



Simply



Good and Beautiful

MATH

K

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ABOUT THE COURSE

Supplies Needed

- *Simply Good and Beautiful Math K Course Book*
- *Simply Good and Beautiful Math K Box*
- Pencil
- Crayons or colored pencils
- Whiteboard and dry-erase marker
- Ten pennies, ten nickels, and ten dimes (It is suggested that you put these coins in the math box and keep them there. You will not use them until partway through the course.)

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 65

COUNTING BACKWARD: 10 TO 1

Practice items the child has not mastered.

- Count from 90 to 100.
- On the whiteboard write 7 tally marks and 10 tally marks.
- Write the numbers "13," "14," and "15" on the whiteboard.

- **Lesson**—Blue text is instructions to the parent. Black text is read to the child. Each lesson contains new instruction and review of previous material. You may use the bullet point stars as checkboxes if desired.

Lesson 13

PLUS AND EQUAL SIGNS

Practice the following item if not mastered.

Identify the numbers: || 10 8 9 7

◆ **Read to the child:** Read the following addition problems. Point to each number and sign as you say it.

$2 + 1 = 3$

$2 + 2 = 4$

$3 + 1 = 4$

◆ **Read to the child:** The boy on this page is named Carlos. He has a big pond by his house, and dragonflies love living by ponds. Carlos decides to count the dragonflies he sees. We can use the plus sign to help him count. Point to the plus sign. This is the plus sign. Point to the equal sign. This is the equal sign.

$+$ $=$

We use the plus sign when we add or combine numbers. For example, Carlos saw 1 dragonfly sitting on a rock and 2 dragonflies sitting on a branch. We can know the total number of dragonflies by adding 1 and 2. I will point to each part of this addition problem as I say it. Point to the parts of the addition problem as you say, "One plus two equals three." Then have the child count the dragonflies to see that there are 3.

$1 + 2 = 3$

◆ **Read to the child:** In the purple box, draw a plus sign. In the green box, draw an equal sign.

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 10–12 minutes.

- If the child takes longer than 10–12 minutes per lesson but is understanding and retaining the information, don't worry; complete as much of a lesson as the child's attention span allows each day. It is OK if this course takes longer than a school year to complete.
- If the child takes less than 10–12 minutes and is learning new things, we suggest not moving to Math 1 so that the child doesn't have holes in his or her math foundations. Rather, consider having the child do multiple lessons a day and move through the course quickly before starting Math 1.
- If the child takes less than 10–12 minutes per lesson and seems to already know all the information, 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 shows that most children in kindergarten thrive with having math for 10–12 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 K a spiral or mastery program?

Math K is mainly a spiral curriculum, constantly reviewing concepts your student 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?

Every level of *Simply Good and Beautiful Math* has an answer key except for Math K since this level is so basic.

How do I use the hundreds chart on the first page of the course book?

Whenever the course has the child count, feel free to have the child use the hundreds chart, pointing to each number while counting.

How can I provide extra addition and subtraction practice?

For more addition and subtraction practice, we suggest using *Anteater Addition* and *Snowy Owl Subtraction*, which are available at goodandbeautiful.com. The game cards can also function as addition and subtraction flashcards.

UNIT 1 OVERVIEW

✂ LESSONS 1-40 ✂

Extra Supplies Needed

- a fruit snack or small food item
- three small objects in nature

New Concepts Taught

- Addition plus 1, 2
- Addition up to 4
- Color recognition
- Count to 80
- Count up starting at numbers 0-80
- Days of the week
- Identify numbers 0-20
- Longer and shorter
- Matching
- Memorize a phone number
- Number bonds
- One more, one less
- Order of events
- Ordinal numbers
- Position words
- Shape recognition
- Spatial reasoning
- Tally marks
- Ten frames
- Ten sticks
- Write numbers 0-20

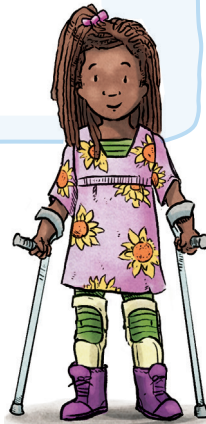
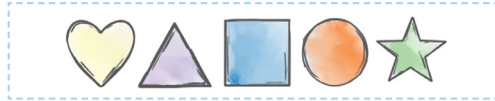
Parent/Teacher Tips

- Gather ten of each of the following coins now and put them in the math box: ten pennies, ten dimes, ten nickels. Then you will have them in plenty of time when you need them for the math course.
- Watch the video “Pencil Grip | How and Why to Teach It” on The Good and the Beautiful YouTube channel. Even though children may not like working on correct pencil grip, it is much easier to establish the correct pencil grip in the beginning than to fix incorrect pencil grip later.
- If desired, use the hundreds chart on page iii when the Review Box tells you to practice counting. Have the child use his or her finger, a pencil, a straw, a colored popsicle stick, etc., to point to each number as he or she counts.

NUMBER PRACTICE

Practice the following item if not mastered.

Identify the shapes and colors below.



- ◆ **Read to the child:** This is Raven. Her family owns an orchard of orange trees. Raven loves to sit and read in the orchard when the trees are blossoming in the spring. The blossoms smell wonderful, and the birds sound cheerful. Raven also loves making orange juice with the oranges. The ten frames below show how many oranges are needed to make the amount of orange juice shown in each pitcher. Count the oranges below and write the number in the orange box for each ten frame of oranges. Remember that each row in a ten frame has five spaces, so if a row is filled, we don't need to count the oranges in it; we just know there are five oranges in the row.

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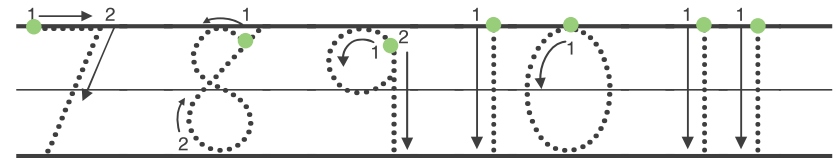
- ◆ Have the child write the missing answers. Have the child count the oranges, if needed, to help figure out the answers.

$3 + 3 = \bigcirc$

$2 + 4 = \bigcirc$

$3 + 4 = \bigcirc$

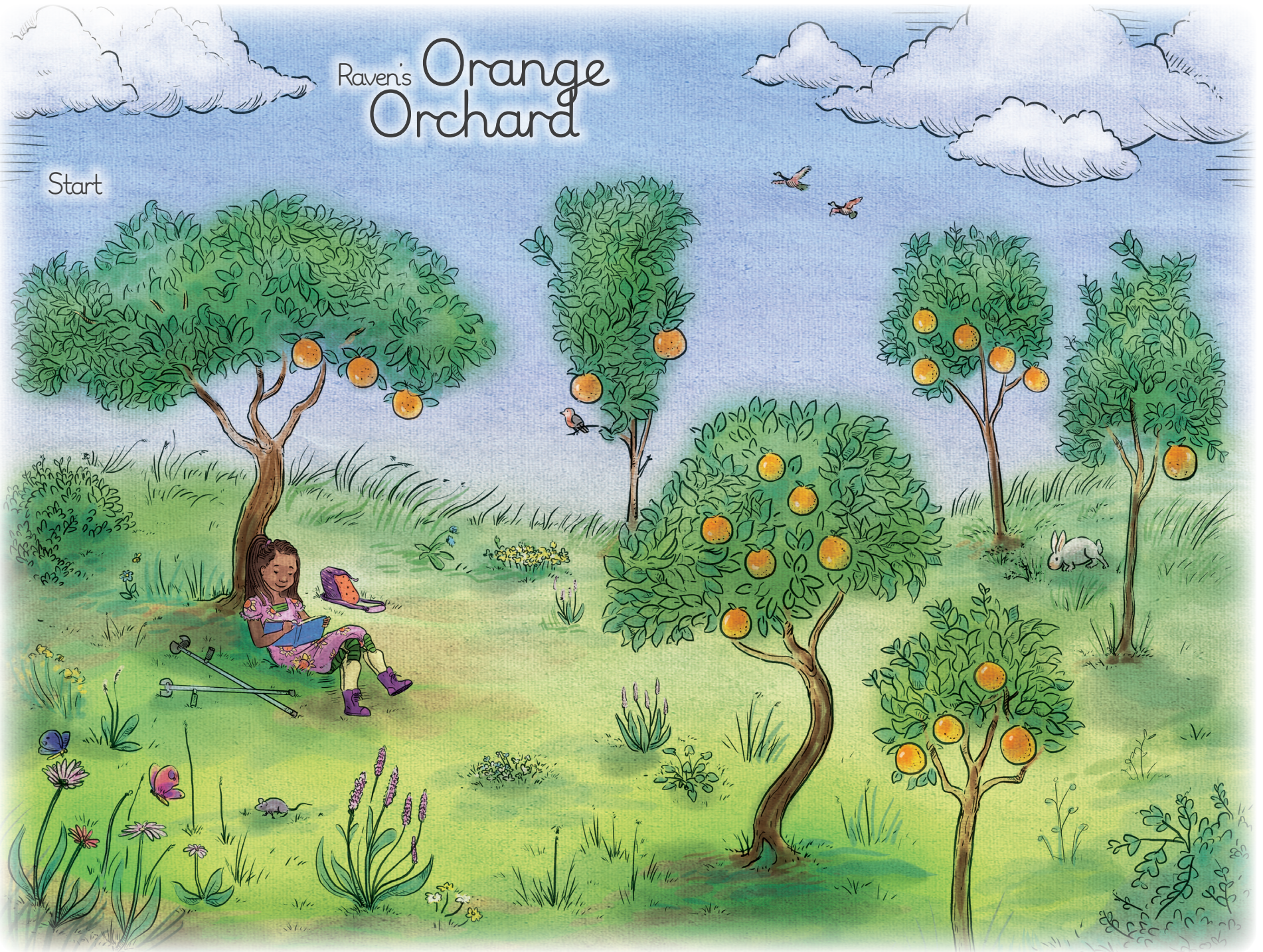
- ◆ Have the child trace the numbers.



- ◆ **Count the Oranges Game:** Take the two game pawns and the dice with numbers 1 to 6 from the math box. Put your game pawns on "Start" on the next page. **Read to the child:** This is Raven's orchard. Most of the oranges have been picked from the trees, but not all of them. Let's play a game. Roll the dice and find the tree that has the same number of oranges as the number shown on the dice. Move your piece to that tree. Then I will do the same. We will keep doing this until we both land on the same tree. Then, on the whiteboard, you write the number that we both landed on, and the game is over. **Play the game two or more times.**

Raven's Orange Orchard

Start



ONE MORE, ONE LESS: PART 1

Practice items the child has not mastered.

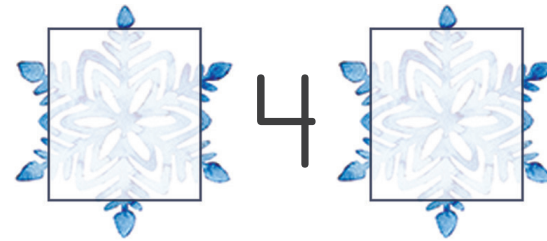
- Write the numbers “15,” “16,” “17,” and “18” on the whiteboard.
- Watch “Days of the Week Song” on The Good and the Beautiful Kids YouTube channel.
- Point to the equal sign and the plus sign to the right.



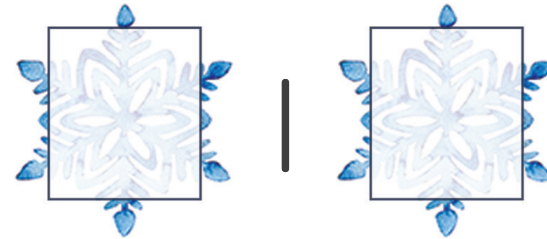
◆ **Read to the child:** This is Anika. She lives in a little town that is nicknamed Snow Village because it snows so much there in the wintertime. Anika loves the beauty of winter—the snow-covered trees and the ground blanketed in white. She loves to snuggle up by the crackling fire while she watches feathery snowflakes fill up the sky outside. **Take a car from the math box and give it to the child.** Let’s visit the three houses on the next page as we learn about one more and one less.

Place your car in front of the first home. How many chimneys does the home have? [1] Draw another chimney on the house. Now how many chimneys are there? [2] Now count the number of fence posts. How

many are there? [6] Cross out one of them. How many are there now? [5] In the row of snowflake boxes below, write the numbers that are one less and one more than the number 4.



Drive your car to the second home and park it. How many birds are on the house? [1] If the bird flew away, how many birds would there be on the house? [0] So one less than the number 1 is 0. Draw another bird on the house. How many birds are there now? [2] In the snowflake boxes, write the number that is one less and one more than the number 1.

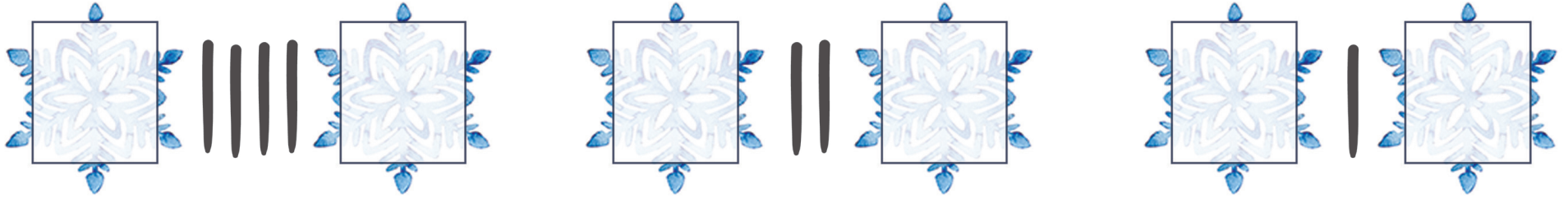


Drive your car to the third home. How many trees are by it? [3] Cross out one. How many trees are there now? [2] So, 1 less than 3 is 2. How many animals are by the house? [4] If there were one more animal, how many animals would there be? [5] In the snowflake boxes, write the numbers that are one less and one more than the number 5.



This area is left blank for double-sided printing and cutting purposes.

◆ Have the child use tally marks to show one less and one more than the tally marks shown.



Snow Village



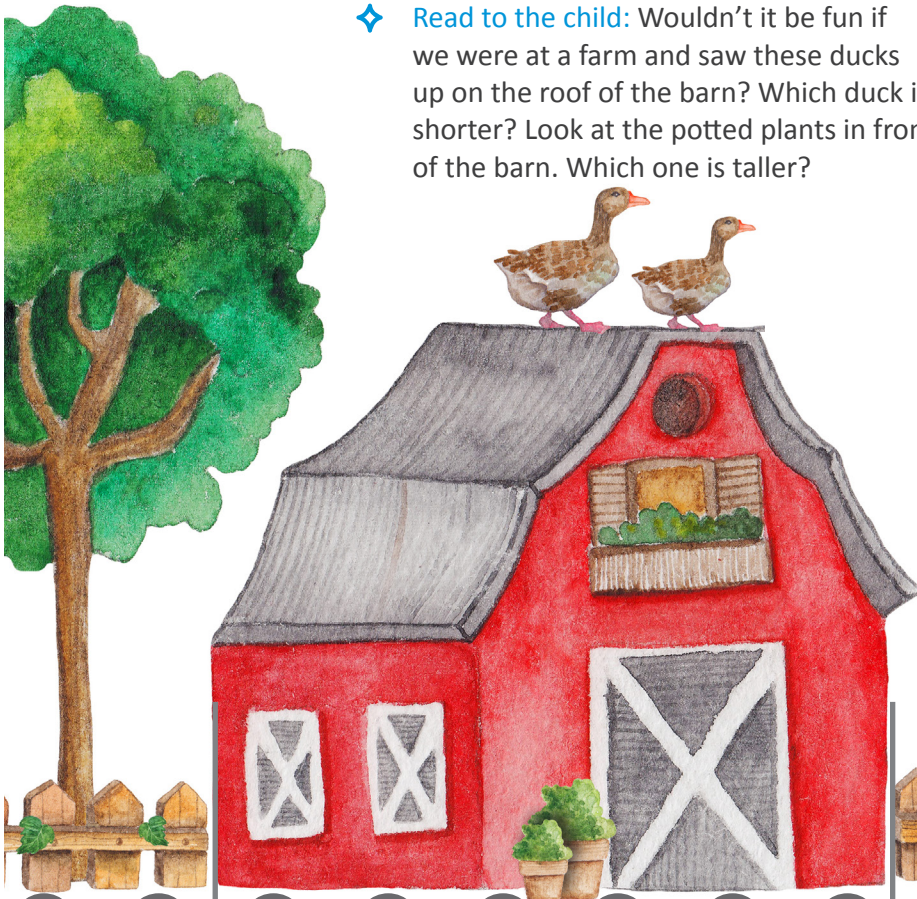
Lesson
38

LONGER AND SHORTER

Practice items the child has not mastered.

- Count from 60 to 80.
- Say the days of the week.

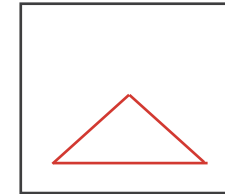
- ◆ **Read to the child:** Wouldn't it be fun if we were at a farm and saw these ducks up on the roof of the barn? Which duck is shorter? Look at the potted plants in front of the barn. Which one is taller?



- ◆ In the blank box, have the child draw a line that is longer than the red line.

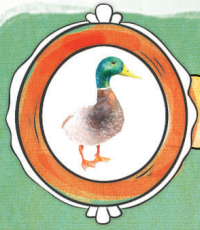


- ◆ In the blank box, have the child draw a triangle that is taller than the red triangle.



- ◆ On the whiteboard have the child draw a line that is longer than his or her thumb and a circle that is taller than a raisin.
- ◆ **Read to the child:** Look at the dots at the bottom of the page. We can use these dots to measure. How many dots long is the barn? Write that number in the red box. Now count how many dots long the fence is from the edge of the barn nearest the ram to the end of the page and write that number in the brown box.





Duck Addition

$$0 + 2 = \bigcirc$$



$$2 + 3 = \bigcirc$$



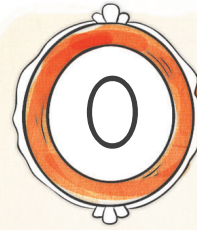
$$3 + 2 = \bigcirc$$



$$2 + 4 = \bigcirc$$



$$3 + 3 = \bigcirc$$



Plus Zero Addition

$$12 + 0 = \bigcirc$$

$$0 + 13 = \bigcirc$$

$$15 + 0 = \bigcirc$$

$$0 + 18 = \bigcirc$$

$$19 + 0 = \bigcirc$$

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. This allows you to assess the most important concepts that should be understood at this point before moving on and to practice the concepts that still need work.
- For Lesson 39** have the child complete the assessment 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 continue to be reviewed, 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 1 TO 11

Copy each number.

1	2	3
4	5	6
7	8	9
10	11	



Additional Practice

Copy each number.

1	2	3
4	5	6
7	8	9
10	11	



ADDITION



Complete the problems.

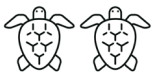
$$3 + 2 = \bigcirc$$

$$4 + 1 = \bigcirc$$

$$1 + 3 = \bigcirc$$

 **Additional Practice**

Complete the problems.



$$2 + 2 = \bigcirc$$



$$3 + 3 = \bigcirc$$



TALLY MARKS TO 5



Count the items below, and then draw tally marks in the green box for each group of items.




 **Additional Practice**

Complete the problems. Write the answers in tally marks.

$$\text{||} + \text{||} = \bigcirc$$

$$\text{||||} + \text{|} = \bigcirc$$







$$\text{|||} + \text{|} = \bigcirc$$



WRITING NUMBERS 12-20 & ONE LESS AND ONE MORE







Write one less and one more than each number.

	13	
	18	
	15	



Additional Practice

Write one less and one more than each number.

	14	
	17	



COUNTING & DAYS OF THE WEEK



Count from 1 to 80. Point to each number with a counting stick as you count.

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
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80

Say the days of the week in order. [Have the child watch "Days of the Week Song" on The Good and the Beautiful Kids YouTube channel](#) if the child has not memorized the days of the week.



Additional Practice

Repeat the items in the section above.

UNIT 2 OVERVIEW

LESSONS 41-80

Extra Supplies Needed

- glue

New Concepts Taught

- Addition up to 5
- Count by 10s
- Count to 110
- Equal and not equal
- Identify numbers 0-100
- Months
- Pattern blocks
- Place value
- Right and left
- Story problems
- Telling time

Parent/Teacher Tips

- Watch for cues that your child is overwhelmed or frustrated and don't push the child too far, especially at this age. For example, if the lesson says to count from 80 to 100 and that is overwhelming, consider counting to the child a few times while he or she lies on the couch and just listens, or have him or her just count from 80 to 90.
- Kinesthetic kids like to move. While doing counting practice, consider having them hop, clap, or take a step forward with each number.
- Don't feel like you need to rush through exploring and having fun with your child just to mark off a lesson each day. If your child wants to repeat playing a game or explore or discuss a concept, this is wonderful, especially at this age.

Lesson
44

HUNDREDS CHART

Practice items the child has not mastered.

- Have the child write "13," "14," and "15" on the whiteboard.
- Have the child draw a triangle on the whiteboard.

◆ **Read to the child:** What is one more than 99? [100] Jesus once told a story about a shepherd who had 100 sheep. Point to 100 on the hundreds chart in the next column and keep your finger there. One of the sheep wandered off and was lost. If there were 100 sheep and 1 went away, how many are there now? [99] Move your finger to 99. Now you can take your finger off. The shepherd left all 99 sheep to look for the 1 that was missing. The shepherd cared for every single one of his sheep, just as Jesus cares about every single one of us.



◆ **Take a counting stick from the math box and give it to the child.**
Read to the child: I will tell you a number, and you point to it on the hundreds chart with the counting stick: 1, 5, 7. Great! Now move your stick straight down from 7 to 17. Now go straight down to 27. Now go straight down to 37. What pattern do you notice about this column? [All the numbers end with 7.] Now point to 10. Move your stick straight down to 20. This row has all tens. **Have the child color the tens column with a yellow crayon and practice counting by 10s as an introduction to the next lesson.**

◆ **Read to the child:** We are going to practice counting using the

hundreds chart. **Point to 79.** This is 79. Use your counting stick to point to each number as you count from 79 to 100. **Point to 88.** This is 88. Use your counting stick to point to each number as you count from 88 to 100.

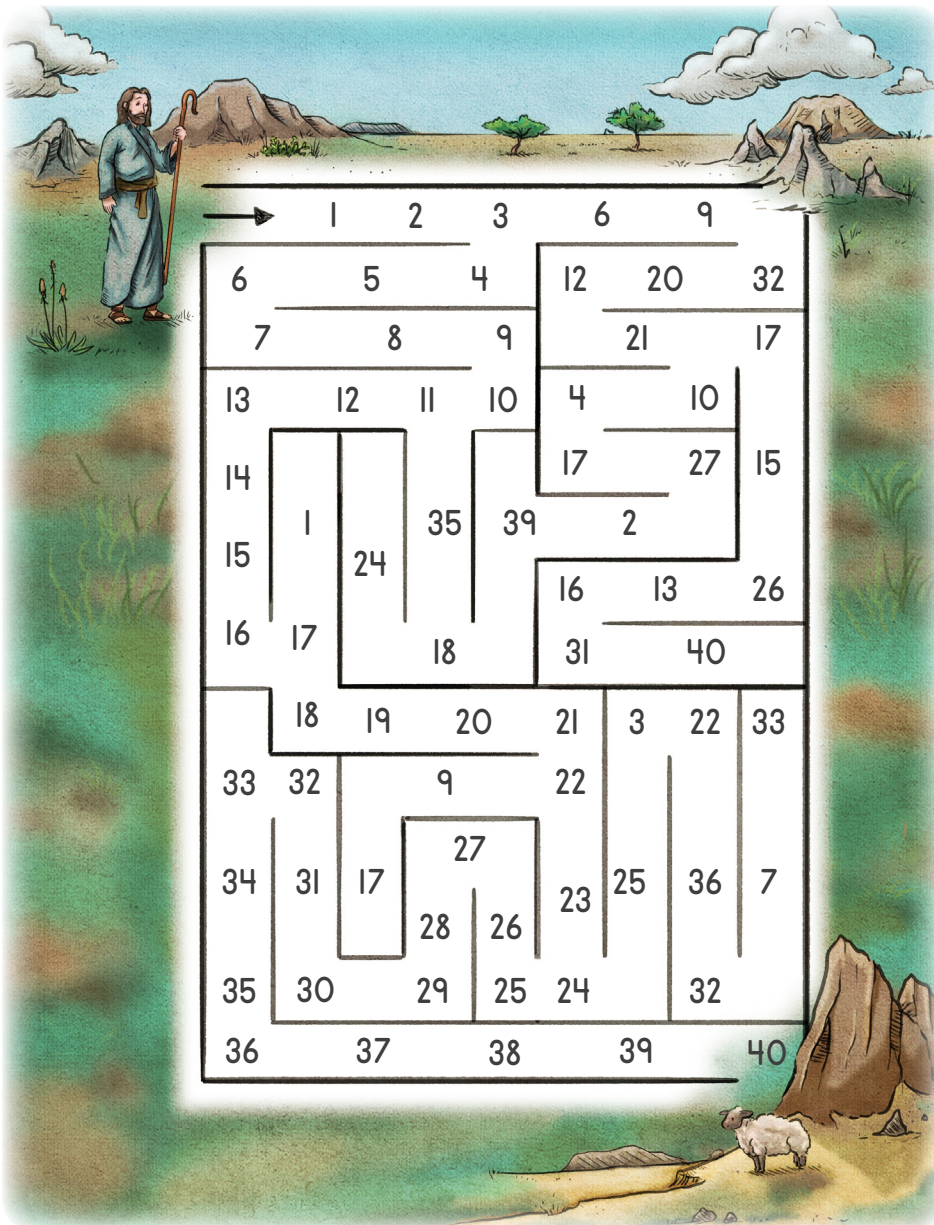
◆ **Read to the child:** I'll say a number, and you point to it with your counting stick and say the number that is one less than my number. It will be the number right BEFORE the number on the hundreds chart: 100, 5, 27, 40, 18.

Hundreds Chart

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
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

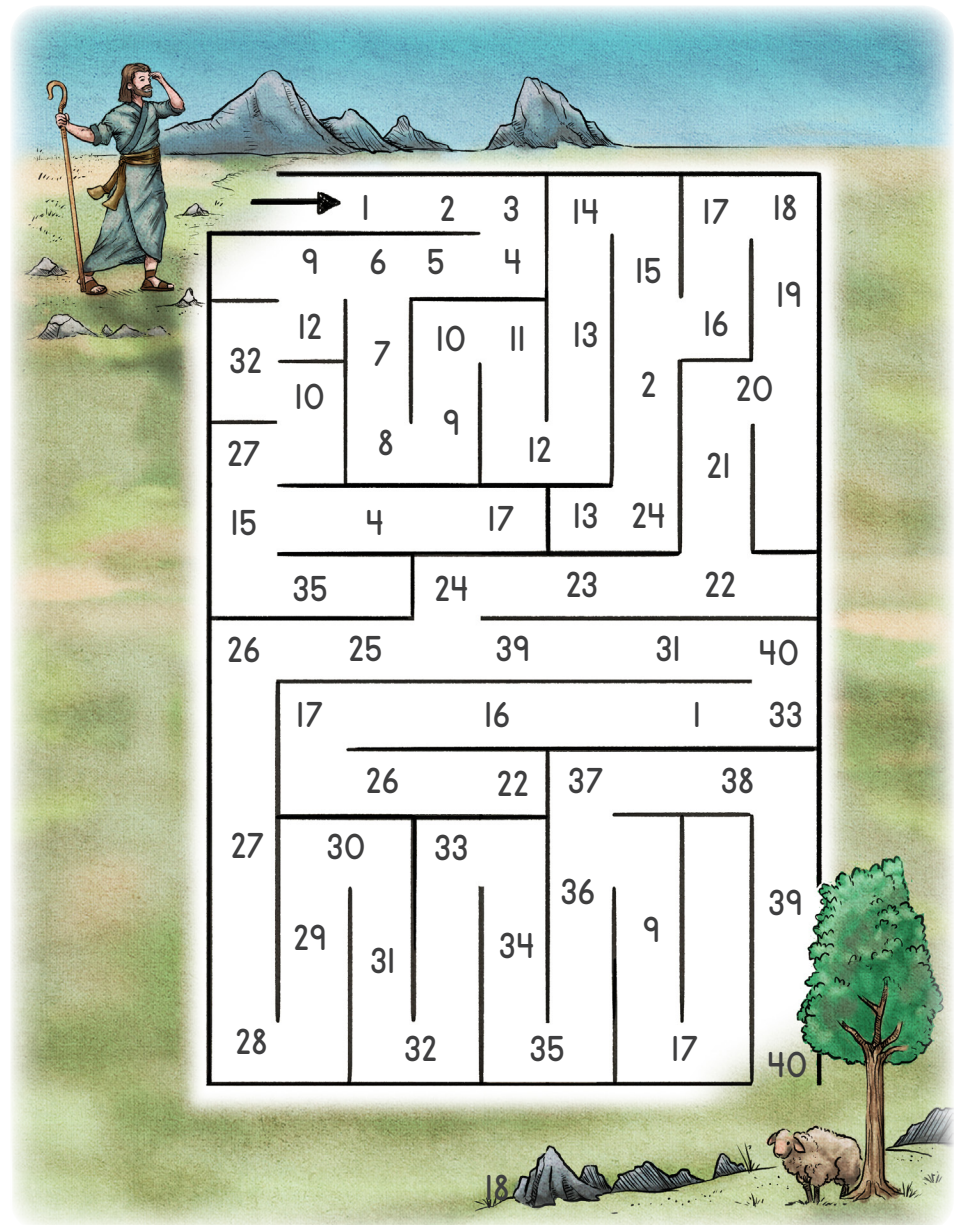
Sheep Searches

◆ **Read to the child:** The shepherds are looking for their lost sheep. Complete the mazes, helping each shepherd find the lost sheep. To get through each maze, follow the numbers 1 through 40 with your counting stick.



A shepherd stands on the left, holding a staff. A sheep is visible at the bottom right. The maze is a grid with numbers 1 through 40 placed at various intersections. The path starts at the top left and ends at the bottom right.

	1	2	3	6	9	
6		5	4	12	20	32
7		8	9		21	17
13		12	11	10	4	10
14					17	27
15	1		35	39		2
16		24			16	13
	17		18		31	40
	18	19	20	21	3	22
33	32		9	22		
34	31	17		27	23	25
			28	26		36
35	30	29	25	24		32
36		37	38	39		40



A shepherd stands on the left, holding a staff. A sheep is visible at the bottom right. The maze is a grid with numbers 1 through 40 placed at various intersections. The path starts at the top left and ends at the bottom right.

	1	2	3	14		17	18
	9	6	5	4		15	
32	12		7	10	11	13	
	10						2
27			8	9		12	
15			4		17	13	24
	35		24		23		22
26		25		39		31	40
	17			16			1
		26		22		37	38
27		30		33			
						36	
	29		31				9
28			32			35	
							17
							40

Lesson
51

INTRODUCTION TO CLOCKS

Practice items the child has not mastered.

- Memorize a parent's phone number.
- Point to each number while counting by 10s. Then identify each color.

20 30 40 50 60 70 80

◆ **Read to the child:** Mallory was given a big clock like the one to the right for her birthday. She has not seen this kind of clock often.

In her home she has digital clocks. Digital clocks are clocks that show the numbers of the current time, like the one on the left. **Point to the digital clock.** Her new clock is an analog clock.



Point to the analog clock.

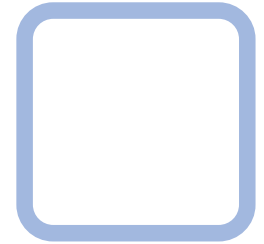
The numbers on an analog clock go from 1 to 12. You are going to write the missing numbers around the clock. I will point to the spot for each number as we go around the clock clockwise, which is to the right. **Point to where the number 1 is found on a clock and have the child write "1."** Continue around the clock until all the missing numbers are written.



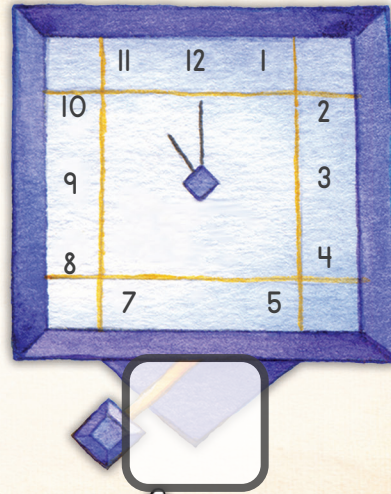
◆ **Read to the child:** Each clock on the next page is missing a number. Write the number that is missing in the box below the clock.

Point to your favorite clock on the next page.

Count the number of clocks on the next page and write the number in the box.



Sorting Clocks



NUMBERS 20 TO 40: PART 2

Practice the following item if not mastered.

For each clock have the child point to the minute hand (long hand). Then have the child point to the hour hand (short hand).

Have the child tell you the time shown on each clock.



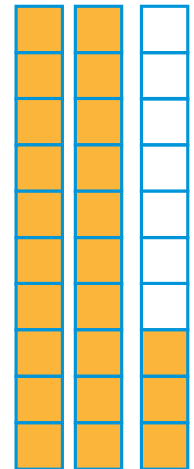
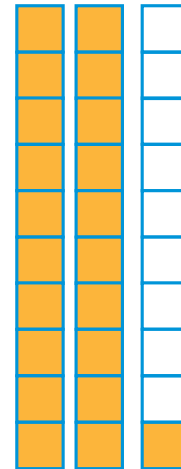
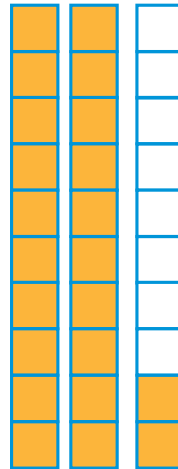
- ◆ **Read to the child:** This is Thomas. He lives in Australia. He has an electric toy car big enough for him to drive. Point to the number on his car. This is number 21. Each number in the twenties starts with a 2.



Point to each number as we count from 20 to 30 together.

20 21 22 23 24 25 26 27 28 29 30

- ◆ **Read to the child:** A full ten stick has 10 blocks. How many blocks do 2 ten sticks have? [20] Yes, 10 blocks plus 10 blocks equals 20 blocks. Look at each set of ten sticks and tell me what number each represents, remembering that 2 full ten sticks equals 20.



- ◆ **Read to the child:** Point to each number as we count from 30 to 40 together.

30 31 32 33 34 35 36 37 38 39 40

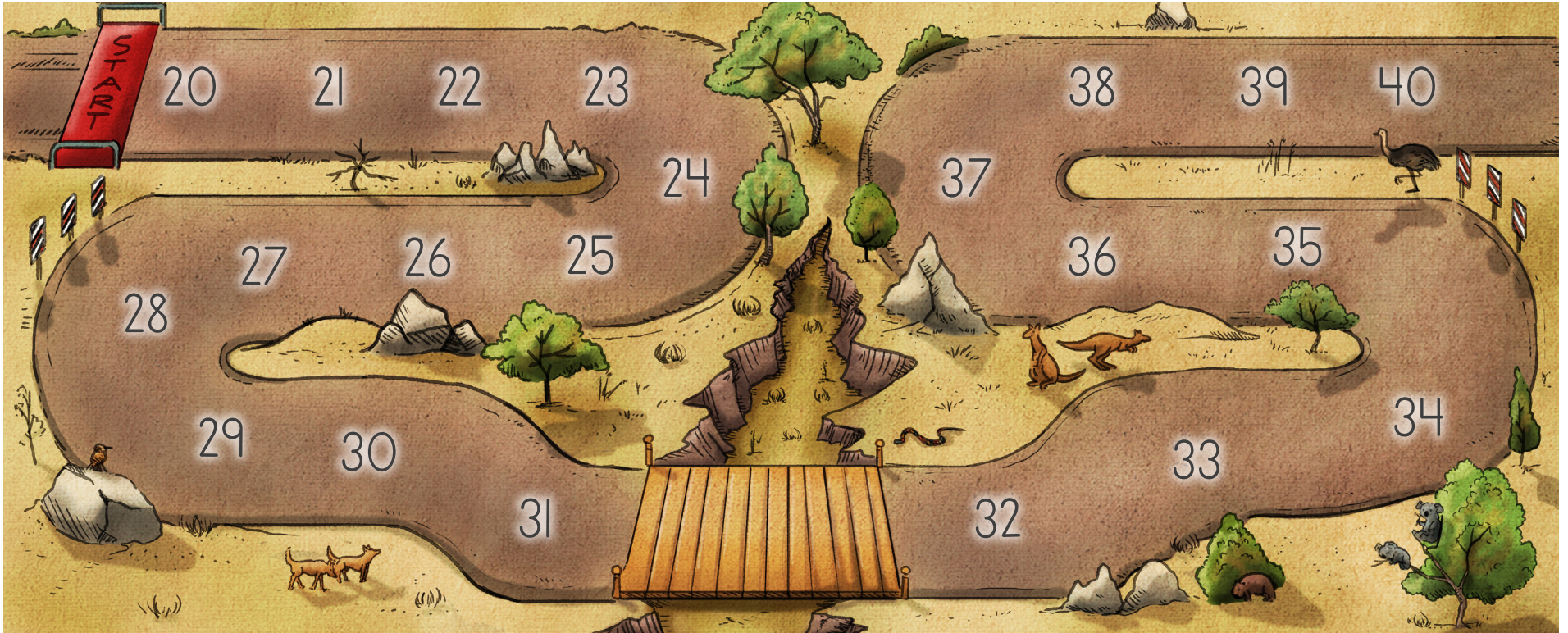
On the row of purple numbers above, point to 33, 36, 40, 30, 38, and 31.

- ◆ **Take a car from the math box and give it to the child. Read to the child:** Let's play a game to practice recognizing numbers 30 to 40. The next page shows a track that Thomas' father made for him outside their farm in Australia. Put your car on "Start." I will say a number. You drive your car as fast as you can, without going off the road, to the number and stop. Then put your car back on "Start," and I will tell you another number. We will repeat those steps.

OK, we are ready. Drive to 31. Drive to 35. Drive to 29. Drive to 37. Drive to 39.

Now put your car on the number 40. Your car is going to drive in reverse, which means backward. Drive backward to 30. Put your car back on 40. Drive backward to 24.

Outback Racing



♦ Have the child complete the addition problems, adding the numbers on each car. Have the child use counting sticks from the math box if needed.

$$\begin{array}{c}
 \text{3} \\
 \text{3} \\
 + \\
 \text{3} \\
 \hline
 \square
 \end{array}$$

$$\begin{array}{c}
 \text{4} \\
 \text{3} \\
 + \\
 \text{3} \\
 \hline
 \square
 \end{array}$$

$$\begin{array}{c}
 \text{4} \\
 \text{2} \\
 + \\
 \text{2} \\
 \hline
 \square
 \end{array}$$

$$\begin{array}{c}
 \text{5} \\
 \text{3} \\
 + \\
 \text{3} \\
 \hline
 \square
 \end{array}$$

Lesson
61

TIME: PART 3

Practice items the child has not mastered.

- Count by 10s from 10 to 100.
- Point to the left and then to the right.



- ◆ **Read to the child:** This is Belle. She wants to be a teacher one day. She often makes worksheets and activities for her little sister who is in kindergarten. One day Belle printed out some clocks from the computer, taped them on a page, and wrote instructions. Her little sister loved doing the worksheet. You get to do it too!
- First, let's review clocks. This is the clock in Belle's room.

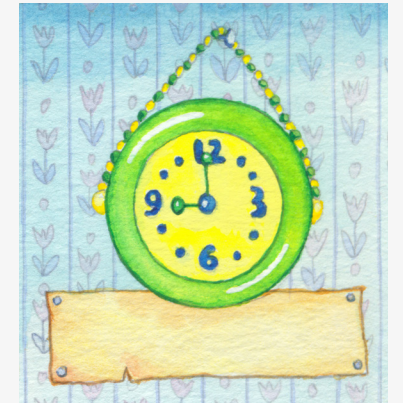


Point to the short hand on the clock. What number is it pointing to? [5] The short hand is the hour hand. Point to the long hand. What number is it pointing to? [12] The long hand is the minute hand. Since the minute hand is right on the 12 and the hour hand is on 5, it is exactly 5:00. Point to the clock again and say, "Five o'clock."

- ◆ **Have the child complete Belle's worksheet.**

Belle's Worksheet

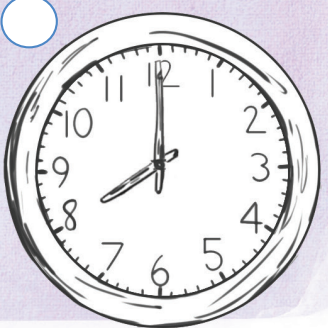
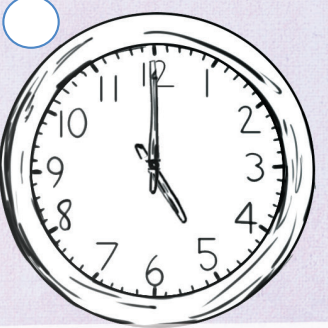
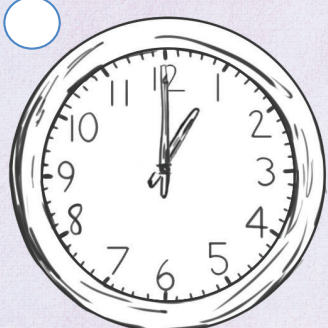
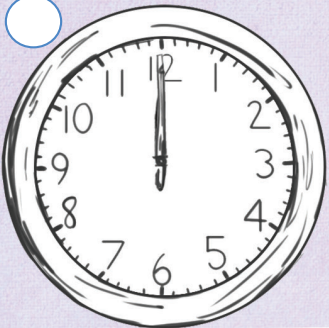
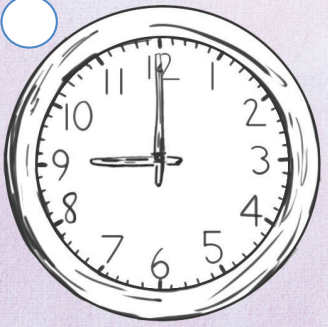
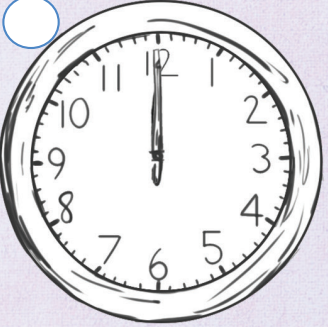
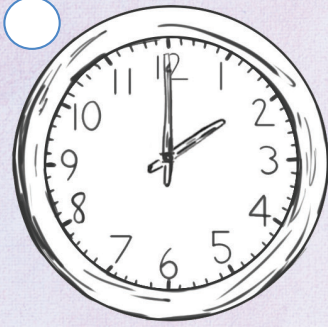
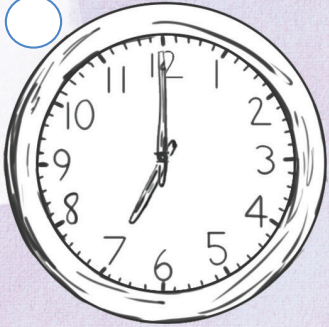
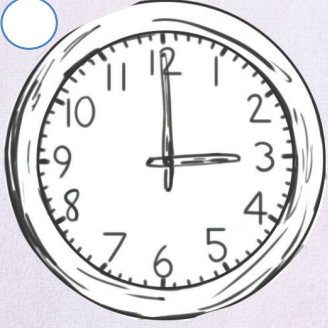
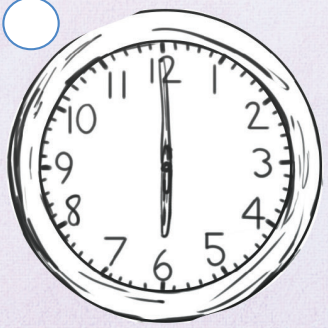
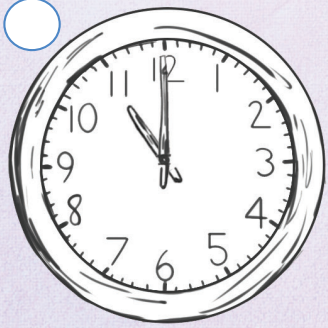
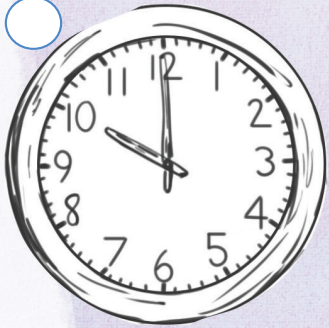
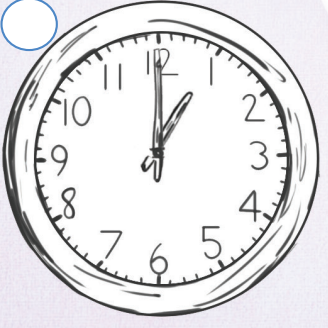
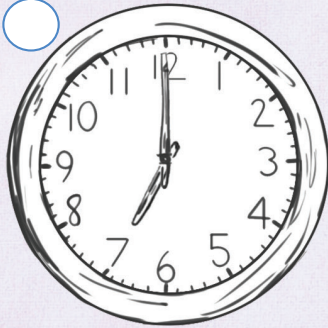
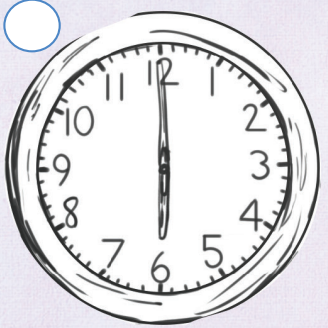
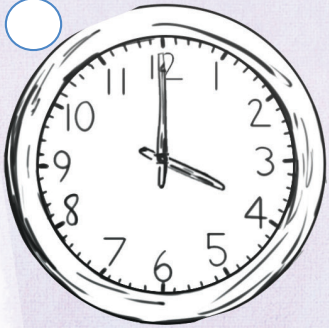
In the box below each clock, write the time.



- ◆ **Four in a Row Clock Game:** Take the 1–6 dice and 7–12 dice from the math box and give them to the child. **Read to the child:** Let's play the game on the next page. You roll the two dice. If either of the numbers on the dice matches the hour hand on a clock, fill in the circle by the clock or clocks using a BLUE colored pencil. (You can only use a number from one dice.) I will then do the same using a RED colored pencil. We will repeat the steps until one of us gets four circles in a row filled in across, down, or diagonally, or until the circles are all filled.

Four
in
a
Row

CLOCK GAME



ADDITION STORIES: PART 2

Practice items the child has not mastered.

- Count from 90 to 100.
- Watch the “Days of the Week Song” video.



◆ **Read to the child:** This is Caleb. He lives in Mexico and speaks Spanish. It is hot and dry where he lives, which is perfect for growing cactus plants. In fact, his family has a nice greenhouse where Caleb grows many cactus plants. His mother loves pottery, and she makes the pots for the plants. Caleb’s father takes the plants to the outdoor market every Saturday and sells them. The family is working together to earn money to visit Caleb’s grandmother, who lives far away by the beach.

Look at Caleb’s greenhouse on the next page. Point to the planter box. Each row has 10 cactus plants in it, so we can count all the cactus plants in the box by counting by 10s. **Have the child count the cactus plants by counting by 10s.** Look at the big potted cacti with flowers in the image. Point to the one that is to the left of the table. Point to the one that is to the right of the table.

Let’s do some stories with addition about Caleb and his greenhouse. **Give the child the whiteboard and a dry-erase marker. Read the stories in the boxes. Have the child write and solve the problems on the whiteboard. Read the stories as many times as needed. Use counting sticks to help solve the problems if needed.**

Caleb planted 3 cactus seeds, and his little sister planted 3 more. How many total seeds did they plant?

Caleb’s mom wants to make jam out of prickly pear cactus plants. Wearing thick gloves, Caleb cut 4 cactus spines for his mom. Caleb’s mom needed more, so Caleb cut 4 more spines. How many spines total did he cut?

One of Caleb’s chores is to water the plants each week. He watered plants for 2 hours on Monday and 2 hours on Tuesday. How many hours total did he spend watering plants?

In the greenhouse there are two cactus plants that produce flowers that open at night. Caleb’s mom let him stay up after dark one night to see the flowers. One plant had 3 flowers, and the other plant had 4 flowers. How many total flowers did Caleb see?

Today, Caleb is excited to be planting new plants. His mother has worked hard to make plenty of new pots for the new plants. Once these plants are grown, their family is going to give them to neighbors and family as Christmas gifts. There are 19 small pots and 1 large pot to fill. How many total pots does Caleb have to fill?

Caleb's Greenhouse





Cactus Addition



$1 + 4 = \bigcirc$



$3 + 4 = \bigcirc$



$2 + 5 = \bigcirc$

$18 + 1 = \bigcirc$

$20 + 0 = \bigcirc$



Mama's Pots Addition



$2 + 4 = \bigcirc$



$3 + 2 = \bigcirc$



$4 + 2 = \bigcirc$

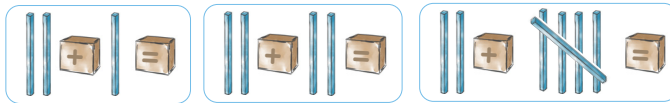
$19 + 1 = \bigcirc$

$3 + 4 = \bigcirc$

ESTIMATING

Practice items the child has not mastered.

- Write the numbers “17,” “18,” “19,” and “20” on the whiteboard.
- Make and solve these problems with the math box items shown.



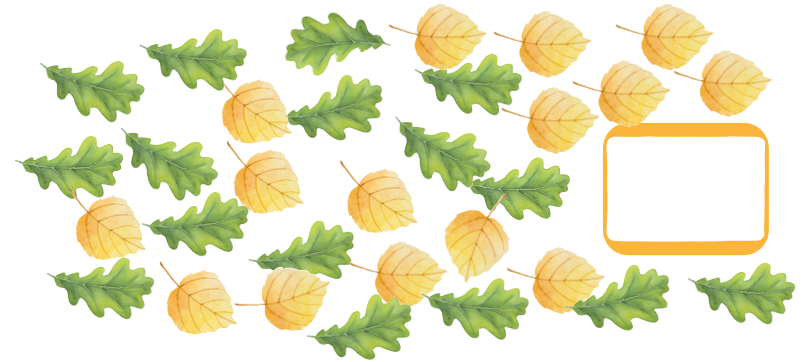
- ◆ **Read to the child:** Kimball is having friends over today, and they are going to paint designs on leaves. What hand is Kimball painting with? [left]



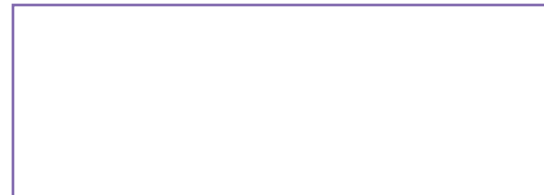
Kimball is helping his mom prepare for the party. There will be 20 children at the party, and they each need 2 leaves. That means Kimball and his mom need to have at least 40 leaves. Kimball goes out into the woods by his house to collect 40 leaves. Let’s help him estimate if he has found enough leaves. When we estimate the number of items in a group, we don’t count each item; we say *about* how many there are. In the next column, look at the leaves he has found so far and estimate how many he found. Do you estimate that he found 2 or 10 leaves? Write your answer in the box. Then count the leaves. Were you right? Are there close to 10 leaves?



He found some more leaves. Look at the pile. Do you estimate that he found 12 or 30 leaves? Write your answer in the box. Then count the leaves. Mark each one with your pencil as you count so you don’t count it twice. Were you right? Are there close to 30 leaves?








- ◆ **Take the four dice from the math box and give them to the child. Read to the child:** How many dice do you estimate can fit in the purple box? Put them in and see if you are right. How many dice do you estimate can fit in the green box? Put them in and see if you are right.



Leaf GRAPHING

◆ Have the child complete the graph by counting each different type of leaf and coloring in the correct number of boxes.



10					
9					
8					
7					
6					
5					
4					
3					
2					
1					
					

UNIT 3 OVERVIEW

✂ LESSONS 81-120 ✂

Extra Supplies Needed

- 1-cup measuring cup
- $\frac{1}{2}$ -cup measuring cup
- glass of water
- ball
- two matching cups

New Concepts Taught

- 2D and 3D shapes
- Addition up to 15
- Comparing numbers
- Comparing volume
- Count backward from 20
- Count by 2s
- Count by 5s
- Divide in half
- Doubles addition
- Even and odd
- Graphs
- Heavier or lighter
- Making 10
- Measure in centimeters
- Measure in inches
- More than, less than
- Ordering numbers
- Pennies, nickels, and dimes
- Seasons
- Subtraction up to 10
- Symmetry

Parent/Teacher Tips

- If the child is struggling with transitions over the tens (like 29 to 30), which is common at this age, consider doing this activity: on index cards, write three sets of transitions. (For example, on six separate cards write 29, 30, 39, 40, 49, 50.) Then put them in sets (separate from each other) for the child and have him or her read them. Then mix the cards up and have the child put them back in sets.
- Does the child want more math each day? Rather than supplementing, we suggest doing one and a half to two lessons a day. If the child is finishing a lesson each day and wants to do more, that is a sign that he or she is likely ready to move more quickly through concepts, not that he or she needs to spend more time on concepts.
- Remember, you can use the hundreds chart on page iii when the Review Box tells you to practice counting. Have the child use his or her finger, a pencil, a straw, a colored wooden craft stick, or other pointer to point to each number as he or she counts.

Lesson
101

DIVIDING GROUPS IN HALF

Practice items the child has not mastered.

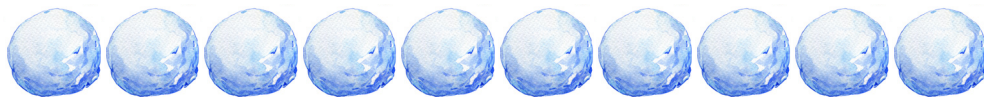
- Count by 2s from 2 to 20, using the number line if needed.



- Repeat this sentence twice: Even numbers end with 0, 2, 4, 6, or 8.

- Take the counting sticks from the math box. Place two counting sticks in front of the child. Read to the child: Look at these sticks. If we wanted to share these sticks and each have the same number, how many would we each get? [1] We just divided the number of counting sticks in half. Let's do the same thing with four sticks. Pass out a stick to each of us until there aren't any sticks left. Give one stick to me and one stick to you until all the sticks are passed out. How many sticks do we each have? [2] Continue practicing with groups of 6, 8, and 10.

Ben and Sarah made these snowballs and are now going to divide them in half so they each have the same number for their snowball piles. To divide them in half, put "B" for Ben and "S" for Sarah back and forth under each snowball. The first two are completed. Then tell me how many snowballs they each get. [5]



B S




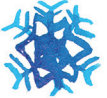

- Read to the child: Sarah and Ben each decided to make a snowman. Here are the items they collected. Draw a line to divide each group in half so each snowman will have the same number of each item.



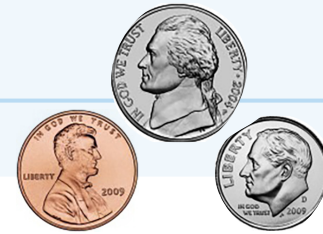
Snowflake GRAPHING

◆ Have the child complete the graph to show how many of each snowflake are in the sky. After the child graphs a snowflake, have the child cross it out.



10					
9					
8					
7					
6					
5					
4					
3					
2					
1					
					

SEASONS

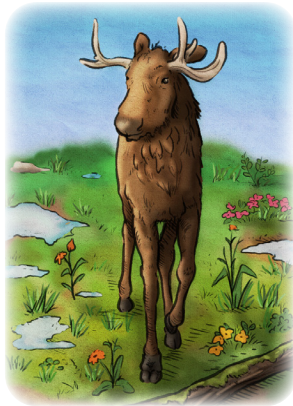


Practice items the child has not mastered.

- Count backward from 20 to 1.
- Point to the penny, the dime, and the nickel. Say how many cents each coin is worth.

◆ **Read to the child:** The year is divided into four time periods called seasons: winter, spring, summer, and fall. **Discuss the activities the child does in the winter, spring, summer, and fall.**

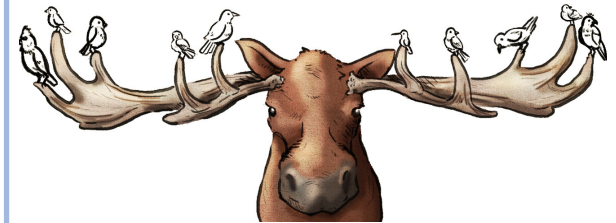
◆ **Read to the child:** Like many other animals, some moose migrate each year to different locations depending on the season. **Migrating** is moving from one place to another for food or warmer weather. Moose live in parts of the world with long winters and short summers. The moose below are in different seasons. Point to each moose and, using the colors and details as clues, tell me what each season is.



How do the seasons where you live compare to where moose live? Do you get lots of snow in the winter? Do flowers bloom in the spring? Do you swim in a swimming pool in the summer?

◆ **Take a car from the math box.** **Read to the child:** Place your car on “Start” and drive along the moose migration path on the next page. Look at the colors and details of the season. Stop at each line and tell me what season it is and three things you noticed about that season. Continue driving and do the same for each season.

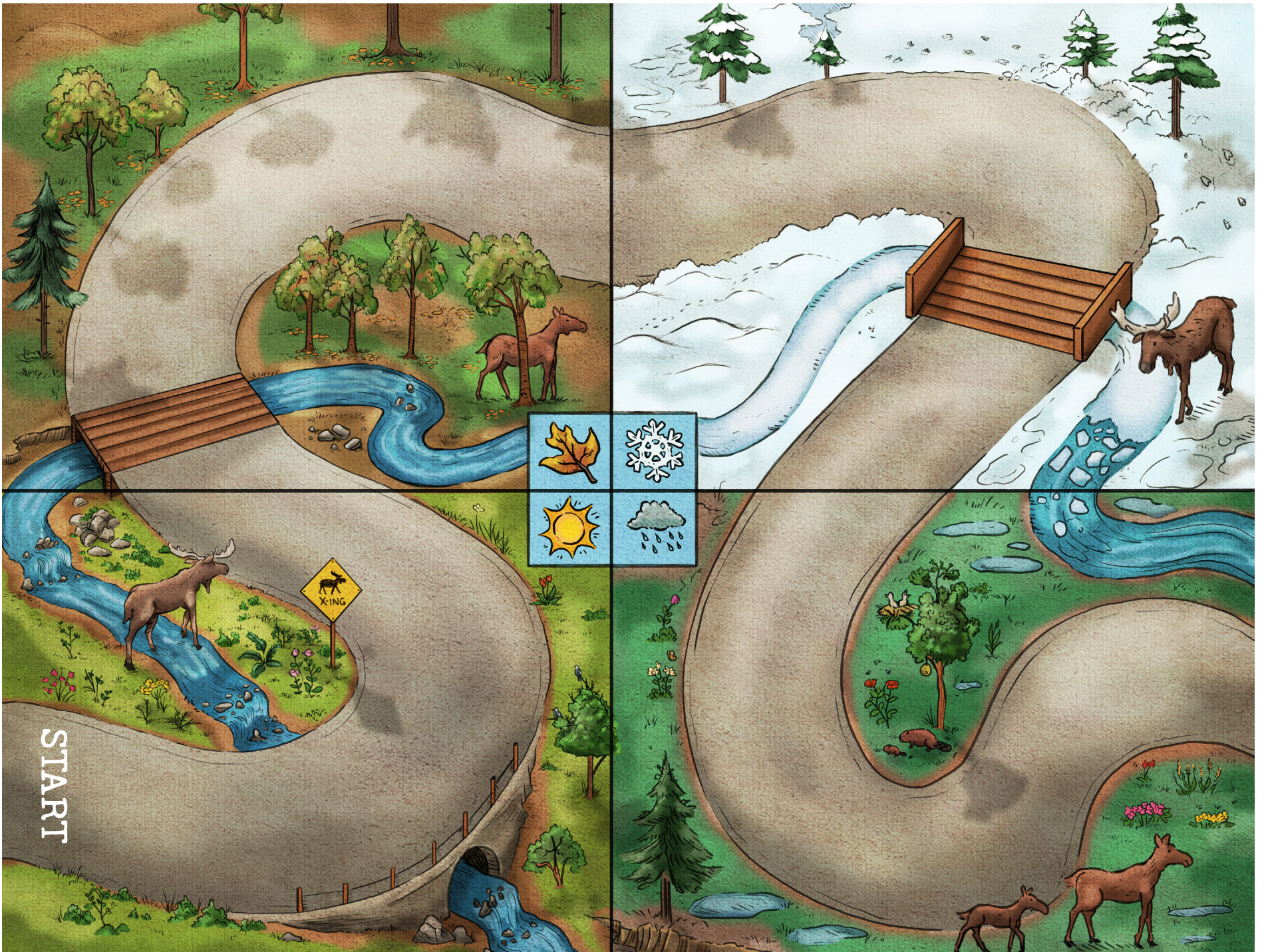
◆ **Read to the child:** Color some of the birds below blue and some yellow. Then write equations matching the bird colors in the circles below.




$$\bigcirc + \bigcirc = 10$$

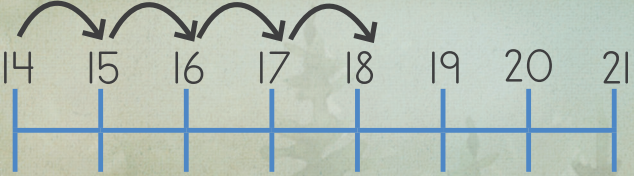



$$\bigcirc + \bigcirc = 10$$





MOOSE Migration



 $14 + 4 = \square$






 $16 + 3 = \square$






 $13 + 2 = \square$






 $12 + 5 = \square$




 $15 + 4 = \square$




 $21 + 2 = \square$



PAYING FOR ITEMS USING CENTS

Practice items the child has not mastered.

- Count by 2s from 2 to 20, using the number line if needed.

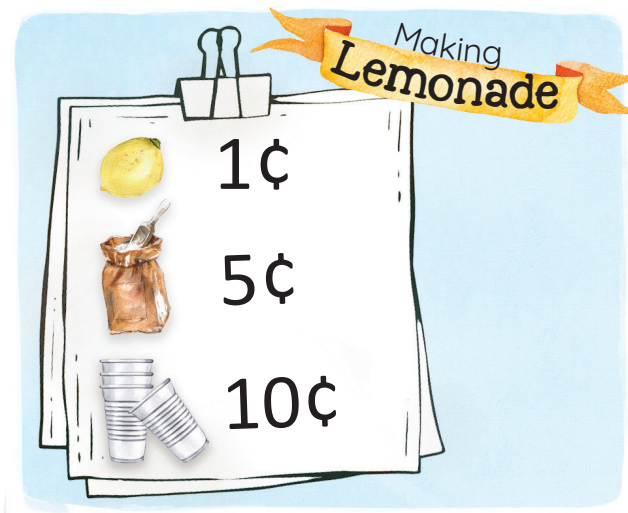


- Point to the left. Point to the right.
- Count backward from 20 to 1.

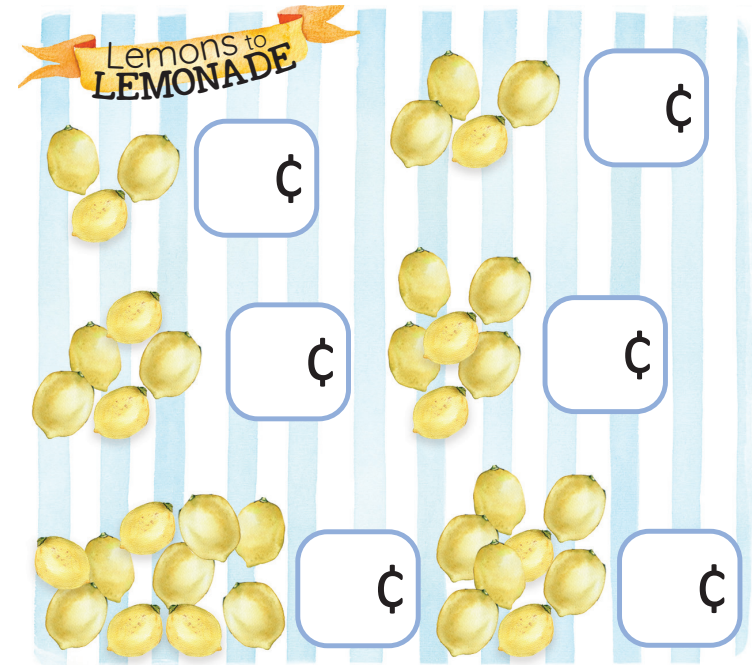
- Take ten pennies from the math box. Read to the child: How many cents is a penny worth? [1 cent] How many cents are two pennies worth? [2 cents] How many cents are three pennies worth? [3 cents] If something costs 5 cents, how many pennies do I need to pay for it? [5] If something costs 2 cents, how many pennies do I need to pay for it? [2]



Give the child 10 pennies. Read to the child: Ben wants to make lemonade to sell at a lemonade stand. First, he needs to buy the necessary supplies. Give me the number of pennies he needs for a lemon. Give the penny back to the child. Give me the number of pennies he needs for a scoop of sugar. Give the pennies back to the child. Give me the number of pennies he needs for paper cups.

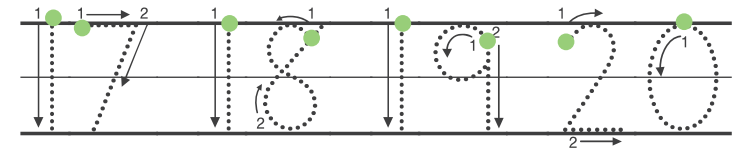


- Read to the child: Ben has sold all the lemonade he made. He needs to buy more lemons to make more lemonade. If each lemon costs one cent, write the number of pennies he needs in the box next to each group.



- Take a car from the math box. Read to the child: On the next page, place your car on "Start" and drive through Lemonade Lane, stopping at each lemonade stand to pay for a glass of lemonade at the price shown. Give me the correct amount with your pennies. I will give them back to you after you buy each one so you have enough pennies to buy the next one.

- Have the child trace the numbers.






Start



COURSE ASSESSMENT



Parent/Teacher

-  This assessment covers the whole course, including Unit 3. Only major concepts are covered. Children are not expected to master all concepts before moving to Math 1, as Math 1 reviews most concepts taught in Math K. This assessment helps you see all the child has learned in the course and where more practice is needed. It is suggested that the child master the following items before moving to Math 1:
 - counting from 1 to 100
 - single-digit addition
 - counting by 2s to 10
 - recognizing colors
-  For Lesson 119 have the child complete only the sections with purple headers. 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 120 have the child complete all the orange sections that are checked.




Student







ORAL ASSESSMENT SECTION

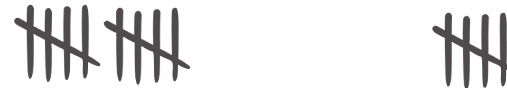


Mark the triangle for any items the child completes incorrectly.

-  Have the child count by 5s from 5 to 50.
-  Have the child raise his or her right hand and then left hand.
-  Have the child point to the triangles and ovals. Have the child point to the square and the rectangle. Have the child point to the circles. Have the child point to each shape and say the number on it. Have the child point to each shape and tell you its color.



-  Have the child count from 1 to 100.
-  Have the child tell you the days of the week.
-  Have the child count by 10s from 10 to 100.
-  Have the child tell you if each set of tally marks is equal to ten or not equal to ten.



-  Have the child tell you the name of each coin and its value.



Additional Practice

Complete the items above for the triangles that are marked.



ORDINAL NUMBERS



For each item in the box, circle its position in the row: 1st, 2nd, 3rd, 4th, 5th, or 6th, starting on the left.

3rd
2nd
1st



4th
5th
6th



Additional Practice

For each item in the box, circle its position in the row: 1st, 2nd, 3rd, 4th, 5th, or 6th, starting on the left.

6th
3rd
2nd



4th
1st
6th



TELLING TIME TO THE HOUR



Draw a line from the analog clock to the digital clock with the matching time.



Additional Practice

Draw a line from the analog clock to the digital clock with the matching time.

