



## MGSE2.NBT.2 Video Transcript

00:01

[Opening Music]

00:11

This video will deconstruct the Georgia Standards of Excellence 2.NBT.2 which states that students will count within 1,000 and skip count by 5's, 10's, and 100's.

00:28

The expectations with 2.NBT.2 include being able to count forward and backward within 1,000 while also skip counting by 10's, 100's, and 5's by multiples as well as non-multiples. Students will also determine if a specific number will be stated when skip counting by a given interval and starting point.

00:52

The learning progression for 2.NBT.2 begins in kindergarten as students count to 100 by ones and tens. They also count forward from a given number other than 1. First graders then continue the progression by counting within 120 while mentally finding 10 more or 10 less than any number without having to count.

01:16

The IKAN assessment, which is a counting interview, that is included in the Ga Numeracy Project Resources, is an excellent tool for assessing counting and early numeracy. During the interview, students count forward and backwards within specific spans while also stating what number comes before and after a specific number. This assessment provides a good starting point by identifying strengths and weaknesses when counting within 1,000.

01:43

Counting Collections is another great formative assessment tool that allows students to model and show their thinking as they count groups of objects.

Students make estimates about how many objects that they think they have and decide how they can group the objects to count and record more efficiently. As students engage in the activity throughout the year and across grade levels, they begin to utilize concepts of operations to more efficiently count collections.

**02:07 (Video)**

**Teacher: How many tens did you have?**

**Student:** We had... (looking at cups, then counting) 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17.

**Teacher:** Did you have any left overs?

**Student:** No.

**Teacher:** You had exactly tens?

**02:31 (Video)**

**Teacher:** How many tens did you have? How many groups of ten?

**Student 1:** 160.

**Teacher:** You had 116?

**Student 1:** 160

**Teacher:** 160. Do you have any ones left over?

**Student 2:** Yes.

**Teacher:** How many groups of ten did you have?

**Student:** 15... 16...

**Teacher:** Let's count.

**Teacher and students:** 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16. So, what does 16 tens make?

**Students:** Umm...

**Teacher:** Do you want to count by tens?

**Student 1:** 100?

**Teacher:** Let's count by tens.

**Students:** 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 101.

**Teacher (begins to count with students):** ...110, 120, 130, 140, 150, 160... Now let's add in these extras.

**Students (with teacher support):** 161, 162, 163, 164, 165, 166, 167, 168.

**Teacher:** So, you have 16 tens and 8 ones.

**Student from another group at the table:** We got more than them. We got 170.

**Teacher:** You got 170? But, very close!

**03:58 (Video)**

**Teacher:** How many tens are you having to draw.

**Student:** 17.

**Teacher:** What does 17 tens make?

**Student:** It makes 170.

**Teacher:** 170.

04:10

100's charts provide a great visual as students skip count by 5's, 10's, and 100's. Students begin to see place value patterns which helps determine whether a specific number will be stated when skip counting by a given interval.

**04:25 (Video)**

**Teacher:** So, the frog is at number 7. If he hops by 5s, what is the next number he's going to hop onto?

**Student:** 12.

**Teacher:** Ok, can you move him to 12? [Student moves frog to 12.]

**Teacher:** He goes from 7 to 12. What if he hops by 5 again?

**Students (thinking):** 17.

**Teacher:** 17. What if he hops by 5 again?

**Student:** 22.

**Teacher:** 22... And then what if he hops by 5 again?

**Student:** 27.

**Teacher:** 27. So, what numbers has he hopped on so far? He started on 7, then went to...

**Students with teacher:** 12, 17, 22, 27.

**Teacher:** Did you see a pattern? Do you notice a pattern happening?

**Student (thinking for several seconds):** Oh! Ooh, these [pointing to the 7 column on the hundred chart].

**Teacher:** Yes.

**Teacher:** So if he hops by fives, [points to 82 on the chart] will he end up on 82?

**Student:** Yes.

**Teacher:** How do you know?

**Student:** Because the order is... Every time when he hops 5, he gets on 2 and every time when he hops another 5, he gets on...

**Teacher:** What do you all think?

**Student:** Seven.

**Teacher:** Seven. Where is it (the two and seven) in the ones place or the tens place?

**Student:** The ones.

**Teacher:** The ones place.

06:07

Choral Counting is another classroom routine that can lead to discussions and observations about patterns that occur when skip counting forwards and backwards. As students count by given increments, the teacher guides the discussion to include "what do you notice" and "what do you wonder."

06:21 (Video)

Students [counting chorally]: 73, 83, 93.

Teacher: Do you notice any patterns as we're counting?

Student: Yeah. They all have threes.

Teacher: They all have three in the...

Students and teacher: Ones place. Do you notice anything happening here [pointing to the tens place]?

Student: It's a zero, then 1, 2, 3, 4, 5, 6, 7, 8, 9.

Teacher: So the tens are going up by one group of ten each time. So, what comes after 93?

Students: 103!

6:53 (Video)

Teacher [writes 103 on chart paper]: 103.

Students [counting corally from 103 by tens]: 113, 123, 133, 143, 153, 163, 173, 183, 193.

Teacher: Ok, what do you notice from this column to this column [the first column to the second column]?

Student: A one was added before each number.

Teacher: How much bigger is this number [113] than this one [13]? When we go this way [draws arrow pointing from 13 to 113]?

Student: We added an extra one.

Teacher: We added an extra one. What does that one mean, though?

Student: I noticed a pattern with [pointing to tens place in each number of the pattern] 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19.

Teacher: So, she sees that same pattern of numbers in this column [the second column]. And somebody else said we had we had an extra digit. What place value does this digit have?

Student: The hundreds.

Teacher [Going back to the original question]: So how much bigger is this number [113] that this number [13]?

Teacher: What do you think?

Student: It has one more extra hundred?

Teacher: It has a hundred? Does this number [13] have any hundreds?

Students: No!

Teacher: Does this number [113] have a hundred?

Students: Yes!

Teacher: Yes, it has one hundred. So what comes after 193 when we count by tens? What do you think?

Student: 203.

8:04

Teacher: 203. Ok, so let's keep counting and start this row. 203...

Students [count corrally to 293]: 293.

Teacher: Ok. Do the same patterns continue?

Students: Mixed responses [Yes/No].

Teacher: So, what happens when we go from this row [second column] to this row [third column]?

Teacher: How much did it grow? What do you think?

Student: Another hundred.

Teacher: Another hundred.

Teacher [pointing to each column as she speaks]: So, we grew a hundred, we grew another hundred... So, what would happen here? What number do you think that would be?

Student: 1,000.

Teacher: You think it's 1,000. What number do you think it would be?

Student: 300.

Teacher: 300?

Student: 303.

Teacher: 303? [pointing to the row]

Several Students: 313!

Teacher: 313. How do I know that? What do you think?

Student: Because you got 13, then 113, then 213 and go to 313.

8:55

It is important for 2<sup>nd</sup> grade students to engage in skip counting games and tasks throughout the year so that they develop a deeper understanding of number patterns and relationships.

In the upcoming video clips, students strive to sequence numbers on a game board by skip counting forward and backward. Once a number is placed, their partner can either agree or disagree and move a card that has already been placed.

09:19 (Video)

Student 1: I'll change this [700].

Teacher: And why are you changing it?

Student 1: Because if it's 700 here, that would be 10. But if I move it here, that would be 705 and that would be 710.

Teacher: Ok.

Student 1: [places 710 card on game board]

Teacher: Where do you think 695 goes?

Student 2: If we're counting by 5s?

**Teacher:** Yes. If we're counting by 5s, where would 695 go? Where do you think. You can place it where you think it might go.

**Student 2** [Places 695 card in the space before 600].

**Teacher:** Ok.

**Teacher [to Student 1]:** So you can change hers or pick a new card.

**Student 1** [Picks a new card].

**Teacher:** Where do you think 590 would go?

**Teacher:** Do we need to change anything on the board, or are we in the correct order?

**Student 1:** Oh! [Places 590 in the correct spot on the board]

**Teacher [To student 2]:** Do you see anything we need to change?

**Student 2:** This needs to change.

**Teacher:** Where would 695 go?

**Student 2** [tries to place 695 after 590].

**Teacher:** So we have 590... 595...

**Student 1:** Oh, I know where it goes.

**Teacher:** Ok, it's your turn, where do you think it will go?

**Student 1:** [moves 695 right before 700]

**Teacher:** And how do you know it goes there?

**Student 1:** Because we're counting by 5s and another 5 would change the hundred to seven hundred.

10:51

In this next task, students must determine the skip counting pattern used in each row. As the video shows, skip counting forward and backward when crossing hundreds can often be a challenge. Using concrete, base ten models can help solidify the concept.

**11:08 (Video)**

**Teacher:** So, we have 76, 86, 96... If we have 9 tens [96], what's one more group of tens?

**Student:** 100.

**Teacher:** 100, so... or ten tens. So we have 11 tens [pointing to the paper]. What would come next?

**Student:** 100...

**Teacher:** One-hundred, what?

**Student:** 111?

**Teacher:** Can you count on from 96 ten times?

**Student [with teacher support]:** 97, 98, 99, 100, 101, 102, 103, 104, 105, 106. So, 106. We have ten tens [Student also writes 116 to continue the pattern] and now we have 11.

**11:56 (Video)**

**Teacher:** Let's count up... Can you count up from 792 ten times.... What do you think? What do you think it is?

**Student:** 799.

**Teacher:** Is it 799? With 799, does our same pattern of the twos keep in place? 792 and add ten more.

**Student:** 802.

**Teacher:** 802. That's right.

12:27

For additional tasks and resources, please visit Unit 1 in the 2<sup>nd</sup> grade framework units. The tasks "Where Am I on a Number Line" as well as "Number Hop" specifically focus on skip counting activities.

12:41

Also check out the professional learning video on 2.MD.8 that discusses how skip counting can be used in context with money.

12:50

[Closing Music]