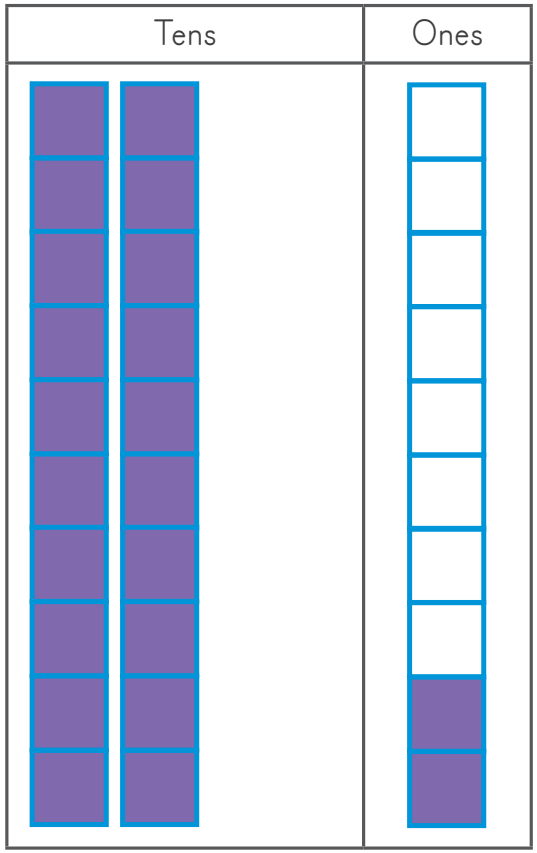


Chart #2

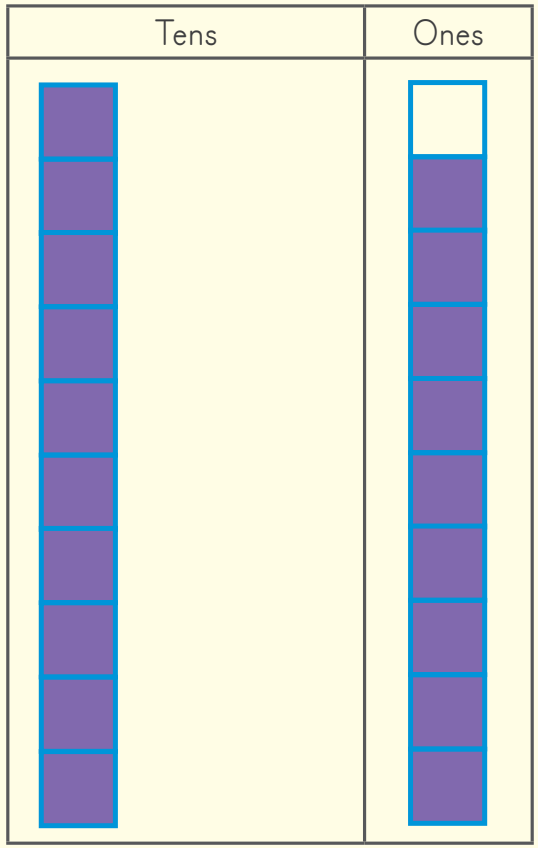
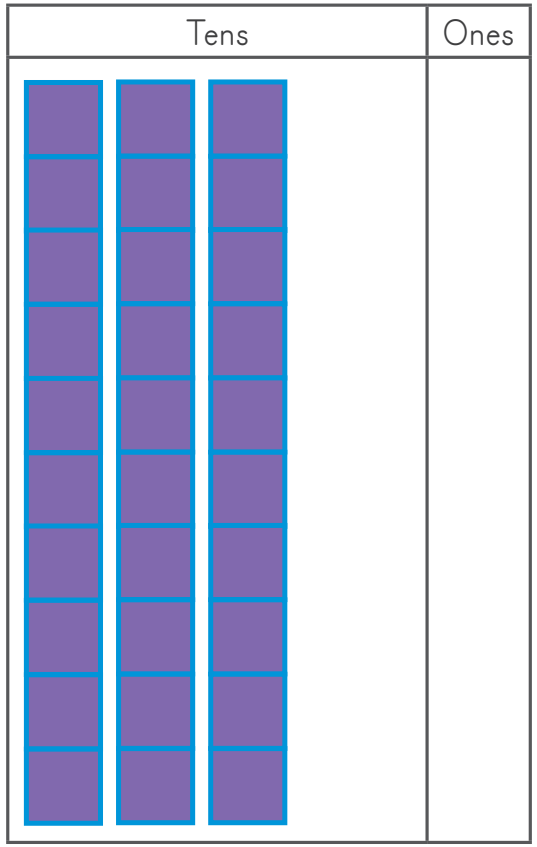


Chart #3



Lesson 92

ROUNDING TO THE NEAREST TEN

Have the child practice items that are not mastered.

- Show the quarters of the clock (0, 15, 30, and 45) on the clock with movable hands from the math box.
- Show the following times on the clock with movable hands: 4:05, 4:45, 3:25, 3:15, 3:30, quarter after 2, 6:45, 6:50.
- Count backward from 20 to 1.

○ Read to the child: When we round a number to the nearest ten, we decide which ten it is closer to. We use rounding in real life all the time. Rounding helps us find numbers that are close to actual values but are easier to add and subtract.

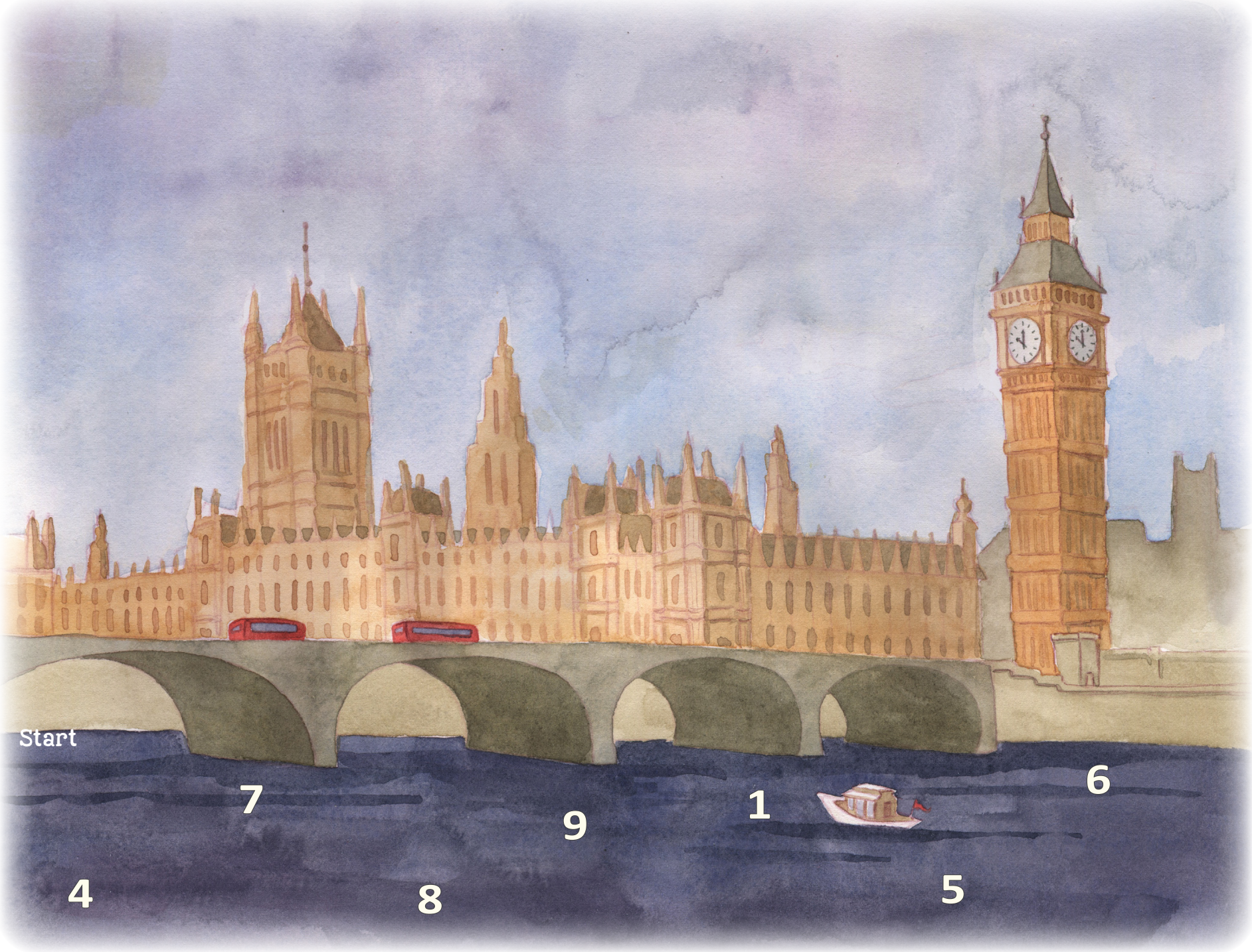
London, England, is known for its rainy weather. Many people carry umbrellas just in case it rains. When it does rain, the water falls down one side of the umbrella or the other, but not on your head!

The umbrella to the left shows raindrops sliding one way or the other to 0 or 10. Point to the number 4. Numbers 1 through 4 round down to 0. Slide your finger from 4 to 0. Point to 5. Numbers 5 through 9 round up to 10. Slide your finger from 5 to 10. Do the same thing for the numbers below.

3 9 6 2

○ Read to the child: Round the number in each raindrop to 0 or 10. Then circle the 0 or 10 by the umbrella.

○ Take a boat, the 1–6 dice, and the clock with movable hands from the math box. Read to the child: Look at the next page. This is the River Thames in London. The large clock tower is known as Big Ben. Place your boat on "Start" and move it along the river, rounding the numbers in your path to 0 or 10 until you reach Big Ben. When you reach Big Ben, roll the dice and move the hands on the clock to show that hour on the clock.



Lesson 100

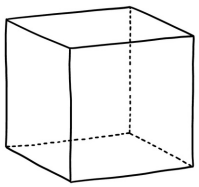
THREE-DIMENSIONAL SHAPES: PART 1

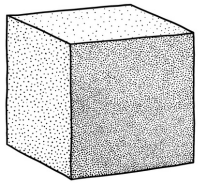
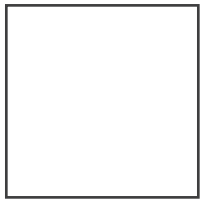
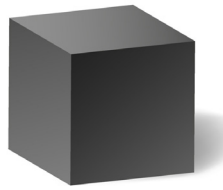
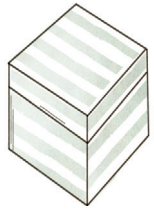
Have the child practice items that are not mastered.

- Count by 10s from 150 to 170. Then answer these questions: What comes after 149, 159, 169?
- Count by 5s from 30 to 50.
- Say the months of the year in order.
- Show the following times on the clock with movable hands: 2:05, 12:45, 3:35, 1:15, 4:30, quarter after 9, 5:45, 5:50.

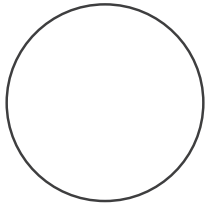
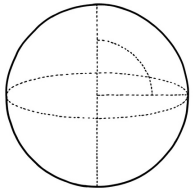
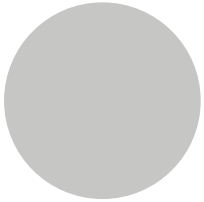
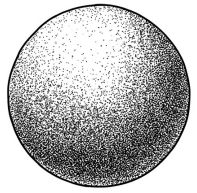
○ Have the child draw a rectangle on the whiteboard. Read to the child: The rectangle you just drew is two-dimensional. That means it is flat. Look at your course book. The top is in the shape of a rectangle, but the book is not flat. It has height. Have the child point to the sides showing the height. The course book is three-dimensional. A three-dimensional shape is a shape that is not flat.

Some of the pictures below are flat squares, and some are not flat because you can see sides drawn on them that give them height. The shapes that are not flat are called cubes. Point to the pictures of squares that ARE flat (two-dimensional). Now point to the pictures of cubes that ARE NOT flat (three-dimensional).



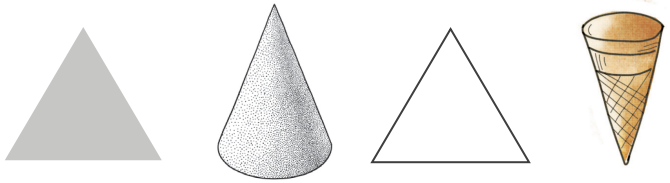





Have the child draw a circle on the whiteboard. Is that circle flat? Yes, it is flat. That means it is a two-dimensional shape. Now think of a basketball. Is a basketball flat? No, a ball is a three-dimensional shape because it is not flat. A three-dimensional circle is called a sphere. Point to the pictures of circles that ARE flat (two-dimensional). Now point to the pictures of spheres that ARE NOT flat (three-dimensional).

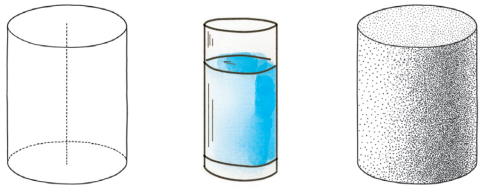






○ Have the child draw a triangle on the whiteboard. Read to the child: Is that triangle flat? Is it two-dimensional or three-dimensional?

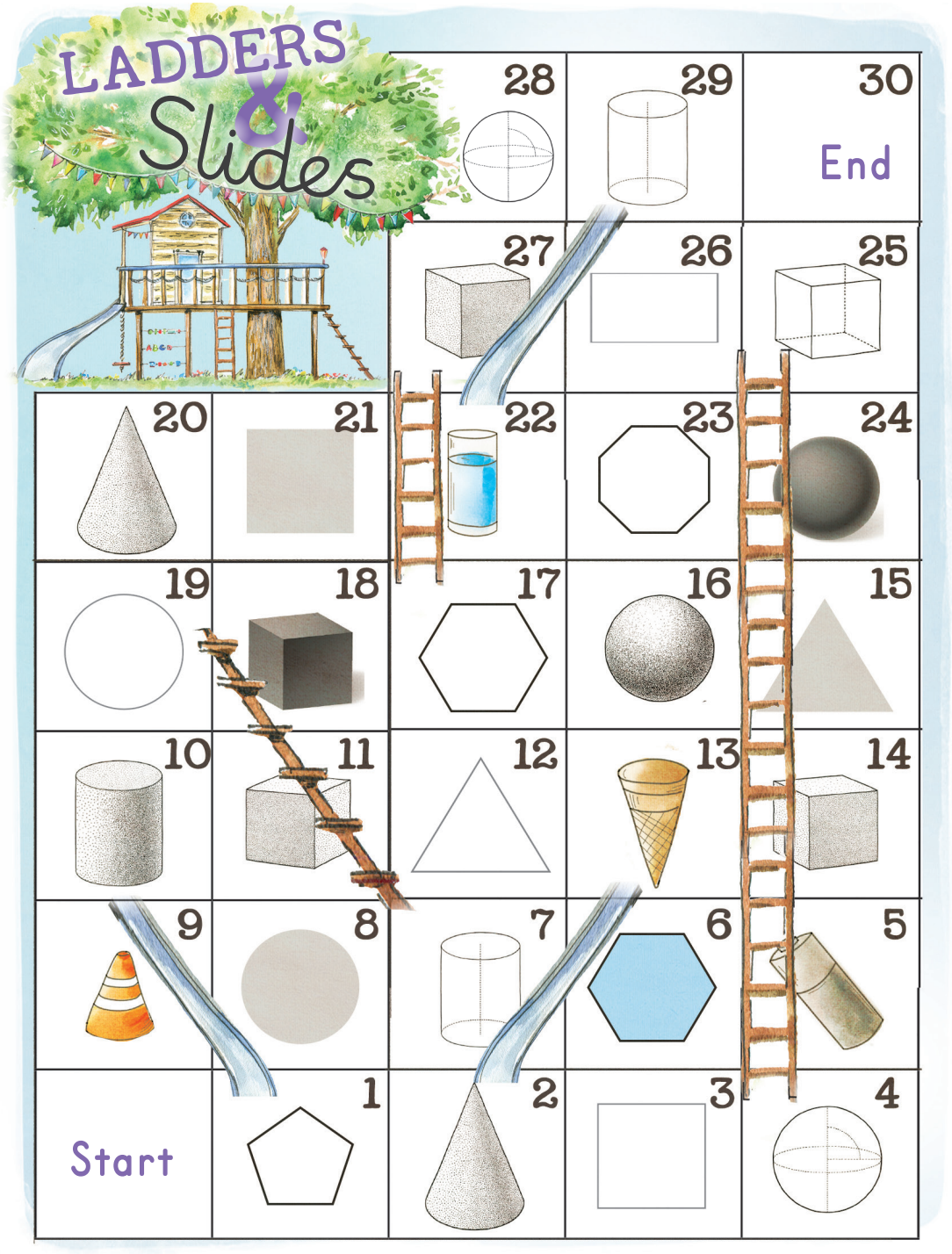
Some of the pictures below are flat two-dimensional triangles, and some are three-dimensional cones. A cone is similar to a triangle, but it is three-dimensional and has a circle on one end and a point at the other end. Point to the pictures of triangles that are flat (two-dimensional). Now point to pictures of cones that are not flat (three-dimensional).



Read to the child: Look at the shapes below. These are three-dimensional shapes called cylinders. They have a circle on each end and look like tubes.



○ **Ladders & Slides Game.** Take the small black circle and the 1–6 dice from the math box. Read to the child: Place your circle on "Start." Roll the dice and move your circle forward that many spaces. Name the two-dimensional or three-dimensional shape you land on. If you answer correctly, go again. If you don't answer correctly, move back one space and try to name that shape. Stop moving backward when you correctly identify the shape, and then roll again. If you land on a ladder, climb to the top. If you land on the top of a slide, slide to the bottom. Continue until you reach the end! [shapes with 5 sides = pentagons, 6 sides = hexagons]



Review

Write the answer to each addition problem with a number word from the box.

eleven twelve eight seven

3 + 4 = _____

2 + 6 = _____

7 + 5 = _____

5 + 6 = _____

Round each number below to the nearest ten (0 or 10) and write the answer in the box.

9 ☐

3 ☐

5 ☐

1 ☐

Draw a line from the phrase to the answer below.

Hours in a day	Minutes in an hour	Seconds in a minute
60	24	60

Write the answers to the problems by increasing the digit in the tens place by one for addition or decreasing the digit in the tens place by one for subtraction.

42 + 10 = ☐ 83 + 10 = ☐ 64 − 10 = ☐

56 − 10 = ☐ 71 + 10 = ☐ 98 − 10 = ☐