

Counting and Cardinality

Prior to Instruction

Program student AAC devices with numbers and mathematical symbols. For students who are not fluent using devices to communicate, provide students with visual response options and communication cards. For students with emerging symbolic communication, use concrete representations of objects during the lesson. Sample words and phrases include:

- Numbers 1-20
- The Moon and the Hat
- Count

Anchor Instruction for All Students

Prior to beginning instruction, anchor instruction by referencing the story, *The Moon and the Hat*. Say, **We read the book, *The Moon and the Hat*. The boy's hat flew away and he ran to catch it! Can we count things in the story?** Allow students to share their responses. For students who need communication or response support, provide appropriate visual response options using the math worksheets or the language cards.

Introduce Numbers- Reciting Numbers in a Sequence

Note: If students cannot ambulate, have students use their arms to pretend to fly, or have a support person use hand-over-hand support to get them engaged in the activity.



Learning Objective

- Students will identify numbers 1-100.
- Students will count to a specific number.
- Students will count objects with one-to-one correspondence.
- Students will compare numbers within 100.

Materials

- Number and Quantity Cards
- Counting Mat (Matching)
- Counting Mat
- Counting Worksheet
- Linking Counting Cubes
- Number Line
- Counting Frame
- Magnetic Whiteboard
- Magnetic Numbers
- Magnetic Display Tray
- Magnetic Picture Pockets
- Worksheet Pockets

	LEVEL 1	LEVEL 2	LEVEL 3
INTRODUCE	<p>The hat is flying high in the sky! Let's count backwards from 10 to 1 and pretend to fly! 10, 9...3, 2, 1!</p> <p>Great job counting. Let's try it again. You can repeat this as a group or have individual students do it.</p>	<p>The hat is flying high in the sky! Let's pretend to fly and count by 5's to 10! 5, 10, 15...100!</p> <p>Excellent! Let's try it again. Let's count by 5's to 100. You can repeat this as a group or have individual students do it assigning different number of ending seconds for each student.</p>	<p>The hare runs so fast! Let's run in place and count by 100's to 1,000! 100, 200, 300...1,000. Whew! We won the race!</p> <p>Excellent! Let's try it again. Let's count by 100's to 1,000. You can repeat this as a group or have individual students do it.</p>

Introduce Numbers—Number ID with Time Delay

	LEVEL 1	LEVEL 2	LEVEL 3
INTRODUCE	<p>Say, Numbers are all around us! A number tells us how many. We are going to practice identifying numbers and counting different things. Let's remember our book.</p> <p><i>Relate to Story: The hat flew away and the moon wore the hat! Can we count things from our story?</i> For students without number recognition have students identify a number vs. not a number ("I" vs. book).</p>		

Number Identification and Math Vocabulary with Constant Time Delay

*All levels may only need 4 second delay round.

This instruction is recommended for all levels of learners. There are two rounds of instruction. In each round, you will use the number and quantity cards first and then you will identify the numeral on an object in the school (generalization training). First, for the zero-second delay round, you will provide a model of the target response at the same time as providing the task demand. It is important that there is no pause or delay between asking for the target number and showing students the target number. Based on the needs of your students, you may want to repeat the procedures for zero-second time delay three times for the set of numbers before transitioning to the four-second time delay round. Be sure to vary the order of the numbers or targets. For the four-second delay round, you will pause for four seconds after asking for the target number. If needed, after four seconds, you will point to the correct answer. This provides students a brief opportunity to respond independently. Repeat the procedures for the four-second time delay round until each student can identify the target number(s).

Zero Second Delay Round

Complete 5-10 Trials/Student. Recommended for students needing substantial to moderate prompting and support.

Materials: Number and Quantity Cards

Generalization: Identify target numeral on object in classroom or school (e.g., ruler, tape measure, calendar, measuring cup, 100 chart, cell phone, keyboard, telephone, calculator, cafeteria lunch checkout, room number, etc.).

Insert target numerals in varying order in script below.

- **Level I:** Matches and identifies the quantities of 10

TEACHER SAYS	STUDENT RESPONSE	FEEDBACK
Show your student the card with the target number. Say, This is the number (#) .	Student touches number or says the word “(#).”	Say, Outstanding! You found the number (#) ! When you state (#) aloud, show your students on your fingers, drawing a connection between the spoken word and quantity.
	Student does not respond.	Say, This is (#). Touch the number (#) . Wait for the student to respond. Provide physical guidance if needed.
	Student responds incorrectly.	

Four Second Delay Round

Complete 5-10 Trials/Student. Recommended for students needing some prompting and support.

Materials: Number and Quantity Cards

Insert target numerals in varying order in script below.

- **Level 1:** Matches and identifies the quantities of 10
- **Level 2:** Identifies #1-100
- **Level 3:** Sequences a series of numerals 1-100

TEACHER SAYS	STUDENT RESPONSE	FEEDBACK
Say, Let's practice identifying our numbers some more! This time, I'm going to give you a chance to tell me the name of the number written on the card. If you need help, you can wait or ask, and I will help you. Show me the number (#). Wait four seconds.	Student touches or says the word "(#)" within four-seconds.	Say, Wonderful! You found the number (#)! Hold up (#) fingers as you state the number one in your praise statement.
	Student responds incorrectly before additional prompting.	Point to the correct response. Say, (#). This number is the number (#). What number?
	Student does not respond within four seconds.	Point to the correct response. Say, (#). This number is the number (#). What number? Provide physical guidance if necessary. After the student touches or says the name of the number, provide specific verbal praise. Say, That's it! That number is (#)!



Instructional Tip! For students needing additional support, consider altering the task demand and have your students practice matching identical numbers. Have your students practice matching number cards to response options and programmed responses on AAC devices to promote communication. For students struggling during the 4 second delay round, return to the zero round for a number of trials or only present the target number to the students. After the student responds given one response option, slowly introduce distractors.

Counting and Number Sense—Differentiated Systematic and Explicit Instruction

Follow the instructional steps below. Adapt the steps or language, as needed, to account for student-specific needs. After each step, provide specific verbal feedback for correct responses and participation.

	LEVEL 1	LEVEL 2	LEVEL 3
INTRODUCE	Say, Now that we have practiced identifying numbers, we are going to practice counting. We can count pictures of items from our story!	Say, Now that we have practiced identifying numbers, we are going to practice counting. When we count forward, numbers grow and get bigger. I can count aloud and count objects to specific numbers. We can count and show how many the number represents using counters.	Say, Remember, this is a 100 chart. We practiced counting by 10's using the 100 chart. Each line is called a "decade."

Mold-Lead-Test Instruction

This instruction is leveled for three types of support needs. All instruction is delivered in a model-lead-test format. You will teach students how to count by presenting a specific number of counters to your students in an organized or scattered array. Use the counting graphic organizer to help your students visually organize the counters and count to specific numbers. For students needing additional support, consider using the counters on the magnetic board, printing and laminating counters using a pull off system, or counting larger three-dimensional objects.

	LEVEL 1	LEVEL 2	LEVEL 3
LEARNING GOALS	<ul style="list-style-type: none"> Counts 1-10 pictures (scattered) Matches and identifies the quantities of 10 	<ul style="list-style-type: none"> Generalized number ID 1-100 Counts forward from n (n=1-100) 	<ul style="list-style-type: none"> Compares two numbers with quantity to identify if the numbers are greater than, less than, or equal to using symbol.

	LEVEL 1	LEVEL 2	LEVEL 3
MODEL	<p>Use counting mat, worksheets, and manipulatives.</p> <p>Watch me first! Worksheet: Model touching each item and counting aloud. Model how to keep track of where you started and where to stop. Restate final amount.</p> <p>Counting cards and numerals: For quantity match student should count on counting card and select a numeral without picture supports to match.</p>	<p>Use counting mat, worksheets, and manipulatives.</p> <p>Watch me first! Writing numerals: Model making formation of a number. Students can use dotted numbers and write numeral, stamp, or type.</p> <p>Reading numerals 1-100. Use 100 chart for visual support if needed: Model touching each number on the 100 chart and saying aloud. Fill in sequence on worksheet.</p>	<p>Use counting mat, worksheets, and manipulatives.</p> <p>Watch me first! Show 2 number cards with quantity. Here are two numbers with the amount. We need to figure out if one number is greater than, less than, or equal to the other number. Greater than means more. Less than means smaller. Equals to means the same. Provide students with symbols. Say, Show me the [greater than/less than/equals to] sign. Provide several examples and model the correct symbol. Have students show you the same symbol card. Show the correct symbol. Read: (#) is [greater than/less than/equal to] (#). Repeat using several examples.</p>
LEAD	<p>Say, Let's work together and take turns. We are going to practice counting. Use worksheet. Can you count the pictures? Remember one touch, one count.</p> <p>Show counting card. Find the number that matches this amount.</p>	<p>Say, We are going to practice counting. Here is the 100 chart for help. Do it with me! Fill in sequence on worksheet providing assistance if needed.</p>	<p>Say, We are going to figure out if these numbers are [greater than/less than/equal to] each other. Do it with me! Students should use number cards and state [greater than/less than/equal to] and place symbol with correct orientation.</p> <p>Writing numerals: Students can practice writing numerals and signs.</p>
TEST	<p>Say, Your turn. Use worksheet. Count the pictures.</p> <p>Show counting card. Find the number that matches this amount.</p>	<p>Say, Your turn. Fill in the numbers on the worksheet.</p> <p>*Aim to have students do this without the support of the 100 chart.</p>	<p>Say, Your turn. Student should complete worksheet.</p>

	LEVEL 1	LEVEL 2	LEVEL 3
	Note: To be used during the Test phase as needed.		
PROMPTING AND ERROR CORRECTION	<p>If the student does not respond after 4 seconds, say, Count the pictures. Remember one touch, one count. Wait for the student to count. If correct, deliver specific verbal praise.</p> <p>If the student makes an error, Stop! Watch me. Model, and have the student recount from the beginning. Your turn.</p> <p>If the student does not respond after 4 seconds, say, Do it with me. Use hand-over-hand guidance and physically prompt your student to count the pictures.</p>	<p>If the student does not respond after 4 seconds, say, Remember to use your 100 chart if you need it. Wait for the student to perform the skill. If correct, deliver specific verbal praise.</p> <p>If the student makes an error, model pointing to the numerical sequence on the 100 chart.</p> <p>If the student still does not respond after 4 seconds, say, Model writing the numerals on a whiteboard and have students copy into worksheet.</p>	<p>If the student does not respond after 4 seconds, point and say, Are these numbers greater than, less than, or equal to each other? Are they the same or is the first number smaller or bigger than the other? Wait for the student to determine if greater than, less than, or equal to. If correct, deliver specific verbal praise.</p> <p>If the student makes an error, provide a specific verbal prompt (#) is [greater than/equal to/less than (#)]. Have the student complete.</p> <p>If the student does not respond after 4 seconds, provide a model prompt showing the correct symbol.</p>
REINFORCE	Terrific job counting!	Fantastic job counting!	Excellent job comparing numbers!



Instructional Tips!

- For students who need physical adaptations to the materials, consider using larger three-dimensional counters, magnetic counters, or counters that can be removed from a Velcro board. To adjust the complexity level of the task, consider the number of distractors and the organization of the counters.
- For students who are in the beginning stages of learning to count, teach your students to count in a linear array by pushing movable counters and counting from left to right.

Generalization Activity

Compare quantities of items in the school. Students can use hands to show symbols.

Measuring Student Learning

Using the data sheet, collect data on student-specific responses during the counting and cardinality segment. Monitor student progress regularly and make data-based decisions related to instructional pacing, adapting levels of support, and increasing difficulty as needed.

Independent, Technology-Delivered Instruction

enCORE provides additional instruction and practice on the target skills and concepts addressed in this Unit. Both teacher-led and independent student lessons that automatically adapt to differentiate across learning levels are key components of enCORE:

- enCORE automatically selects and assigns these lessons to your students based on their learning level and the Unit you are currently teaching
- or, to view and select any of these lessons at any time – go to the Curriculum tab in your enCORE teacher dashboard.

Operations and Algebraic Thinking

Prior to Instruction

Program student AAC devices with numbers and mathematical symbols. For students who are not fluent using devices to communicate, provide students with visual response options and communication cards. For students with emerging symbolic communication, use concrete representations of objects during the lesson. Sample words and definitions include:

- 1-10
- Add
- Take away
- Combine
- Compare

Anchor Instruction for All Students

Prior to beginning instruction, anchor instruction by referencing the story, *The Moon and the Hat*. Say, **We read the book, *The Moon and the Hat*. We are going to solve math word problems related to our story. Today, we are going to compare two groups of objects to find which group has more and which group has fewer. This is finding the DIFFERENCE. Difference means to subtract, or take away. We will solve math problems from our story!**

Introduce Word Problem Solving

LEVEL 1

LEVEL 2

LEVEL 3

Our story was called *The Moon and the Hat*! When we add things, our number gets bigger. When we take away, our number gets smaller. Different signs help us to solve math problems. A plus sign tells us that we add, and a minus sign tells us that we subtract. Review the story with your students prior to beginning. We are going to use a graphic organizer to solve problems related to our story. We are going to practice putting numbers and math signs in our number sentence to practice writing equations for our math problems.



Learning Objectives

- Students will solve compare, combine, change-add more, and change-take away problems.
- Students will solve addition and subtraction word problems within ten.

Materials

- Word Problem Strips
- Word Problem Worksheet
- Graphic Organizer
- Blank Problem-Solving Placemat
- Linking Counting Cubes
- Ten Frame Cards (optional, use as a graphic organizer)
- Blank Puzzle Pieces (optional, use to write and represent equations)
- Magnetic Whiteboard
- Magnetic Numbers
- Magnetic Display Tray
- Magnetic Picture Pockets
- Worksheet Pockets

LEVEL 1

LEVEL 2

LEVEL 3

Note to teachers: Here you are modeling a “think aloud” of discriminating between problem types.

My turn. Here is my word problem. (Step 1) First, I need to read my problem and find out what information is key. Key information is information that will help me solve.

We read a story about the moon and some hats. There was 1 moon. There were 2 hats. How many things can we count from our story?

(Step 2) **Next, I need to determine what operation- addition or subtraction, I use to solve by investigating the problem type! Remember, sometimes you are finding the ending amount and sometimes you are finding a missing part. We will set up our problem.**

(Step 3) As you read, point to the numbers and the vocabulary referencing the numbers in the problem. **Third, I need to fill-in my number sentence. What do I know and what do I need to find out?** Model explaining if finding an ending amount or missing part (e.g., I only know the starting amount and the ending amount, so I will put those in the number sentence and the total after the equals sign). Put the numbers in the number sentence. **I will put a “?” mark in the unknown.** Put the ? in the number sentence. **Next, I need to add my + or – sign.** Write the sign in the equation. Then read the equation.

(Step 4) **Now, I am ready to set up my problem using the graphic organizer and counters! I need to choose the [compare/combine/change-add more or take away] problem graphic organizer because I am [finding the difference/combining two parts into one total/adding more to a set/taking away from a set].** Select graphic organizer. **Now, let’s put our numbers in the graphic organizer.** Fill in the graphic organizer with the numerals and sign. This is an important thing to model because students may fade using counters eventually. **I need find out [summarize what you will be solving for].**

(Step 5) **Next, I can count to solve.**

(Step 6) **Last, write my answer.** Repeat the question and state the answer with the numeral and what you solved for in the problem. **We solved the math problem.**

Repeat with one more problem.

MODEL

	LEVEL 1	LEVEL 2	LEVEL 3	
LEAD	<p>Fill in word problems with numerals 1-5. Let's do some more problems together. Remember we must figure out if they are addition or subtraction problems to solve them! Repeat using the steps and think aloud process from the "model" section above.</p> <p>The student should demonstrate the action in the word problem: Compare- finding the difference between sets Combine- add sets together Add more- add more to starting set Take away- take away from starting set</p> <p>Fantastic [compare/ combine/ add more/take away]. Choose the statement based on the operation used. The set got bigger! We ADDED- plus (point to sign). The set got smaller! We SUBTRACTED- minus (point to sign).</p>	<p>Fill in word problems with numerals 1-10. Let's do some more problems together. Remember we must figure out if they are addition or subtraction problems to solve them! We also must figure out if we are solving for the ending amount, or if we are solving for a missing part of the equation. Repeat using the steps and think aloud process from the "model" section above. Give each student an opportunity to choose add or subtract and fill in equation and graphic organizer. Fantastic [compare/combine/ add more/take away]. Choose the statement based on the operation used. The set got bigger! We ADDED- plus (point to sign). The set got smaller! We SUBTRACTED- minus (point to sign).</p>		
LEARNING GOALS	<ul style="list-style-type: none"> Students will use manipulatives to represent numbers from story word problems Students will add or subtract with manipulatives and support 	<ul style="list-style-type: none"> Students will solve story based addition and subtraction problems with supports 		
	LEVEL 1	LEVEL 2	LEVEL 3	
TEST	<p>Your turn. Show me how to solve this problem.</p>	<p>Your turn. Show me how to solve this problem.</p>	<p>Your turn. Show me how to write a number sentence and solve this problem.</p>	

	LEVEL 1	LEVEL 2	LEVEL 3
	Note: To be used during the Test phase as needed.		
SYSTEM OF LEAST PROMPTS	<p><i>First prompt:</i> If needed, after four seconds, say Look at the important information in the problem to see if it is a [compare, combine, add more, or take away problem]. Read the second and third sentences in the word problem. Provide assistance to the student.</p> <p><i>Second prompt:</i> If needed, after another four seconds, say I (compare/ combine/add more/take away) in this problem. Model (with your hands, not the counters) how to take away to a set.</p> <p><i>Third prompt:</i> If needed, after another four seconds, model comparing sets, combining, adding more, or taking away. Using physical guidance to help the student take away from sets.</p>	<p><i>First prompt:</i> If needed, after four seconds, say Look at the important information in the problem. What do we know and what to we need to find out?</p> <p><i>Second prompt:</i> If needed, after another four seconds, provide prompts on what is known and what students are finding out. Say, This is a [compare, combine, add more, or take away problem].</p> <p><i>Third prompt:</i> If needed, after another four seconds, model providing the equation for the problem and have the student repeat.</p>	<p><i>First prompt:</i> If needed, after four seconds, say Look at the important information in the problem. What do we know and what to we need to find out?</p> <p><i>First prompt:</i> If needed, after four seconds, say Look at the important information in the problem. What do we know and what to we need to find out?</p> <p><i>Second prompt:</i> If needed, after another four seconds, provide prompts on what is known and what students are finding out. Say, This is a [compare, combine, add more, or take away problem].</p> <p><i>Third prompt:</i> If needed, after another four seconds, model providing the equation for the problem and have the student repeat.</p>
REINFORCE	<p>Way to go! You solved the [compare/combine/ add more or take away] problem.</p>	<p>Way to go! You solved the [compare/combine/ add more or take away] problem.</p>	<p>Way to go! You solved the [compare/combine/ add more or take away] problem.</p>



Instructional Tip! For students needing additional support, pre-teach math concepts and symbols using constant time delay.

Extension Activity:

To extend, use everyday scenarios from your classroom to create. Use the predictable structure of word problems to help your students generalize problem solving. For example, write an anchor statement with the context, two sentences with numerals and referent nouns, and end with the question.

Measuring Student Learning

Using the data sheet, collect data on student-specific responses during the operations and algebraic thinking segment. Monitor student progress regularly and make data-based decisions related to instructional pacing, adapting levels of support, and increasing difficulty as needed.

Independent, Technology-Delivered Instruction

enCORE provides additional instruction and practice on the target skills and concepts addressed in this Unit. Both teacher-led and independent student lessons that automatically adapt to differentiate across learning levels are key components of enCORE:

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- or, to view and select any of these lessons at any time – go to the Curriculum tab in your enCORE teacher dashboard.



Measurement and Data

Prior to Instruction

Program student AAC devices with numbers and mathematical vocabulary. For students who are not fluent using devices to communicate, provide students with visual response options and communication cards. For students with emerging symbolic communication, use concrete representations of objects during the lesson. Sample words include:

- 1-10
- (names of objects chosen to measure)
- Inch
- Tape measure
- Feet

Anchor Instruction for All Students

Prior to beginning instruction, anchor instruction by referencing the story, *The Moon and the Hat*. Say, **We read the book, *The Moon and the Hat*. The hat was in the tree. It looked like the moon was wearing the hat. It was up high in the tree! I wonder how tall the tree is!**



Learning Objective

- Students will compare measurable attributes of items
- Students will measure in feet.
- Students will determine whether to measure in inches or feet based on the size of the item.

Materials

- Measurement Cards
- Measurement Worksheet
- Measurement Sort
- Measurement Comprehension
- Magnetic Whiteboard
- Magnetic Display Tray
- Magnetic Picture Pockets
- Worksheet Pockets

Introduce Measurement

	LEVEL 1	LEVEL 2	LEVEL 3
INTRODUCE	Today we are going to measure things with a tape measure.		
	Hold up a ruler. This is a ruler. We used it to measure in inches. Inches are small units of measurement.		
	Hold up a tape measure. This is a tape measure. We use a tape measure to measure in feet. Feet means more than 1 foot. A foot is about the size of my wrist to my elbow. Show wrist to elbow. We use a tape measure to measure the length of larger things- like the height of a tree, or the distance across our classroom.		

Teaching Measurement Concepts with Constant Time Delay

Zero Second Delay Round

Complete 5-10 Trials/Student. Recommended for students needing substantial to moderate prompting and support.

Materials: Measurement Cards, Real Objects to Compare

TEACHER SAYS	STUDENT RESPONSE	FEEDBACK
<p><i>Level 1:</i> Teach receptive identification of measurements and concepts. In the first round, display one card/object at a time and touch the card/object as you name it. For example, say, Touch foot. Support students to imitate your response and touch targeted word. Wait for students to touch the word. Repeat for all vocabulary words. To increase difficulty, provide 2-3 distractors in the 0s round. To increase support, use vocabulary cards with words and picture supports.</p> <p><i>Levels 2-3:</i> Teach expressive and/or receptive identification of the concepts. Display 3-4 cards or objects at a time. For receptive identification, say, Touch foot while you touch the card/object. For expressive identification, say How long is this? As you touch the card, and immediately model by saying the word, One foot. Repeat for all targets.</p>	<p>Student touches the correct response.</p>	<p>Fantastic! This is a foot. The item in this picture is one foot long.</p>
	<p>Student does not respond.</p>	<p>This is foot. Touch one foot. Wait for the student to respond. Provide physical guidance if needed.</p>
	<p>Student responds incorrectly.</p>	

Four Second Delay Round

Complete 5-10 Trials/Student. Recommended for students needing some prompting and support.

Materials: Measurement Cards, Real Objects to Compare

TEACHER SAYS	STUDENT RESPONSE	FEEDBACK
<p>Say, Let's practice some more! This time, I'm going to give you a chance to show me what you know! But don't guess. If you need help, wait, and I will help you. Touch (show me) foot. Wait four seconds.</p>	<p>Student touches the correct response within four seconds.</p>	<p>Fantastic! This is a foot. The item in this picture is one foot long.</p>
	<p>Student responds incorrectly before additional prompting.</p>	<p>This is foot. Touch one foot. Wait for the student to respond. Provide physical guidance if needed.</p>
	<p>Student does not respond within four seconds.</p>	

Model-Lead-Test and a System of Least Prompts

This instruction is leveled for three types of support needs. All instruction is delivered in a model-lead-test format. Give your students the measurement worksheets and measurement cards

MODEL	LEVEL 1	LEVEL 2	LEVEL 3
	<p>Have tape measure, ruler, measuring cup, and scale. Use worksheet for second part. Watch me. Here are 4 different things we use to measure. To measure length in inches, or the length of small things, I use a ruler. Pick up ruler. To measure length of big things or long things, I use a tape measure. Pick up tape measure. Repeat several times. Today I am measuring in inches. Remember, we measure end to end. Find the number where the object ends. Use worksheet. How many inches long is this object? We look at where it ends. Wait for student to respond.</p>	<p>Measure concrete items in the classroom, such as the length of the room, height of the door, length of window, height of each other (mark on board then measure). Watch me. I am going to measure the length the board using the tape measure. The tape measure has both inches and feet. Show students inch marks and feet marks. Feet are marked with numbers. <i>Note: they also may be marked a different color. This varies by measuring tool, but point out the difference between inches and feet on the tool. This is one foot, this is two feet, this is three feet...</i> Allow students to touch number after your model. When I measure it is important to put things end to end. Because we are measuring in feet, which are much longer than an inch, I need someone to help hold the measuring tape at the start of the object. Select a volunteer to hold tape measure. Now just like with the ruler, we measure end to end. (Name person) is holding the start of the tape. I will measure all the way to the end. It stops at (#) feet. Give students an opportunity to touch the feet on the measuring tool and say it aloud after your model. I can shorten the word “feet” to “ft.” It is important we label the number with the unit we are measuring so people know what unit of measurement we are using!</p> <p>Repeat using several models.</p>	<p>Measure concrete items in the classroom, such as the length of the room, height of the door, length of window, height of each other (mark on board then measure). Use worksheet in lead and test sections. Watch me. I am going to measure the length the board using the tape measure. The tape measure has both inches and feet. Show students inch marks and feet marks. Feet are marked with numbers. <i>Note: they also may be marked a different color. This varies by measuring tool, but point out the difference between inches and feet on the tool. This is one foot, this is two feet, this is three feet...</i> Allow students to touch number after your model. When I measure it is important to put things end to end. Because we are measuring in feet, which are much longer than an inch, I need someone to help hold the measuring tape at the start of the object. Select a volunteer to hold tape measure. Now just like with the ruler, we measure end to end. (Name person) is holding the start of the tape. I will measure all the way to the end. It stops at (#) feet. I can label my unit of measurement by shortening the word “feet” to “ft.” or using the ‘ symbol. Give students an opportunity to touch the feet on the measuring tool and say it aloud after your model. Repeat using several models.</p>

	LEVEL 1	LEVEL 2	LEVEL 3
LEAD	<p>Let’s practice together. Use worksheet and go through a few examples. Ask, How long is the object in inches? Write the number. Give students the opportunity to respond.</p>	<p>Let’s practice together. Review measuring objects in the classroom. Ask, How many units long is it? Remember to always say the number and the unit of measurement- inches. Write the unit of measurement after the number. Remember “ft.”</p>	<p>Let’s practice together. Review measuring objects in the classroom. Ask, How many units long is it? Make sure to label your unit of measurement.</p> <p>Let’s play a game! I am going to name a thing, and I want you to tell me if I measure it in inches or in feet. A tree! Wait for student to say feet. A hat! Wait for student to say inches. A person! Wait for student to say feet. A piece of candy! Wait for student to say inches.</p>
LEARNING GOALS	<ul style="list-style-type: none"> Identifies a ruler and a tape measure as tools that measures length. Identifies inches on a ruler. Reads number of whole inches (___ inches). 	<ul style="list-style-type: none"> Identifies and measures length using a tape measure. 	<ul style="list-style-type: none"> Identifies and measures length using a tape measure. Estimates whether to measure length in inches or feet.
TEST	<p>Your turn. Use worksheet. Ask, How long is the object in inches? Write the number.</p>	<p>Your turn. Use objects for student to measure in feet. Provide a sheet of paper for the student to record answer with (# ft). Ask How many feet long is it? Write the numeral and “ft” to show the number of inches.</p>	<p>Your turn. Use objects for student to measure in feet. Provide a sheet of paper for the student to record answer with (# ft). Ask How many feet long is it? Make sure to label your unit of measurement. Then use worksheet for student to select appropriate unit of measurement.</p>

	LEVEL 1	LEVEL 2	LEVEL 3
PROMPTING AND ERROR CORRECTION	Note: To be used during the Test phase as needed.		
	<p><i>If the student does not respond after 4 seconds or makes an error, say, Look at the number where the object ends.</i></p> <p>Wait for the student to say the correct response or point to the correct response.</p>	<p><i>If the student does not respond after 4 seconds or makes an error, say, Measure end to end. Make sure you start at 0 and look for the foot mark closest to where the object ends.</i></p> <p>Wait for the student to say the correct response or point to the correct response.</p>	<p><i>If the student does not respond after 4 seconds or makes an error, say, Measure end to end. Make sure you start at 0 and look for the foot mark closest to where the object ends.</i></p> <p>Wait for the student to say the correct response or point to the correct response.</p>
REINFORCE	Excellent! You measured in inches!	Excellent! You measured using feet!	Excellent! You measured using feet!

Extension Activity

Measure and compare different things in your classroom.

Measuring Student Learning

Using the data sheet, collect data on student-specific responses during the measurement segment. Monitor student progress regularly and make data-based decisions related to instructional pacing, adapting levels of support, and increasing difficulty as needed.

Independent, Technology-Delivered Instruction

enCORE provides additional instruction and practice on the target skills and concepts addressed in this Unit. Both teacher-led and independent student lessons that automatically adapt to differentiate across learning levels are key components of enCORE:

- enCORE automatically selects and assigns these lessons to your students based on their learning level and the Unit you are currently teaching
- or, to view and select any of these lessons at any time – go to the Curriculum tab in your enCORE teacher dashboard.