

Count 10 Objects Within Counts of 10 to 20 Objects

Lesson by Great Minds, as featured on EngageNY,
annotation by Student Achievement Partners

GRADE LEVEL Kindergarten

IN THE STANDARDS K.NBT.A.1, K.CC.A.1 (K.CC.A.2, K.CC.B.4, K.CC.B.5)

WHAT WE LIKE ABOUT THIS SET OF LESSONS:




Mathematically:

- Allows students to be visualizing the teen numbers as ten ones and some further ones (K.NBT.A.1)
- Gives students opportunities to practice “counting on” in a quick and efficient way during fluency practice (K.CC.A.2)
- Lays the foundations for students to reason abstractly and quantitatively about teen numbers (MP.2)

In the classroom:

- Uses multiple concrete representations and visual models to make the mathematics explicit
- Allows for whole group, partner, and individual work in one lesson
- Prompts students to share their developing thinking and understanding (Student Debrief and throughout lessons)
- Provides opportunities and suggestions for differentiation
- Gives formal and informal opportunities for teachers to check for understanding

MAKING THE SHIFTS¹

	Focus	Belongs to the major work ² of kindergarten
	Coherence	Lays the foundation for place value work in first grade (1.NBT.B.2)
	Rigor ³	Conceptual Understanding: primary in this lesson (K.NBT.A.1) Procedural Skill and Fluency: secondary in this lesson (K.CC.A.1) Application: not addressed in this lesson

¹ For more information read [Shifts for Mathematics](#).

² For more information, see [Focus in Kindergarten](#).

³ Lessons may target one or more aspect(s) of rigor.

ADDITIONAL THOUGHTS

It's important to note that this sample lesson is just one of a 14-lesson unit called **Numbers 10–20; Count to 100 by Ones and Tens**. It is not intended for students to meet the full expectations of the grade-level standards addressed in these lessons through only this selected lesson. These sample lessons lay a strong foundation for the work that is to come in the unit. In the subsequent lessons, students begin to connect this knowledge (of ten ones and some further ones) to the teen numbers and writing those numerals.

The structure of these lessons and the unit/curriculum overall have some interesting aspects to highlight. The units make explicit the coherence within the fully developed curriculum. Each topic (a set of lessons) is connected to prior learning and also points to the next lesson that follows in the learning progression. Within individual lessons, there are a number of components that add to their strength including daily fluency practice, variety in questioning techniques, and daily opportunities for students to debrief about their learning.



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GRADE K • MODULE 5

Numbers 10–20; Count to 100 by Ones and Tens

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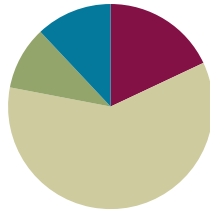
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Lesson 2:

Count 10 Objects Within Counts of 10 to 20 Objects

Suggested Lesson Structure

■ Fluency Practice	(9 minutes)
■ Application Problem	(5 minutes)
■ Concept Development	(30 minutes)
■ Student Debrief	(6 minutes)
Total Time	(50 minutes)



Fluency Practice (9 minutes)

- How Many is One More **K.CC.2** (3 minutes)
- Show One More on Fingers **K.CC.2** (3 minutes)
- Count Piles of Ten **K.CC.2, K.CC.4** (3 minutes)

How Many is One More (3 minutes)

Materials: (T/S) 10-frame cards (large teacher set and smaller sets per pair of students)

- T: (Show 3.) How many dots?
 S: 3.
 T: What's one more than 3?
 S: 4 is one more than 3.

Continue with the following possible sequence: 1, 4, 2, 4, 5, 6, 7, 9, 5, 8, 7. Eliminate asking them to identify the base number as quickly as possible. Students then continue this activity with each other in pairs.

Show One More on Fingers (3 minutes)

Materials: (T) Rekenrek

- T: (Show 5 beads.) Count the number of beads.
 S: 1, 2, 3, 4, 5.
 T: Count one more on your fingers left to right.
 S: (Students hover hands as if playing the piano. They drop a finger or "play a note" starting with the left pinky.) 1, 2, 3, 4, 5, 6.

Continue with the following possible sequence: 6, 4, 7, 9, 8, 7, 6.



NOTES ON SCAFFOLDING STUDENTS ABOVE GRADE LEVEL:

Deepen student understanding through application. Ask students to explain strategies for identifying "one more." Then have them apply their strategies through practice with a partner.

Ask students:

- Could you use the same strategy for solving "two more" and "three more"?

Count Piles of Ten (3 minutes)

Materials: (S) About 40 straws for each pair of students

Have students see how many piles of 10 straws they can count.

Application Problem (5 minutes)

Lisa counted some sticks into one pile of 10. She counted 5 other sticks into another pile. Draw a picture to show Lisa's piles of sticks.

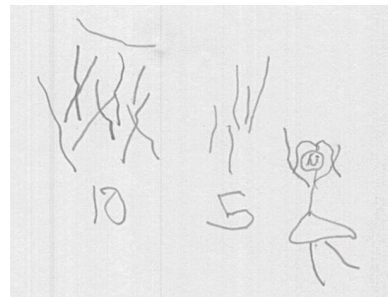
Note to the teacher: For now, just focus on the pile of 10 sticks and the pile of 5 rather than composing the teen number.

(Bonus: Have early finishers draw Lisa's piles on another day when she made one pile of 10 sticks and one pile of 8 sticks!)



NOTES ON SCAFFOLDING STUDENTS BELOW GRADE LEVEL:

Access prior knowledge. Remind students of what a ten looks like by providing empty 10-frames. Students might then draw sets of ten sticks in the 10-frames.



Concept Development (30 minutes)

Materials: (S) 1 egg carton cut to have 10 compartments for each pair of students, 10 bags with different items in each (suggestions to the right)

- T: Count to find out how many slots there are in your egg carton. Wait for the signal to tell me.
- S: (Pause. When all are ready, give the signal.) 10!
- T: Each team will count the objects in ten bags. To count the objects in your bag, start by placing the objects in the egg carton, then put any extra objects next to the carton.
- T: Tell your partner, "I have 10 ones and ____ ones."
- T: We'll do one together first. (Demonstrate.)

Bag Contents:

- 18 clothes pins
- 20 pasta shells
- 13 beads
- 16 pennies
- 11 pencils
- 10 erasers
- 14 linker cubes
- 12 walnuts in the shell
- 10 play dollars
- 15 counting chips

Have pairs of students count out the given teen number, decomposing it as 10 ones and some more ones. After counting the objects, have pairs trade bags and count the new objects.

- T: (Once the students have counted all 10 bags.) Let's see what you discovered! Count the clothes pins with me.
- S: (As you show each one using the egg carton.) 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18.
- T: How many clothes pins are there?
- S: 18!

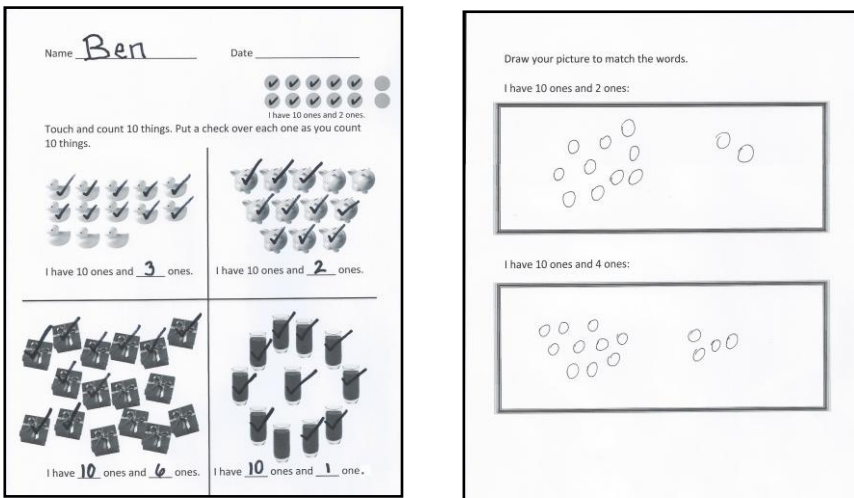
T: “10 ones and ___ ones?” Let’s complete this sentence.
 S: 18 is 10 ones and 8 ones.
 T: Yes!

Have students in pairs count then decompose the other quantities in the other bags using their egg cartons, allowing them to recognize and internalize the structure of teen numbers as 10 ones and some more ones. Continue to encourage statements followig the pattern “12 is 10 ones and 2 ones.”

Activity Worksheet (8 minutes)

Distribute worksheets to students.

Note: Students use the method of checking off one object each time they count. This is an easier strategy than circling 10 items which will be part of the next lesson.



Student Debrief (6 minutes)

The following is a suggested list of questions to invite reflection and active processing of the total lesson experience. Use those that resonate for you as you consider what will best support your students’ ability to articulate the focus of the lesson.

Have the students bring their worksheet to the carpet and work with a partner to check their count of 10 ones and some more ones. Have them say the teen number as 10 ones and some more ones.

S: There are 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13 ducks.
 S: 13 is 10 ones and 3 ones.



NOTES ON SCAFFOLDING ELLS:

For students with developing language skills, review academic vocabulary. Before beginning student sharing during the Debrief, count to 20 with the Slavonic abacus to practice pronouncing numbers.

Ask students to look at the picture of the ducks.

- Is it easy to see ten ones in this picture? Why?
- How is this picture the same and different from counting using the egg carton?
- Which was easier to count, the ducks or the glasses of juice? Why? Show your friend how you counted the glasses of juice.
- Does your drawing of 10 ones and 2 ones look exactly the same as your friends? How is it the same? How is it different?
- Write the number 17 on the board. Can someone come up and draw 17 squares on the board?
- Can someone come up and circle 10? Fill in this sentence for me: 17 is 10 ones and ____ ones.
- 14 is 10 ones and ____ ones. Fourteen is a teen number. What is another teen number?
- Eleven and twelve don't have "teen" but most grown-ups call them teen numbers. What have you noticed today about teen numbers?

MP.7

Exit Ticket

After the Student Debrief, instruct students to complete the Exit Ticket. A quick review of their work will help you assess the students' understanding of the concepts that were presented in the lesson today. Students have two minutes to complete the Exit Ticket. You may read the questions aloud to the students.

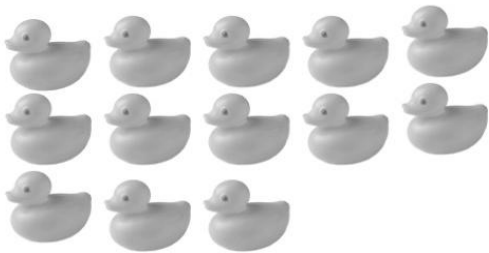
Name _____

Date _____



I have 10 ones and 2 ones.

Touch and count 10 things. Put a check over each one as you count 10 things.



I have 10 ones and _____ ones.



I have 10 ones and _____ ones.



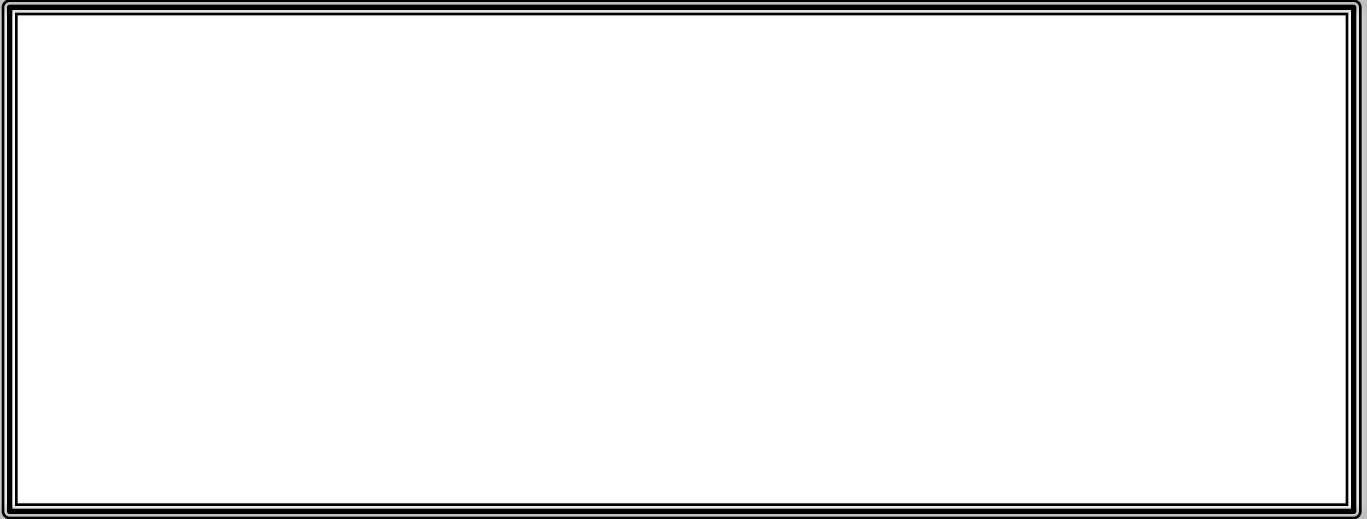
I have _____ ones and _____ ones.



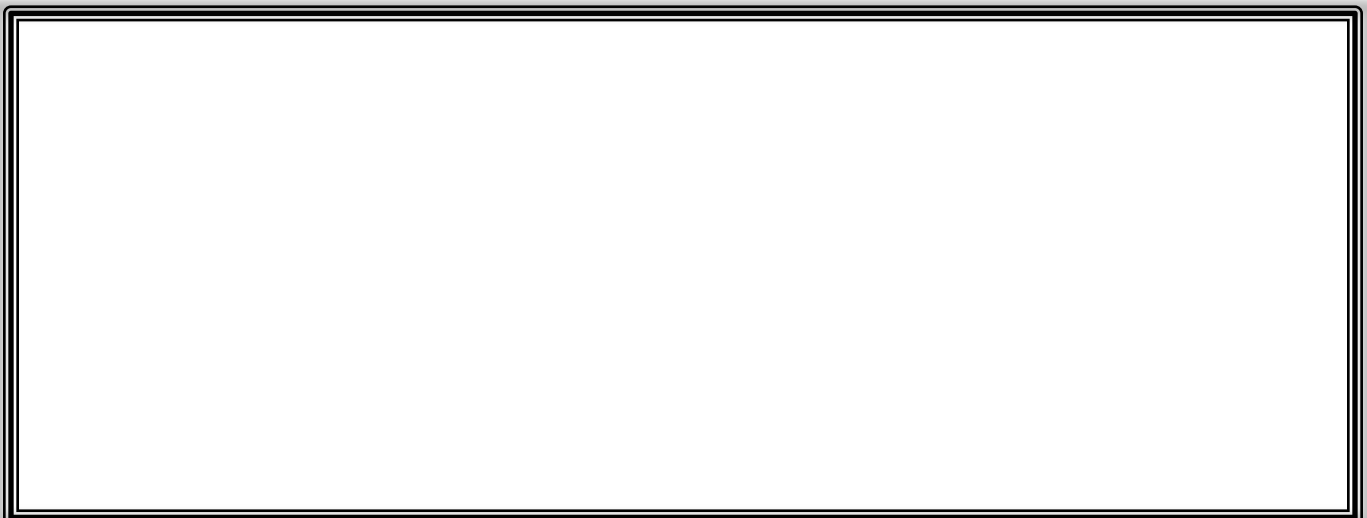
I have _____ ones and _____ ones.

Draw pictures to match the words.

I have 10 small circles and 2 small circles:

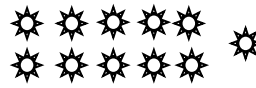


I have 10 ones and 4 ones:



Name _____

Date _____



10 ones and 3 ones

10 ones and 1 one

Circle the correct numbers that describe the pictures.



10 ones and 3 ones



10 ones and 7 ones



10 ones and 8 ones



10 ones and 5 ones



10 ones and 10 ones



10 ones and 8 ones



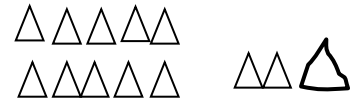
10 ones and 4 ones



10 ones and 2 ones

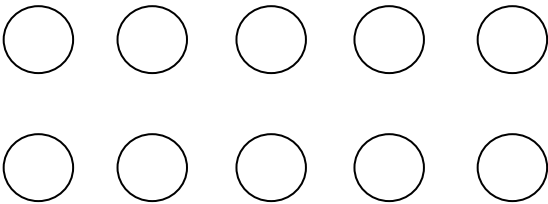
Name _____

Date _____

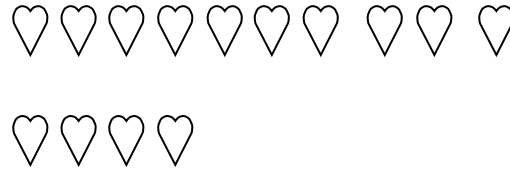


10 ones and 3 ones

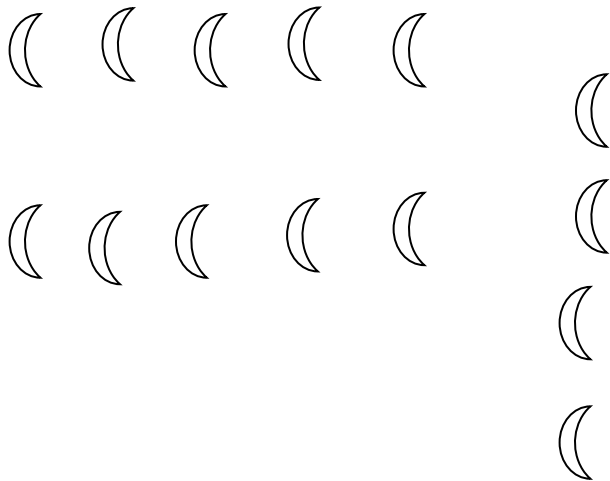
Draw more to show the number.



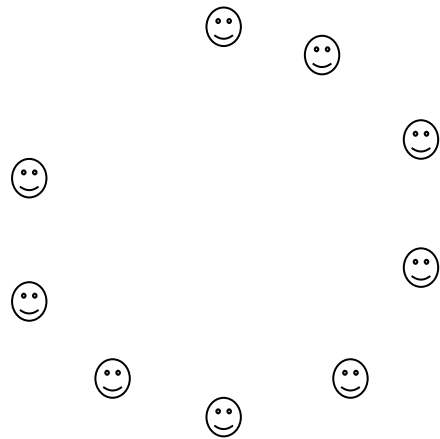
10 ones and 2 ones



10 ones and 5 ones



10 ones and 7 ones



10 ones and 4 ones