

Grade 2	Lesson: 10-2 Counting Hundreds, Tens, and Ones	Reference to English
Math Standard(s): 2.NBT.1 (also 2.NBT.1.b, 2.NBT.3) Domain: Numbers and Operations in Base Ten		
Content Objective(s):		Language Objective(s):
Students will use place-value models to show numbers up to 1,000. <i>I can use models to show numbers to 1,000.</i>		Students will say numbers with hundreds tens and ones. <i>I can say numbers with hundreds tens and ones.</i>
Essential Understanding: Numbers can be used to tell how many. Our number system is based on groups of ten. Whenever we get 10 in one place value, we move to the next greater place value.		Required Academic Vocabulary for Word Wall: Listen: thousand Read: Write: Speak: Sentence Frame:
Materials: <ul style="list-style-type: none"> Index Cards Place-Value blocks (or teaching tool 17) Whiteboards, Markers, Erasers Counting Hundreds, Tens, and Ones (page 301) Guided Practice (page 302) 		Additional Lesson Vocabulary: hundreds
Lesson:		Instructional Time: 30 minutes
Opening: (4 minutes) <ul style="list-style-type: none"> Write 3 on the board. Students will start on the carpet. Have tens rods available to demonstrate. T: “You have learned how to show hundreds with models. Today, you will learn how to show hundreds, tens, and ones with models.” T: “Show me with your fingers what number is on the board.” <i>S: will show 3.</i> T: “Here is a tens rod. Can I show 3 with this?” <i>S: will say, “no.”</i> T: “Why? Tell your neighbor.” <i>S: will turn to their neighbor and say, “because there are only 3 ones.”</i> T: There are only 3 ones in the number 3. There are not any tens.” <ul style="list-style-type: none"> Write 32 on the board. T: “Look at the new number on the board. Can I use tens rods to show this number? Thumbs up or down.” <i>S: will show thumbs up.</i> T: “You are right I can use the tens rods. I need 3 of them (hold up 3 tens rods). 1,2,3 or 10,20,30. Do I need to use anything else to show this number?” <i>S: will respond, “yes, cubes.”</i> T: “Yes, I need 2 unit cubes. Now I have 32.” T: “You see, the 32 has a number in the tens place and the ones place so it is made up of tens and ones.”		
Introduction to New Material (Direct Instruction): (8 minutes) <ul style="list-style-type: none"> Distribute Place-Value mats to each student or whiteboards markers and eraser they can draw place-value on. Write 245 on the board. Draw a place-value mat on the board. T: “Look at the board. I have drawn a rectangle with three squares in it. There is the square for the ones on the right. The square for the tens in the middle and the square for the hundreds on the left. I need you to draw that on your whiteboards.” <i>S: will draw a place-value mat on their boards.</i> T: “Show me your boards.” <ul style="list-style-type: none"> Teacher will check the boards to make sure the students drew the place-value mat correctly. T: “Good job! Now look at the number on the board, 245. Let me show the blocks that go with the number.” <ul style="list-style-type: none"> Hold up place-value blocks – 2 hundreds, 4 tens rods and 5 cubes. T: “How many hundreds do I have?” <i>S: will say, “you have 2 hundreds.”</i>		

T: "You are right, so I will write 2 in the left square or hundreds place. You do the same."

S: will write 2 in the hundreds place.

T: "How many tens do I have? Show me with your fingers."

S: will show 4 fingers.

T: "You are right, I have 4 tens. I will write that in the middle square or 10s place. You do the same."

S: will write 4 in the tens place.

T: "Lastly, how many ones do I have? Tell your neighbor."

S: will tell their neighbor, "5."

T: "How many ones do I have?"

S: will respond, "5."

T: "You are right, I have 5 ones. I will write that in the right square or ones place. You do the same."

S: will write 5 in the ones place.

T: "Show me your boards."

- Teacher will check the student boards to make sure they wrote 245 correctly in the place-value mat.

T: "Tell your neighbor the number we made."

S: will tell their neighbor, "we made the number 245."

T: "Let's say the number that we made together. 245."

Guided Practice: (10 minutes)

Using the Modeling Cycle:

Teacher Does:

T: "Now I need you guys to practice. I am going to tell you 3 digits in a number. I will write those digit on the board, but they won't be in the right order. You will need to listen and put the numbers in the right order on your paper to find the secret number."

T: "I will pass out your papers and you need to take it and quickly go to your desk."

- Teacher will pass out Counting hundred, tens, and ones (page 301) to the students.

S: will collect their papers and begin the activity.

All Students Do:

T: "The first number has these three digits – a 5, a 3 and a 8. I will write those numbers on the board. 5, 3, 8."

T: "The secret number has 8 tens. You need to write 8 on your paper in the right place."

S: will write 8.

T: "The secret number has 3 ones. You need to write 3 on your paper in the right place."

S: will write 3.

T: "The secret number has 5 hundreds. You need to write 5 on your paper in the right place."

S: will write 5.

T: "What is the secret number? Tell your neighbor."

S: will tell their neighbor the secret number, "5 hundred eighty three."

T: "Let's say it together. Five hundred eighty three. Show me your papers so I can check to see if you wrote it correctly."

S: will hold up their papers so the teacher can check them quickly.

- Repeat this activity at least 3 more times.

T: "Good job, I need you to turn in your papers and come sit on the carpet."

S: will turn in their papers and sit on the carpet.

Independent Practice: (5 minutes)

T: "Now, I need you to work on your own. We will do the first one together, and then you will do the last 3 by yourself."

T: "The guided practice problems will give you a model using hundred blocks, tens rods, and unit cubes. You will need to look at the model and figure out what the number is. I will draw the first model on the board."

- Teacher will draw 7 tens rods on the board.

T: "I will also draw a place-value mat on the board."

- Teacher will draw a place-value mat on the board.

T: "How many tens rods do we have? Show me with your fingers."

S: will show 7.

T: "yes, we have 7 tens rods. Will someone please come up and write that number in the place-value mat?"

- Teacher will chose a student.

S: will write a 7 in the tens place and a 0 in the ones place.

T: "Thank you. How many tens are there?"

S: will respond, "7."

T: "How many ones are there?"

S: will respond, "0."

T: "Correct. So, what is our number?"

S: will respond, "70."

T: "Very good, now I will pass out your guided practice papers. You need to complete questions 2,3, and 4 at your desks. You will have 3 minutes."

- Teacher will pass out the papers.

S: will go to their desks and get to work.

- Teacher will walk around helping students as necessary.

T: "10,9,8,7,6,5,4,3,2,1. Time is up. Turn in your papers, and come sit on the carpet."

S: will turn in their papers and sit on the carpet.

Closing: (3 minutes)

- Pass out whiteboards, erasers and markers.

T: "One more problem for the day. I will ready you a story problem and you will need to write the answer on your white board. But, before I read the story problem I need you to write a place-value chart on your board. I will write one on mine as well."

S: will write a place-value chart on their boards.

T: "Hold up your boards so I can check them."

S: will hold up their boards with the place-value chart written on them.

T: "Good, let's begin. A number has been an 8 in the hundreds place (give the students time to write 8 in the hundreds place). It does not have any tens (give the students time to write 0 in the tens place). It has a 3 in the ones place (give the students time to write 3 in the ones place). What is the number? Tell you neighbor."

S: will tell their neighbor, "the number is 803."

T: "Let's say the number together. Eight hundred three."

T: "Good job today. Erase your boards and put everything away."

Assessment:

Guided Practice