Built on the CCSS COMMON CORE

NUMBER WORLDS™

Accelerate Math Success

Teacher Edition

Mc Graw Hill Education

WEEK 24

Numbers to 100

Week at a Glance

This week students begin ***Number Worlds,*** Week 24 and continue to explore Line Land and Sky Land.

Background

In Sky Land, numbers are represented as positions on a scale. When students are asked "How high are you now?" they might think of the height on the scale, the set size that corresponds to that position, or the number that shows the position on the scale.

Teaching for Understanding

As students engage in these activities, they will explore the concept of magnitude and will begin to understand that rolling or choosing large numbers allows a player to move through the number sequence more quickly and in fewer steps.

Observe closely while evaluating the Engage activities assigned for this week.

- Can students correctly order numbers to 100?
- Can students accurately subtract whole numbers?

Skills Focus

- Identify numerals 1–100.
- Compare and order numbers.
- Subtract whole numbers.

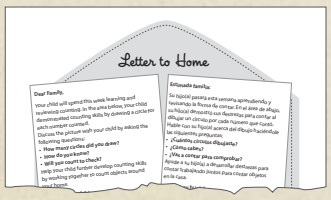
How Students Learn

As students begin this week's lesson, they should be able to move up and down a number line to and from 20 and should be able to subtract small quantities from single- and double-digit numbers.

At the end of this week, students should be able to identify numerals to 100 and know the location of each number in the sequence.

Math at Home

Give one copy of the Letter to Home, page 24, to each student. Encourage students to share and complete the activity with their caregivers.


Letter to Home

Weekly Planner

Lesson	Learning Objectives
1 pages 340–341	Students reinforce counting and number- sequence skills and subtract small quantities from 10 on a vertical number line.
2 pages 342–343	Students reinforce counting and number-sequence skills to 100.
3 pages 344–345	Students reinforce counting and number-sequence skills and subtract small quantities from 10 on a vertical number line.
4 pages 346–347	Students reinforce counting and number-sequence skills to 100.
5 pages 348–349	**Review and Assess** Students will review and reinforce skills and concepts learned this week and in previous weeks.
Project pages 350–351	Students add and subtract whole numbers while telling math stories. Students use math symbols when writing equations.

Conceptual Development Activity

Activity 7, p. 27: Students compare and order numbers from 1 to 10.

Key Standards for the Week

Domain: Counting and Cardinality

Cluster: Know number names and the count sequence.

K.CC.1 Count to 100 by ones and by tens.

Domain: Operations and Algebraic Thinking

Cluster: Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from.

K.OA.1 Represent addition and subtraction with objects, fingers, mental images, drawings, sounds (e.g., claps), acting out situations, verbal explanations, expressions, or equations.

Materials		Technology
Program Materials • ***Student Workbook,*** p. 74 • Elevator Game Board • Elevator Cards • Counters (10 of each color) • Multi-Land Activity Sheet 2, p. A23 (optional)		***Teacher Dashboard*** Building Blocks Function Machine 1
Program Materials • ***Student Workbook,*** p. 75 • Number Line Game Board to 100 • Pawns • Dot Cubes or Number 7–12 Cubes	**Additional Materials** paper and pencils	***Teacher Dashboard*** Building Blocks Off the Tree Number Line Tool
Program Materials • Elevator Game Board • Elevator Cards • Counters (10 of each color) • Multi-Land Activity Sheet 2, p. A23 (optional)		***Teacher Dashboard*** Building Blocks Function Machine 1 Number Line Tool
Program Materials • Number Line Game Board to 100 • Pawns • Dot Cubes or Number 7–12 Cubes	**Additional Materials** paper and pencils	***Teacher Dashboard*** Building Blocks Off the Tree
Program Materials • ***Student Workbook,*** p. 76 • ***Assessment,*** pp. 58–59, 91–93		***Teacher Dashboard*** Review previous activities.
Program Materials Family, p. A29	**Additional Materials** • activity sheet • glue • construction paper • index cards	

Lesson 1

Objective
Students reinforce counting and number- sequence skills and subtract small quantities from 10 on a vertical number line.

Standard
K.OA.1 Represent addition and subtraction with objects, fingers, mental images, drawings, sounds (e.g., claps), acting out situations, verbal explanations, expressions, or equations.

Vocabulary
- **elevator:** A small room that moves from one floor to another in a building
- **equation:** Number story

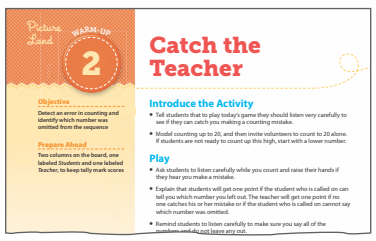
Creating Context
Demonstration and modeling are excellent comprehension strategies to use with English Learners. The Elevator Game Board provides a graphic representation of subtraction that allows students to be actively involved in learning the concept. Teaching the concept in a game format helps English Learners enjoy increased comprehension due to a lower stress level and purposeful repetition of the exercise.

Materials
Warm Up
See materials from previous weeks.
Engage
- Elevator Game Board
- Elevator Cards
- Counters (10 of each color)
- Multi-Land Activity Sheet 2 (optional)

1 WARM UP

Teacher's Choice
Choose one of the Warm-Up activities from previous weeks to use with the whole group, such as:

- Object Land: **Pointing and Winking**
- Picture Land: **Catch the Teacher**
- Line Land: **The Neighborhood**
- Sky Land: **Thermometer Counting**
- Object Land: **What Number Am I?**
- Circle Land: **Count Up**
- Circle Land: **Blastoff!**



Warm-Up Card 2

Purpose
Students reinforce counting and number-sequence skills.

Progress Monitoring

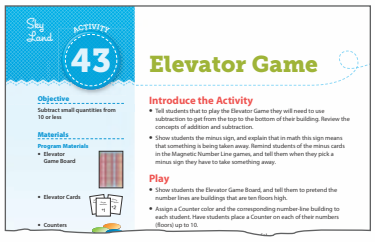
If… students need help with basic skills,

Then… practice counting and number-sequence skills with them throughout the day.

2 ENGAGE

Elevator Game
"Today we will use subtraction to get from the top of a building to the ground floor."

Follow the instructions on the Activity Card to play **Elevator Game.** As students play, ask questions about what is happening in the activity.



Activity Card 43

Purpose
Students subtract small quantities from 10.

Progress Monitoring

If… students have trouble correctly subtracting quantities from 10,

Then… have them start on a lower number such as 5.

Interactive Differentiation
Consult the ***Teacher Dashboard*** for Differentiated Instruction groupings. You can also use performance on the Engage activity to guide students.

Independent Practice
Students should practice subtraction by completing ***Building Blocks*** Function Machine 1. They will identify a math function by observing a series of operations that apply a consistent addition or subtraction value (+2, −5, etc.).

Supported Practice
For additional support with counting and the number sequence, students will count sets of objects found around the classroom.

- Prepare ahead of time some sets of objects (books or pencils) around the classroom.
- Have each student select a set and count the objects.
- Ask the group to verify the counting sequence.
- Discuss any errors that the group detected.

3 REFLECT

Extended Response

Ask questions such as the following:

- **What number did you start on? Did you move up or down on your first turn? What number did you land on? How did you figure that out?** Accept all reasonable answers.
- **If you're on the seventh floor, how many do you need to take away to reach the ground floor? How did you figure that out?** Students should indicate that they need to subtract the number that will leave them with no Counters.

Using Student Pages

Have each student complete ***Student Workbook,*** page 74. Did he or she write the correct answer?

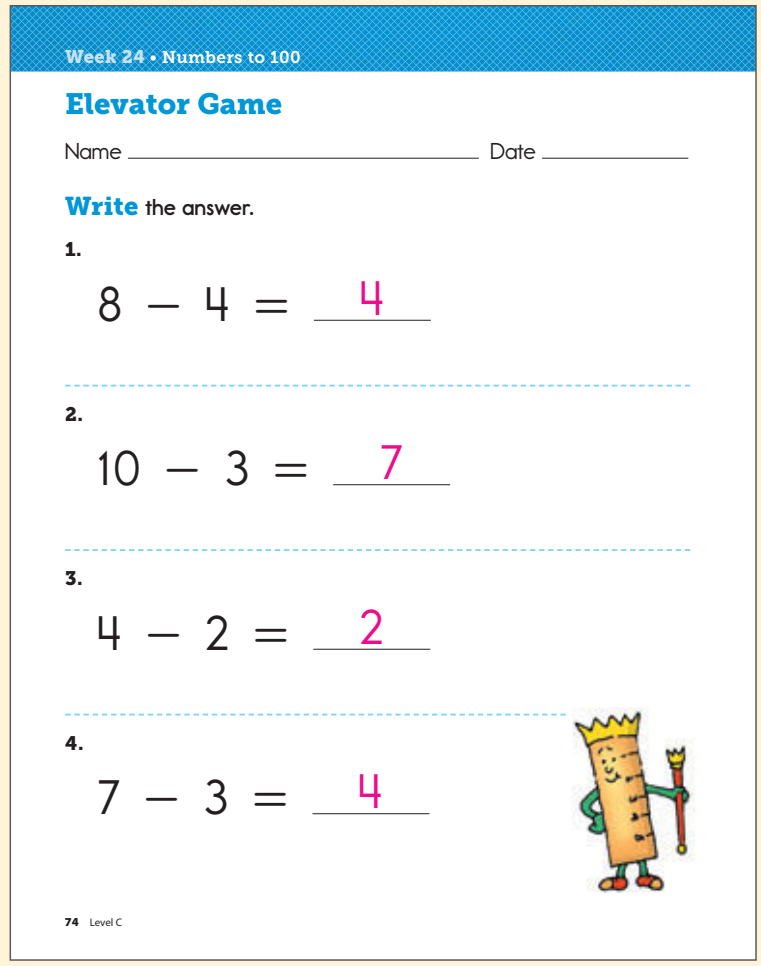
4 ASSESS

Informal Assessment

Use the Student Assessment Record, ***Assessment,*** page 100, to record informal observations.

Below the informal assessment questions are some tips on how you might teach these skills in future lessons.

Teacher's Choice	Elevator Game
Did the student	Did the student
☐ respond accurately?	☐ make important observations?
☐ respond quickly?	☐ extend or generalize learning?
☐ respond with confidence?	☐ provide insightful answers?
☐ self-correct?	☐ pose insightful questions?
• Improve accuracy of responses by having students verify one another's answers to counting, sequencing, spatial-terms, predicting, adding, subtracting, and dial-counting problems.	• Improve observational skills by having students verify one another's use of addition and subtraction.
• Decrease response time by slowly reducing the time between the questions you ask to counting, sequencing, spatial-terms, predicting, adding, subtracting, and dial-counting problems.	• Generalize learning by discussing other vertical scales on which students can move up and down.
	• Improve insightfulness of answers by having each student explain how they know what moves they need to make to win the game.



Week 24 • Numbers to 100

Elevator Game

Name _____ Date _____

Write the answer.

1. 8 − 4 = 4

2. 10 − 3 = 7

3. 4 − 2 = 2

4. 7 − 3 = 4

74 Level C

Student Workbook, p. 74

Lesson 2

Objective
Students reinforce counting and number-sequence skills to 100.

Standard
K.CC.1 Count to 100 by ones and by tens.

Vocabulary
- **pawn:** Game piece
- **most:** More than anyone else

Creating Context
Students will work with large and small numbers as they move along the number line. To help English Learners, use hand gestures that emphasize *big* and *small*. Use gestures while saying the instructions aloud so English Learners understand the directions and learn the terminology at the same time.

Materials
Warm Up
See materials for previous weeks.
Engage
- Number Line Game Board to 100
- Pawns
- Dot Cubes or Number 7–12 cubes

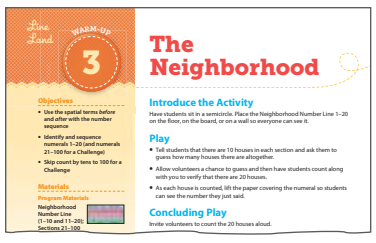
Additional Materials
Engage
paper and pencils

1 WARM UP

Teacher's Choice
Choose one of the Warm-Up activities from previous weeks to use with the whole group, such as:

- Object Land: **Pointing and Winking**
- Picture Land: **Catch the Teacher**
- Line Line: **The Neighborhood**
- Sky Land: **Thermometer**

Counting
- Object Land: **What Number Am I?**
- Circle Land: **Count Up**
- Circle Land: **Blastoff!**



Warm-Up Card 3

Purpose
Students reinforce counting and number-sequence skills.

Progress Monitoring

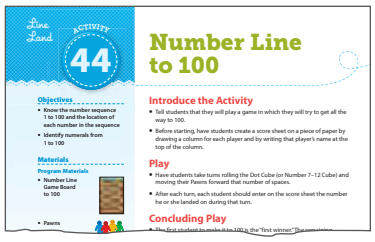
If… students need help with basic skills,

Then… practice counting and number-sequence skills with them throughout the day.

2 ENGAGE

Number Line to 100
"Today we will play a game and try to get all the way to 100."

Follow the instructions on the Activity Card to play **Number Line to 100.** As students play, ask questions about what is happening in the activity.



Activity Card 44

Purpose
Students reinforce number-sequence skills to 100, identify numerals from 1 to 100, and predict the results of adding whole numbers.

Progress Monitoring

If… students have trouble remembering the number sequence,

Then… help them identify and discuss the patterns in the ones and tens places.

Interactive Differentiation
Consult the ***Teacher Dashboard*** for Differentiated Instruction groupings. You can also use performance on the Engage activity to guide students.

Independent Practice
Students should practice problem solving using one-to-one correspondence by completing ***Building Blocks*** Off the Tree. They will add two amounts of dots to identify their total number value (from two through ten) and move forward a corresponding amount of spaces on a game board.

Supported Practice
For additional support with number sequence and subtraction, students will work with the Number Line Tool.

- Tell students they can use the number line to help with their subtracting.
- Prepare on chart paper, a blank equation for reference, such as: _____ − _____ = _____ .
- Have one student count along the number line and stop somewhere between 0 and 10.
- Then have that student write the number in the equation.
- Another student will count down along the number line, completing the subtraction equation.
- Ask the group to determine whether the answer is correct.

3 REFLECT

Extended Response

Toward the end of the game, ask questions such as the following:

- **What number are you on? What number is your classmate on? Which number is higher when we count up?** Answers will vary.
- **Who has gone the farthest? Who has gone the shortest distance? How did you figure that out?** Answers will vary. Students may indicate that the player with the biggest number has gone the farthest, and the player with the smallest number has gone the shortest distance along the number line.

Using Student Pages

Have each student complete ***Student Workbook,*** page 75. Did he or she correctly identify the missing numbers?

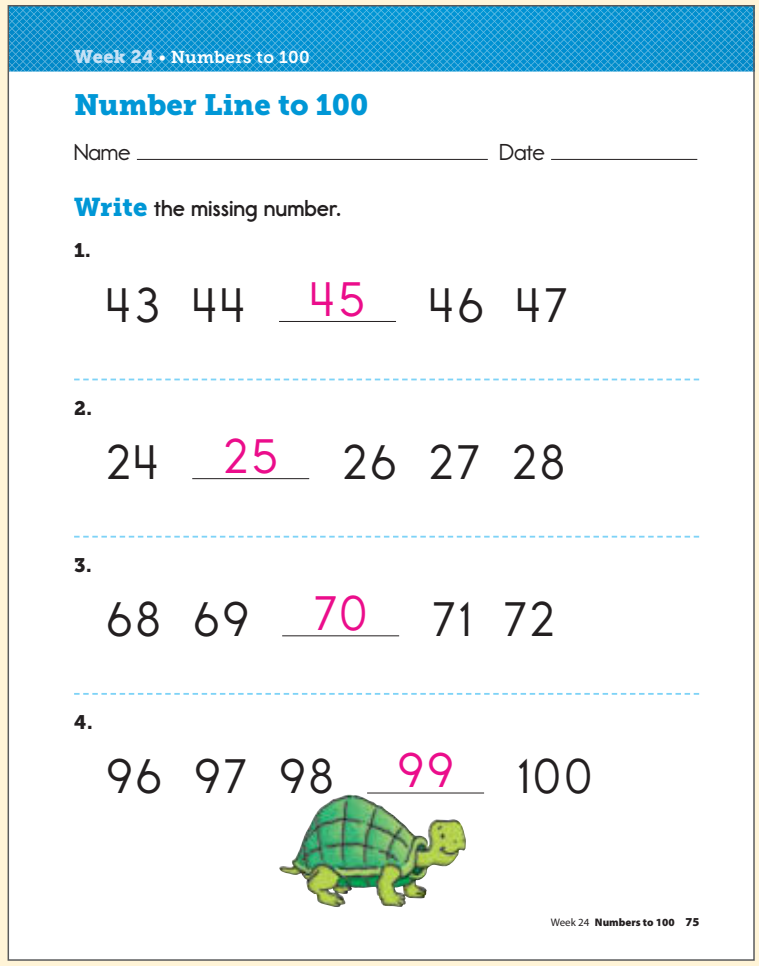
4 ASSESS

Informal Assessment

Use the Student Assessment Record, ***Assessment,*** page 100, to record informal observations.

Below the informal assessment questions are some tips on how you might teach these skills in future lessons.

Teacher's Choice	Number Line to 100
Did the student	Did the student
☐ respond accurately?	☐ pay attention to the contributions of others?
☐ respond quickly?	☐ contribute information and ideas?
☐ respond with confidence?	☐ improve on a strategy?
☐ self-correct?	☐ reflect on and check accuracy of work?
• Build confidence of responses by asking particular students counting, sequencing, spatial-terms, predicting, adding, subtracting, and dial-counting questions that you are fairly sure they will answer correctly.	• Improve attention to the contributions of others by allowing a student to lead the activity and explain the procedures.
• Improve self-correcting skills by providing sufficient wait time before answering counting, sequencing, spatial-terms, predicting, adding, subtracting, and dial-counting problems.	• Build accuracy of work and contributions of ideas by having students play in teams of two and discuss each of their moves before moving along the game board.



Week 24 • Numbers to 100

Number Line to 100

Name _____ Date _____

Write the missing number.

1. 43 44 45 46 47

2. 24 25 26 27 28

3. 68 69 70 71 72

4. 96 97 98 99 100

Student Workbook, p. 75

Lesson 3

Objective
Students reinforce counting and number-sequence skills and subtract small quantities from 10 on a vertical number line.

Standard
K.OA.1 Represent addition and subtraction with objects, fingers, mental images, drawings, sounds (e.g., claps), acting out situations, verbal explanations, expressions, or equations.

Vocabulary
- **plus sign:** Symbol that means "add"
- **minus sign:** Symbol that means "take away"

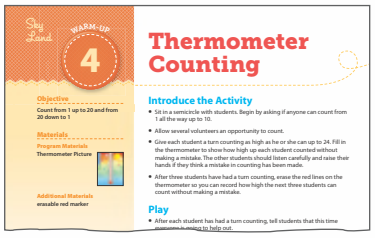
Creating Context
In the Elevator Game the words *top* and *bottom* are used. Help students brainstorm phrases or expressions that include position words, and make a list to display on the classroom wall.

Materials
Warm Up
See materials from previous weeks.
Engage
- Elevator Game Board
- Elevator Cards
- Counters (10 of each color)
- Multi-Land Activity Sheet 2 (optional)

1 WARM UP

Teacher's Choice
Choose one of the Warm-Up activities from previous weeks to use with the whole group, such as:

- Object Land: **Pointing and Winking**
- Picture Land: **Catch the Teacher**
- Line Land: **The Neighborhood**
- Sky Land: **Thermometer Counting**
- Object Land: **What Number Am I?**
- Circle Land: **Count Up**
- Circle Land: **Blastoff!**



Warm-Up Card 4

Purpose
Students reinforce counting and number-sequence skills.

Progress Monitoring

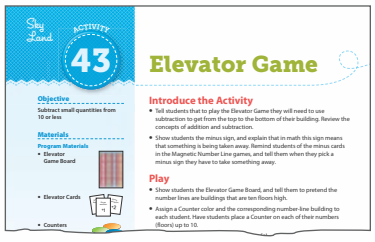
If… students need help with basic skills,

Then… practice counting and number sequence-skills with them throughout the day.

2 ENGAGE

Elevator Game
"Today we will use subtraction to get from the top of a building to the ground floor."

Follow the instructions on the Activity Card to play **Elevator Game.** As students play, ask questions about what is happening in the activity.



Activity Card 43

Purpose
Students subtract small quantities from 10.

Progress Monitoring

If… students can fluently subtract quantities from 10,

Then… have them play the Challenge variation of the game by writing the equation that corresponds to each move.

Teacher's Note

Encourage students to use this week's vocabulary words as they engage in the activities, discuss math concepts, and make predictions.

Interactive Differentiation
Consult the ***Teacher Dashboard*** for Differentiated Instruction groupings. You can also use performance on the Engage activity to guide students.

Independent Practice
Students should practice the number sequence and subtraction by working with the Number Line Tool. They will count along the number line and stop somewhere between 0 and 10, count down along the number line, and write the subtraction equation. The group will check and decide whether the equation is correct.

Supported Practice
For additional support with addition and subtraction, students will work with ***Building Blocks*** Function Machine 1.

- Students will try to figure out what function rule the Function Machine is using.
- Have them select an input and then examine the output.
- Ask the group to discuss what they think the function rule is.
- When the group agrees on a rule, have them do the three proofs to show that they know the rule.

3 REFLECT

Extended Response

Ask questions such as the following:

- **Would you rather pick big numbers or little numbers? Why?** Accept all reasonable answers. Discuss with students that big numbers help them move down the elevator faster, but little numbers may be more useful when they are very close to the ground floor.
- **Can you think of other times at school or at home when you subtract?** Accept all reasonable answers.

4 ASSESS

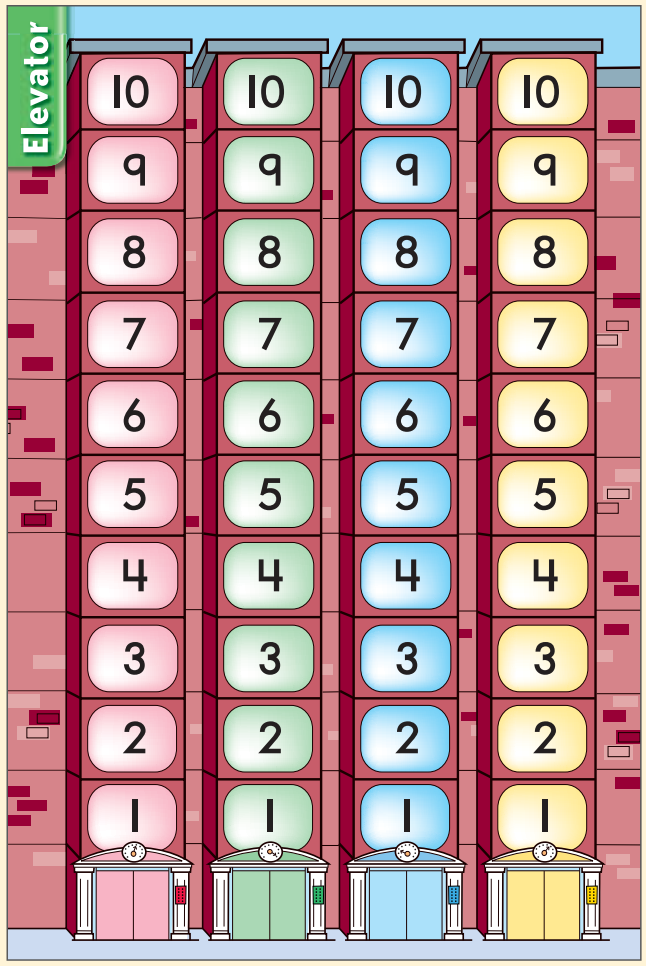
Informal Assessment

Use the Student Assessment Record, ***Assessment,*** page 100, to record informal observations.

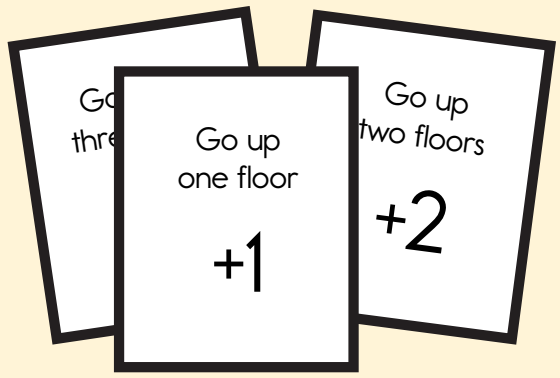
Below the informal assessment questions are some tips on how you might teach these skills in future lessons.

Teacher's Choice	Elevator Game
Did the student	Did the student
☐ respond accurately?	☐ provide a clear explanation?
☐ respond quickly?	☐ communicate reasons and strategies?
☐ respond with confidence?	☐ choose appropriate strategies?
☐ self-correct?	☐ argue logically?

- Decrease response time by slowly reducing the time between the questions you ask to counting, sequencing, spatial-terms, predicting, adding, subtracting, and dial-counting problems.
- Build confidence of responses by asking particular students counting, sequencing, spatial-terms, predicting, adding, subtracting, and dial-counting questions that you are fairly sure they will answer correctly.
- Improve clarity of explanations by asking a student to explain the rules and procedures of the activity.
- Build communication of reasoning and logical arguing skills by having each student explain how they know their game card moves are correct.



Elevator Game Board



Elevator Cards

Lesson 4

Objective
Students reinforce counting and number-sequence skills to 100.

Standard
K.CC.1 Count to 100 by ones and by tens.

Vocabulary
position: Where something is

Creating Context
Playing games is an excellent way to give English Learners practice listening to and speaking English. The natural repetition of procedural and counting language replaces tedious drills with authentic, active experience. Wait time is built into the process, and the low-stakes environment makes the use of games an enjoyable and efficient learning tool in math.

Materials
Warm Up
See materials for previous weeks.
Engage
- Number Line Game Board to 100
- Pawns
- Dot Cubes, or Number 7–12 Cubes

Additional Materials
Engage
paper and pencils

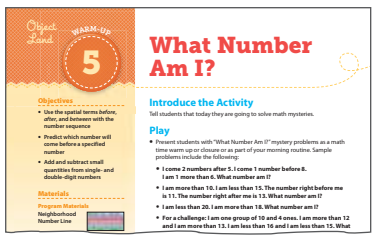
1 WARM UP

Teacher's Choice
Choose one of the Warm-Up activities from previous weeks to use with the whole group, such as:

- Object Land: **Pointing and Winking**
- Picture Land: **Catch the Teacher**
- Line Land: **The Neighborhood**
- Sky Land: **Thermometer**

Counting

- Object Land: **What Number Am I?**
- Circle Land: **Count Up**
- Circle Land: **Blastoff!**



Warm-Up Card 5

Purpose
Students reinforce counting and number-sequence skills.

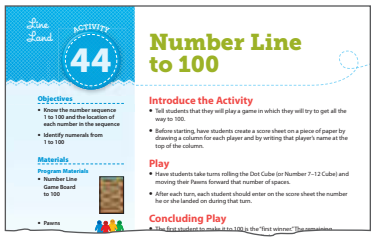
Progress Monitoring

If… students can work fluently with numbers 1 through 10,
Then… challenge them to work with bigger numbers.

2 ENGAGE

Number Line to 100
"Today we will play a game and try to get all the way to 100."

Follow the instructions on the Activity Card to play **Number Line to 100.** As students play, ask questions about what is happening in the activity.



Activity Card 44

Purpose
Students reinforce number-sequence skills to 100, identify numerals from 1 to 100, and predict the results of adding whole numbers.

Progress Monitoring

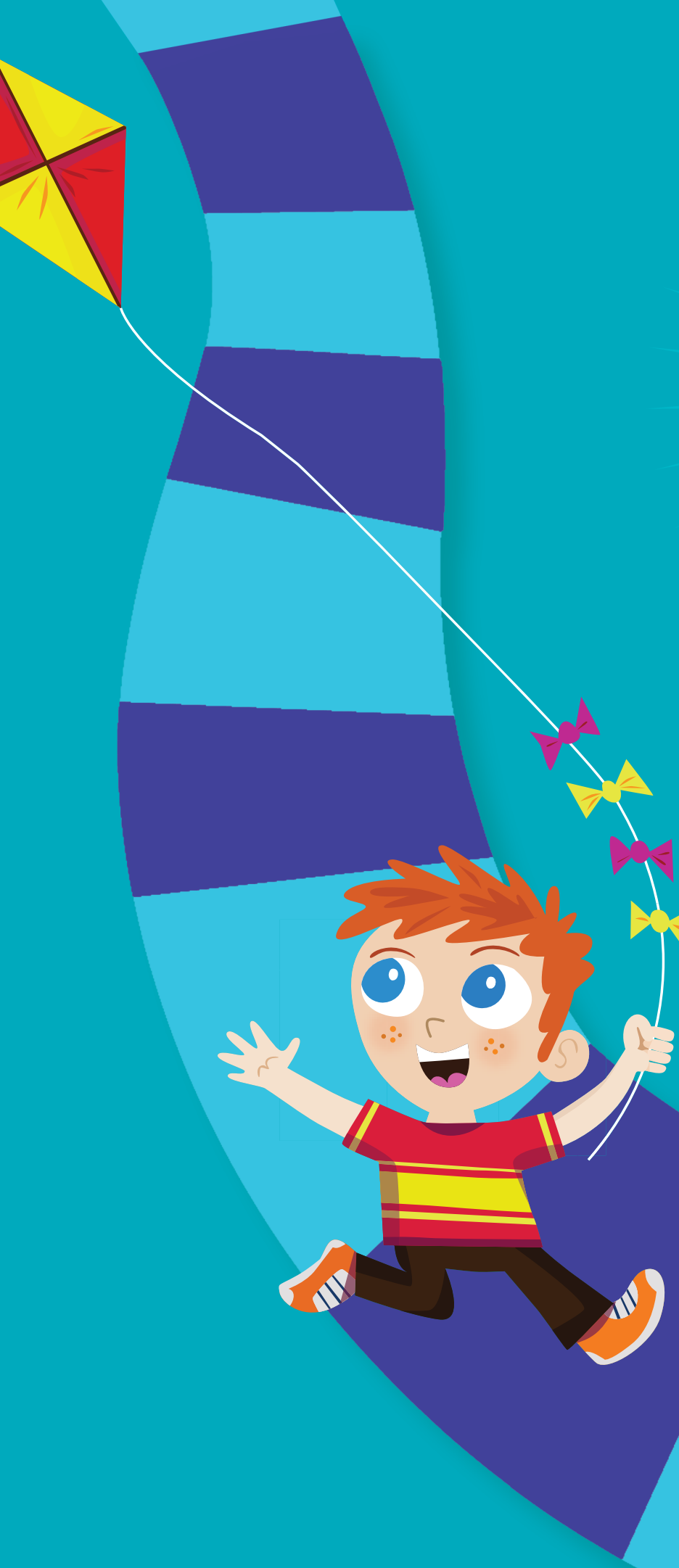
If… students are comfortable with the number sequence,
Then… challenge them to write the addition equation that corresponds to each roll of the Dot Cube.

Interactive Differentiation
Consult the ***Teacher Dashboard*** for Differentiated Instruction groupings. You can also use performance on the Engage activity to guide students.

Independent Practice
Students should practice the number sequence and addition equations by playing a variation of the **Number Line to 100** activity. They will play the activity using the Number Line Game Board with the additional task of writing the equations that go along with their Dot Cube rolls and moves.

Supported Practice
For additional support in addition and problem solving, students will work with ***Building Blocks*** Off the Tree.

- Tell students they will use their addition skills to move along a game board.
- Give students turns to count the dots in two dot frames and come up with a sum.
- Before moving the game piece ahead and clicking "OK," ask the group to verify that the move will be correct.



LEVEL C

NUMBER WORLDS™

Accelerate Math Success

Teacher Edition

Help struggling students accelerate math success with a proven approach.

- **PREPARE** students to meet rigorous Common Core standards with proven curriculum and enhanced planning tools.
- **ENGAGE** students with project-based learning and embedded games, activites, and digital resources.
- **ASSESS** student achievement with dynamic digital assessment and reporting.

Built on the CCSS COMMON CORE

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