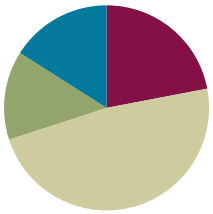
Lesson 15

Objective: Count up and down by tens to 100 with Say Ten and regular counting.

Suggested Lesson Structure

Fluency Practice	(11 minutes)
Application Problem	(7 minutes)
Concept Development	(24 minutes)
Student Debrief	(8 minutes)
Total Time	**(50 minutes)**



A NOTE ON STANDARDS ALIGNMENT:

In this lesson, students write multiples of 10 through 100, which bridges Kindergarten content of writing numbers to 20 (**K.CC.3**) to Grade 1 content of writing numbers to 120 (**1.NBT.1**).

Fluency Practice (11 minutes)

- Write Teen Numbers with Circular Configurations **K.CC.3** (3 minutes)
- Teen Circular-Counting **K.CC.5** (5 minutes)
- Hide Zero for Teen Numbers **K.NBT.1** (3 minutes)

Write Teen Numbers with Circular Configurations (3 minutes)

Materials: (T) Pre-drawn circular configurations (S) Personal white board

Note: Now that counting teen numbers in circular configurations has been introduced, the goal is to develop accuracy. Encourage students to select a starting point they can remember, so they know when to stop.

T: (Project 13 stars in a circular configuration.) On your personal white board, write the number of stars that you see.
S: (Students write 13.)
T: Say the number the Say Ten way.
S: Ten 3.
T: Say the number the regular way.
S: 13.

Repeat the process for 3 or 4 other teen numbers.

Teen Circular-Counting (5 minutes)

Materials: (S) Teen circular-counting (Fluency Template)

Note: This activity is a step up in complexity from the previous one, because counting out a set is more difficult than counting an existing set. Whisper counting and marking the starting point facilitates accuracy in counting teen numbers in a circular configuration.

After distributing teen circular-counting, have students say each number the regular way and the Say Ten way. Then, have students whisper count as they draw more shapes to match the number indicated.

Hide Zero for Teen Numbers (3 minutes)

Materials: (T) Large Hide Zero cards (Lesson 6 Template 1)

Note: This activity reinforces the grade level standard requiring students to understand that teen numbers are composed of ten ones and some additional ones.

T: (Place the 7 card on the 10 card to show 17.) Say the number.
S: 17.
T: Say the number the Say Ten way.
S: Ten 7.

Break apart the cards into 10 and 7.

Repeat this process for additional teen numbers.

NOTES ON MULTIPLE MEANS OF ENGAGEMENT:

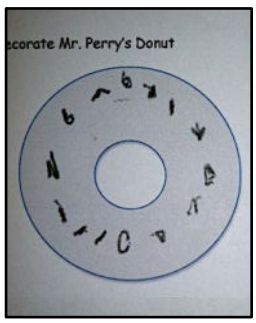
Scaffold the Application Problem for English language learners by giving them sentence starters to help them express how they tackled the challenge. For example, "I put ____ dots of chocolate on the donut."

Application Problem (7 minutes)

Materials: (S) Donuts (Template 1), 14 cubes

Mr. Perry is decorating donuts. He puts 14 little dots of chocolate in rows. Show him an idea about how to put the 14 dots in a circle on his donut. Use the cubes first, and then draw the chocolate dots on his donut. Show the total number of dots of chocolate with a number bond and the Hide Zero cards.

Note: This problem serves as an opportunity for students to apply their recent work with organizing and counting objects in linear and circular configurations. Using Hide Zero cards supports the understanding of 14 as ten ones and 4 ones.



Concept Development (24 minutes)

Materials: (T) 100-bead Rekenrek (S) Set of 10 small 10-frame cards (Template 2)

T: (Invite students to the carpet, and display the Rekenrek.) Count the beads as I move them. (Slide each bead from right to left.)
S: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10.
T: How many beads are in this row?
S: 10.
T: (Point to the beads in the second row.) How many beads are in this row?
S: 10.
T: How can you tell there are ten beads?
S: I see 5 red beads and 5 white beads, and 5 and 5 is 10. → It looks just like the first row.
T: So, each row has how many beads?
S: 10.
T: Let's count all the beads. Should we count by ones or by tens? Which way is faster?
S: By tens!
T: Let's count by tens. (Slide each row from right to left as students count.)
S: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100.
T: Now, let's count back. (From the bottom, sliding each row from left to right.)
S: 100, 90, 80, 70, 60, 50, 40, 30, 20, 10.

NOTES ON MULTIPLE MEANS OF ACTION AND EXPRESSION:

Scaffold the lesson for students who are working below grade level by having them work in a small group with the Rekenrek. Lead them in counting the Say Ten way while they move the row of beads.

Have students return to their seats, and pass out ten 10-frame cards to each child.

T: Lay your 10-frame cards out at the top of your table.
T: Let's count them the Say Ten way.
S: Ten, 2 tens, 3 tens, 4 tens, 5 tens, 6 tens, 7 tens, 8 tens, 9 tens, 10 tens.
T: And now count them the regular way.
S: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100.
T: I will say a number the Say Ten way. Pull down that many cards in front of you.
T: 3 tens.
S: (Show 3 cards.)
T: Count up by tens, and tell me how many.
S: 10, 20, 30.
T: Use your finger and write 30 on your table.

NOTES ON MULTIPLE MEANS OF ENGAGEMENT:

Challenge students who are working above grade level by placing the ten card and two ones on the table. Have them count by tens starting with twelve (12, 22, 32, 42, 52, and so on).

T: Now, slide each card back to the top of your table, and count down by ten as you do so.
S: 30, 20, 10.
T: Here's a new number. 8 tens.
S: (Show eight cards.)
T: Count up by tens, and tell me how many.
S: 10, 20, 30, 40, 50, 60, 70, 80.
T: Use your finger and write 80 on the table.
T: Slide each card back, and count down by ten as you go.
S: 80, 70, 60, 50, 40, 30, 20, 10.

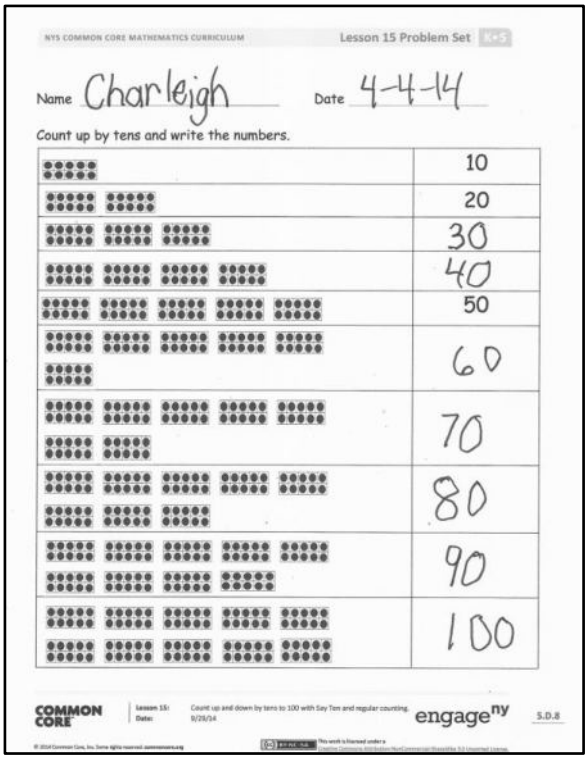
Repeat with the other tens.

Problem Set (6 minutes)

Students should do their personal best to complete the Problem Set within the allotted time.

Note: This Problem Set asks students to write numbers greater than 20, which is a Grade 1 standard (**1.NBT.1**). If students are not ready for this step, consider having them use numeral cards or simply tell the amount pictured.

After completing the Problem Set, have students fold after 50 to see and analyze the same "stairs" from Lesson 11 as one more ten is placed on each row as pictured to the right below. While students work, encourage them to count both in the regular way and the Say Ten way.


NYS COMMON CORE MATHEMATICS CURRICULUM Lesson 15 Problem Set K•5

Name Charleigh Date 4-4-14

Count up by tens and write the numbers.

●●●●●	10
●●●●● ●●●●●	20
●●●●● ●●●●● ●●●●●	30
●●●●● ●●●●● ●●●●● ●●●●●	40
●●●●● ●●●●● ●●●●● ●●●●● ●●●●●	50
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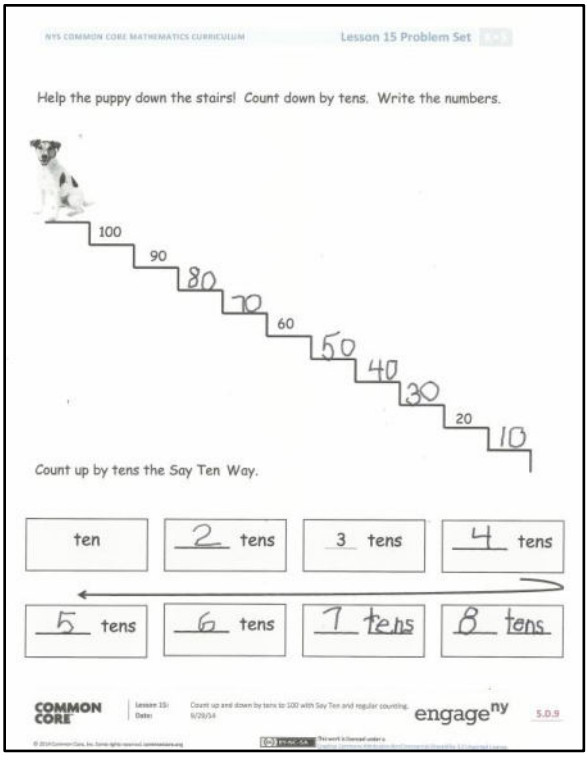
COMMON CORE Lesson 15: Date: Count up and down by tens to 100 with Say Ten and regular counting. engage^ny 5.D.8


NYS COMMON CORE MATHEMATICS CURRICULUM Lesson 15 Problem Set K•5

Help the puppy down the stairs! Count down by tens. Write the numbers.

100 90 80 70 60 50 40 30 20 10

Count up by tens the Say Ten Way.

ten	2 tens	3 tens	4 tens
5 tens	6 tens	7 tens	8 tens

COMMON CORE Lesson 15: Date: Count up and down by tens to 100 with Say Ten and regular counting. engage^ny 5.D.9

Student Debrief (8 minutes)

Lesson Objective: Count up and down by tens to 100 with Say Ten and regular counting.

The Student Debrief is intended to invite reflection and active processing of the total lesson experience.

Invite students to review their solutions for the Problem Set. They should check work by comparing answers with a partner before going over answers as a class, taking turns reading the numbers forward and back. Look for misconceptions or misunderstandings that can be addressed in the Student Debrief. Guide students in a conversation to debrief the Problem Set and process the lesson.

Any combination of the questions below may be used to lead the discussion.

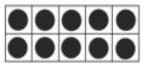
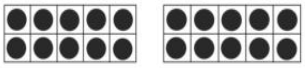
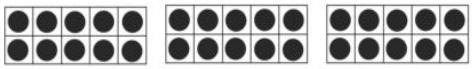
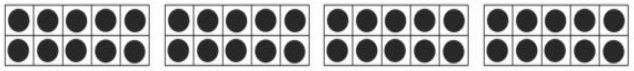
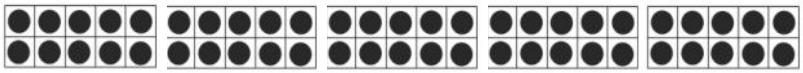
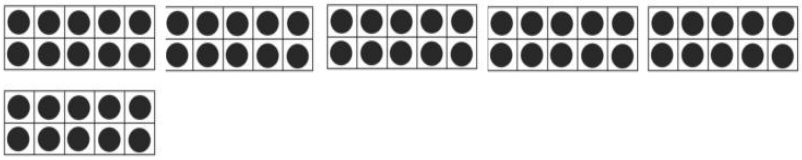
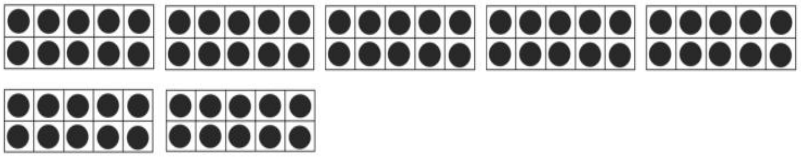
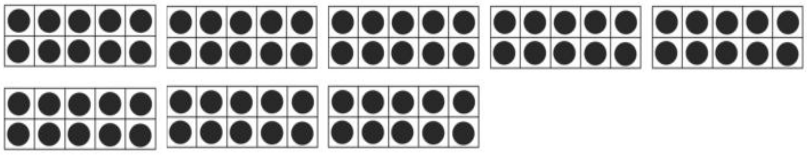
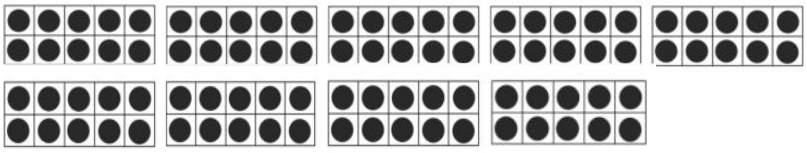
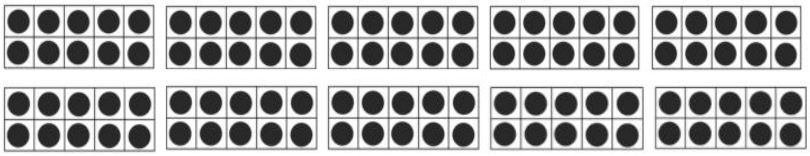
- How would the picture of the stairs be different if you were counting by ones?
- What kinds of things could we count by tens?
- Why is it helpful to count by tens?
- Practice more counting on the Rekenrek.

Exit Ticket (3 minutes)

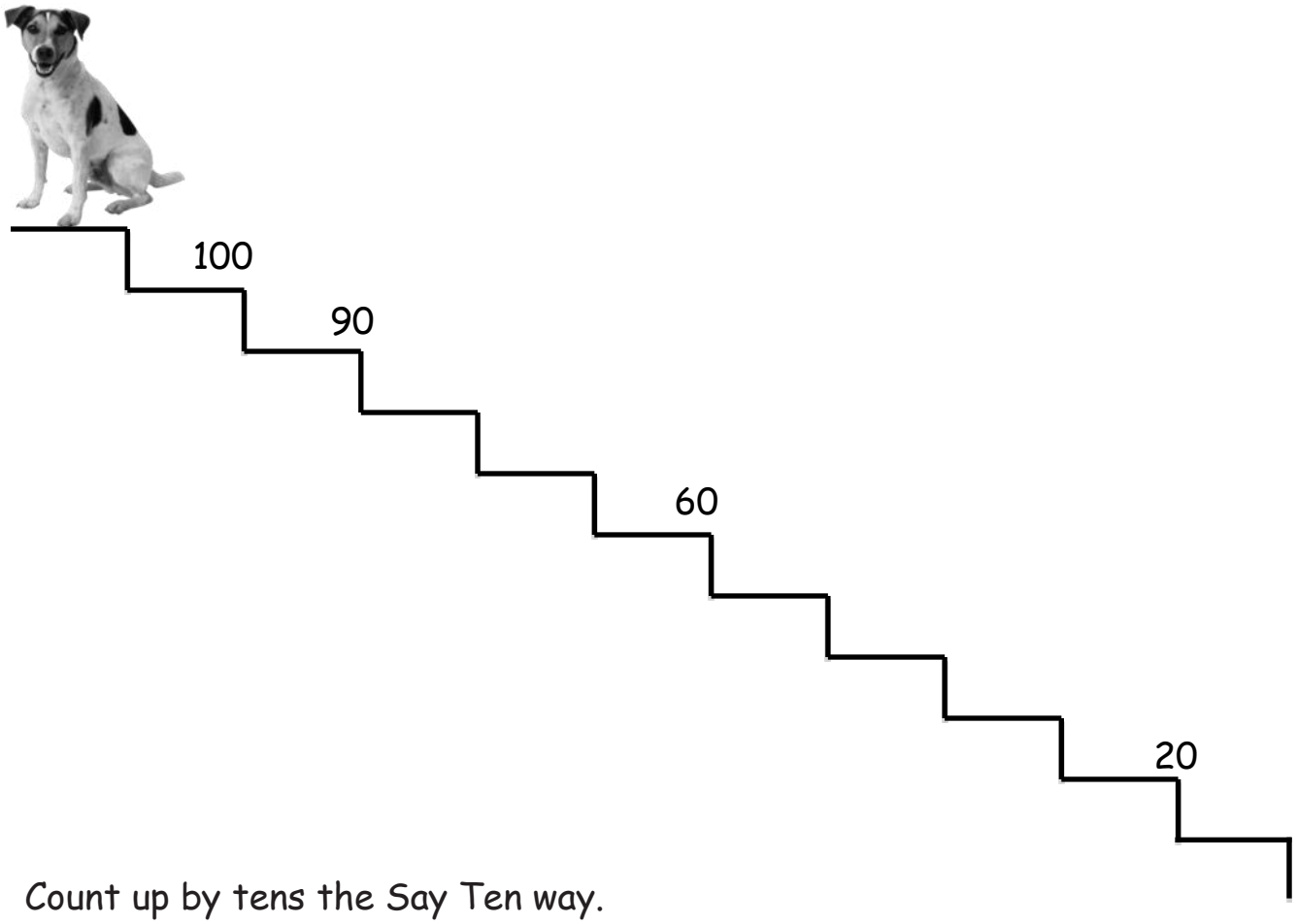
After the Student Debrief, instruct students to complete the Exit Ticket. A review of their work will help with assessing students' understanding of the concepts that were presented in today's lesson and planning more effectively for future lessons. The questions may be read aloud to the students.

Name _____ Date _____

Count up by tens, and write the numbers.

	10
	20
	
	
	50
	
	
	
	
	

Help the puppy down the stairs! Count down by tens. Write the numbers.

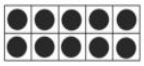
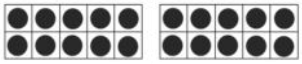
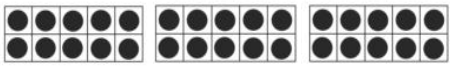
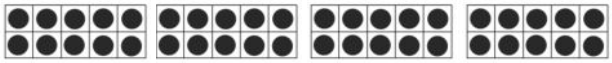
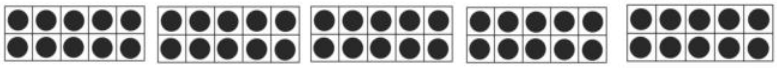
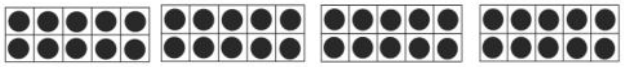
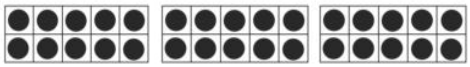
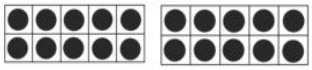
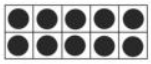


Count up by tens the Say Ten way.

ten	____ tens	3 tens	____ tens
____ tens	____ tens	____ ____	____ ____

Name _____ Date _____

Count up and down by 10. Write the numbers.

	10
	
	
	
	
	40
	
	
	

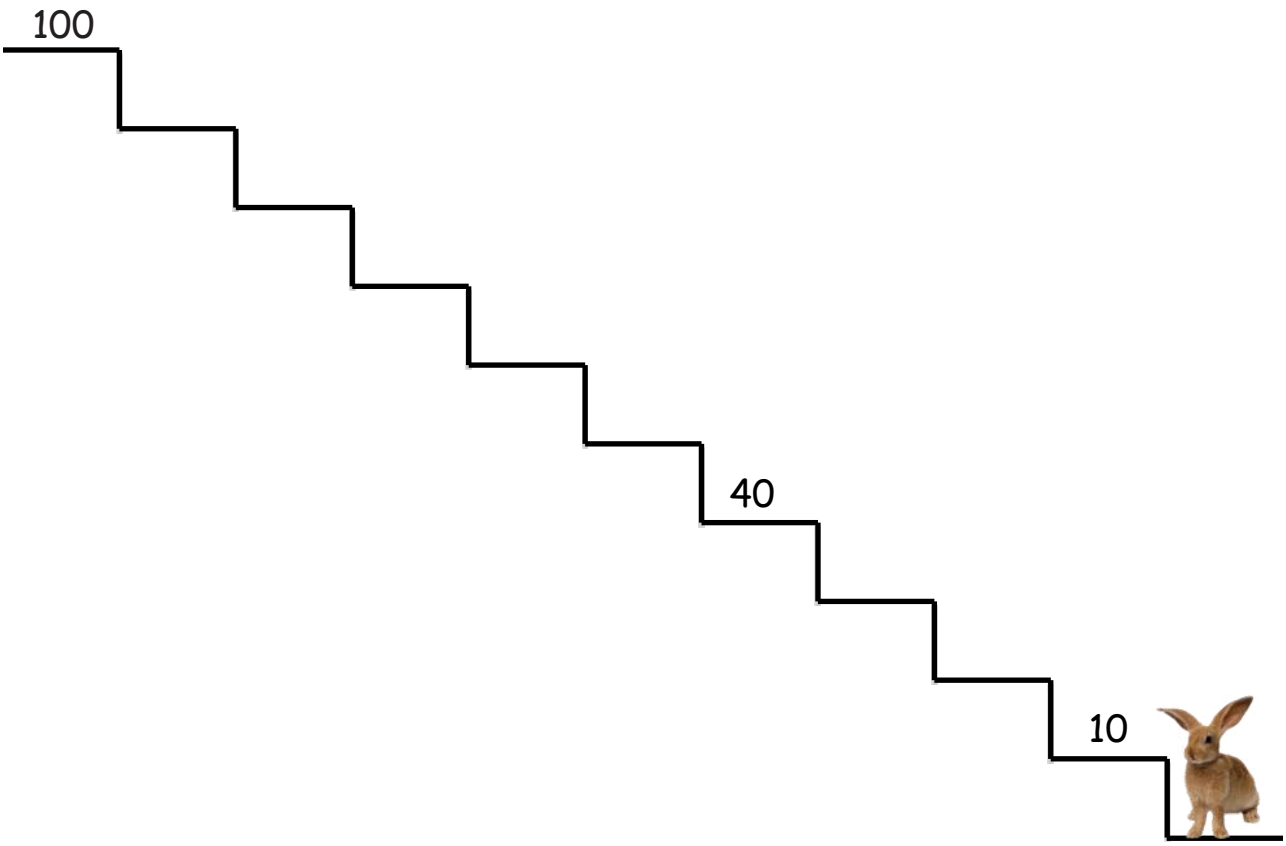
Count down and up by 10 the Say Ten way.

100	10	tens
90		tens
80		tens
70	7	tens
60		tens

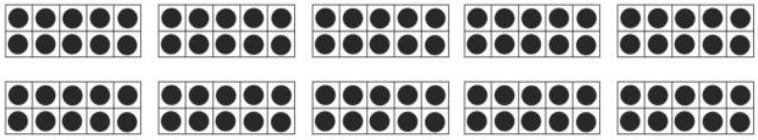
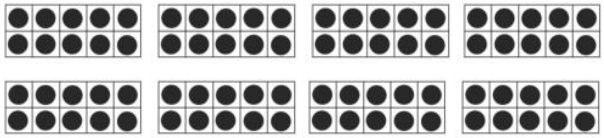
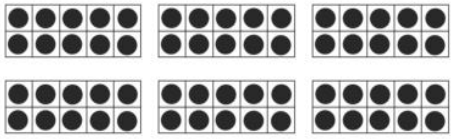
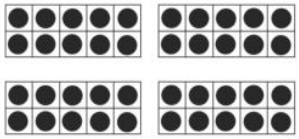
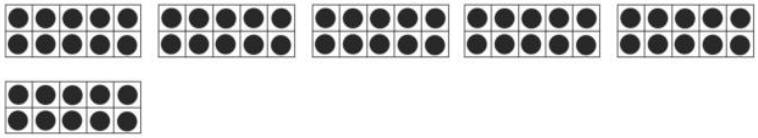
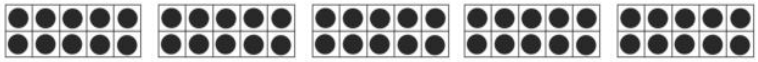
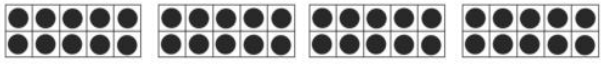
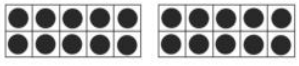
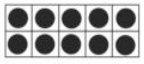
50		tens
40	4	tens
30		tens
20		tens
10	1	ten

Name _____ Date _____

Count down by 10, and write the number on top of each stair.



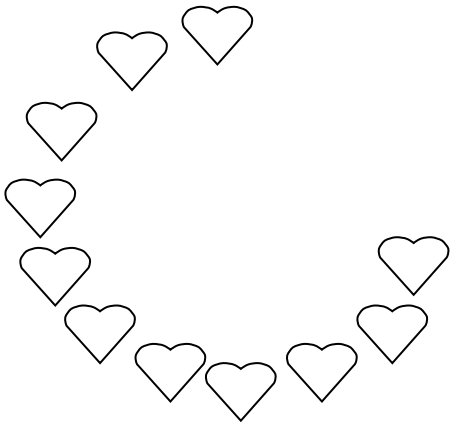
Count down the Say Ten way. Write the missing numbers.

	100	
		9 tens
	80	_____ tens
	70	_____ tens
		6 tens
		_____ tens
	40	4 tens
		_____ tens
		_____ tens
		_____ ten

Name _____ Date _____

Whisper count and draw in more shapes to match the number.

14



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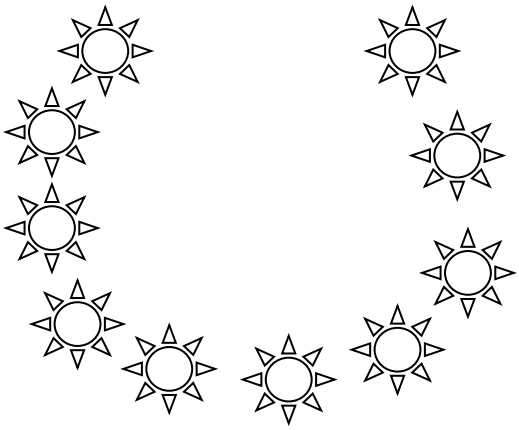

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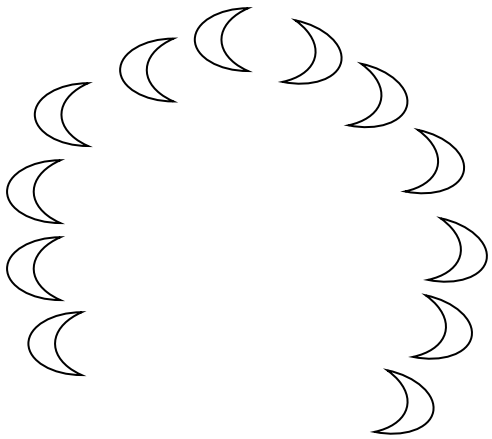

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teen circular-counting

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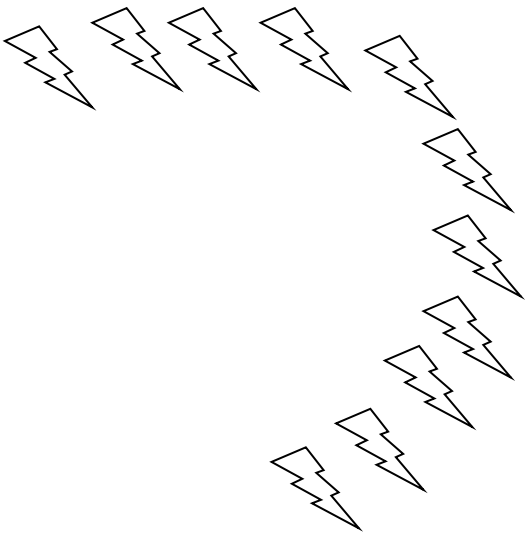

Whisper count and draw in more shapes to match the number.

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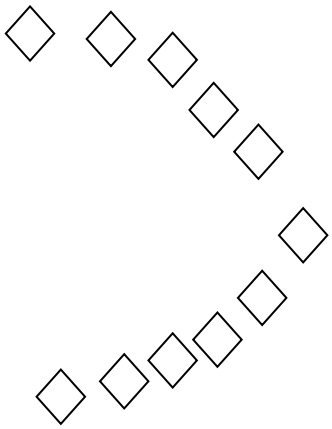

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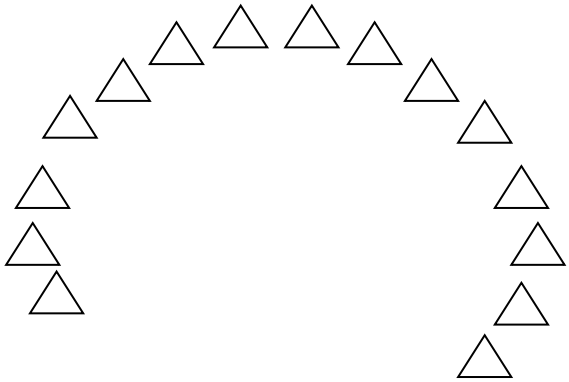

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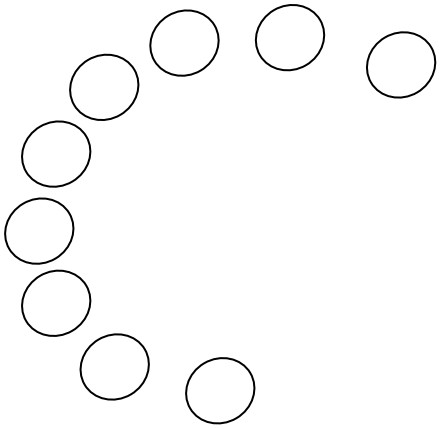

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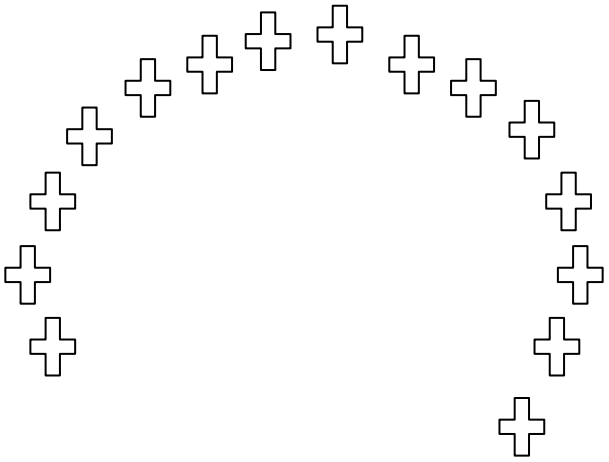
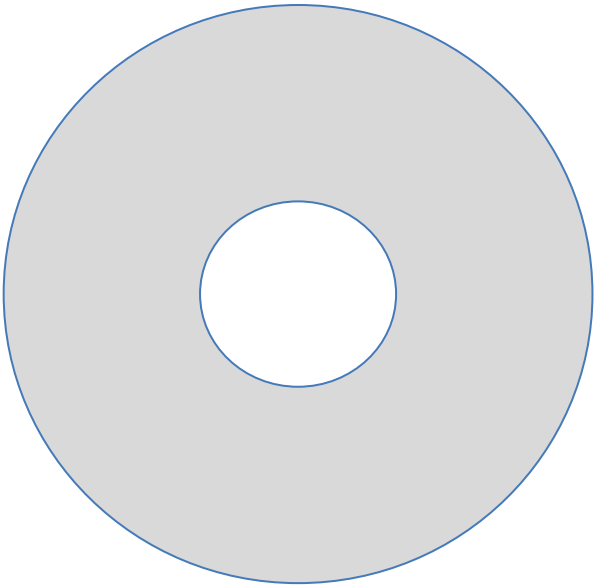
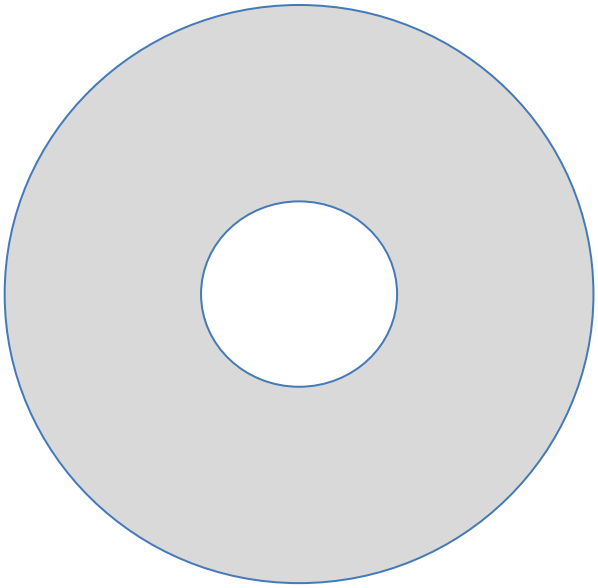


teen circular-counting

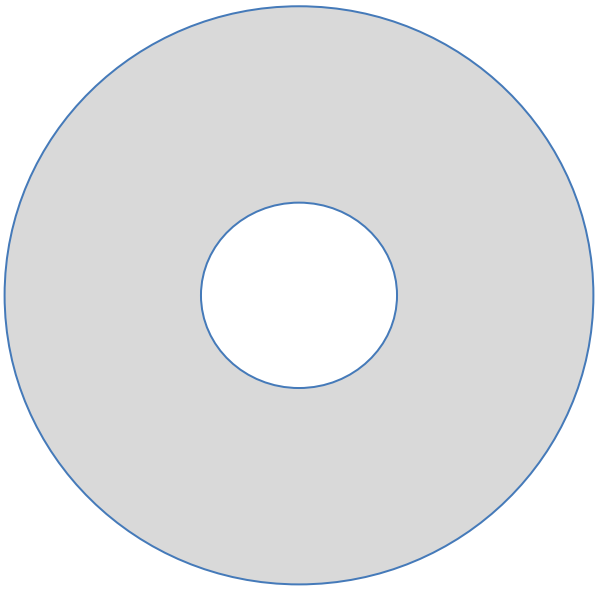
Decorate Mr. Perry's Donut



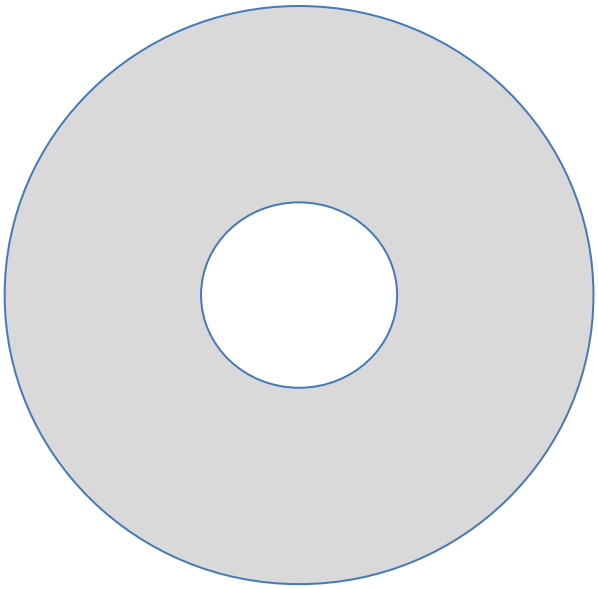
Decorate Mr. Perry's Donut



Decorate Mr. Perry's Donut



Decorate Mr. Perry's Donut



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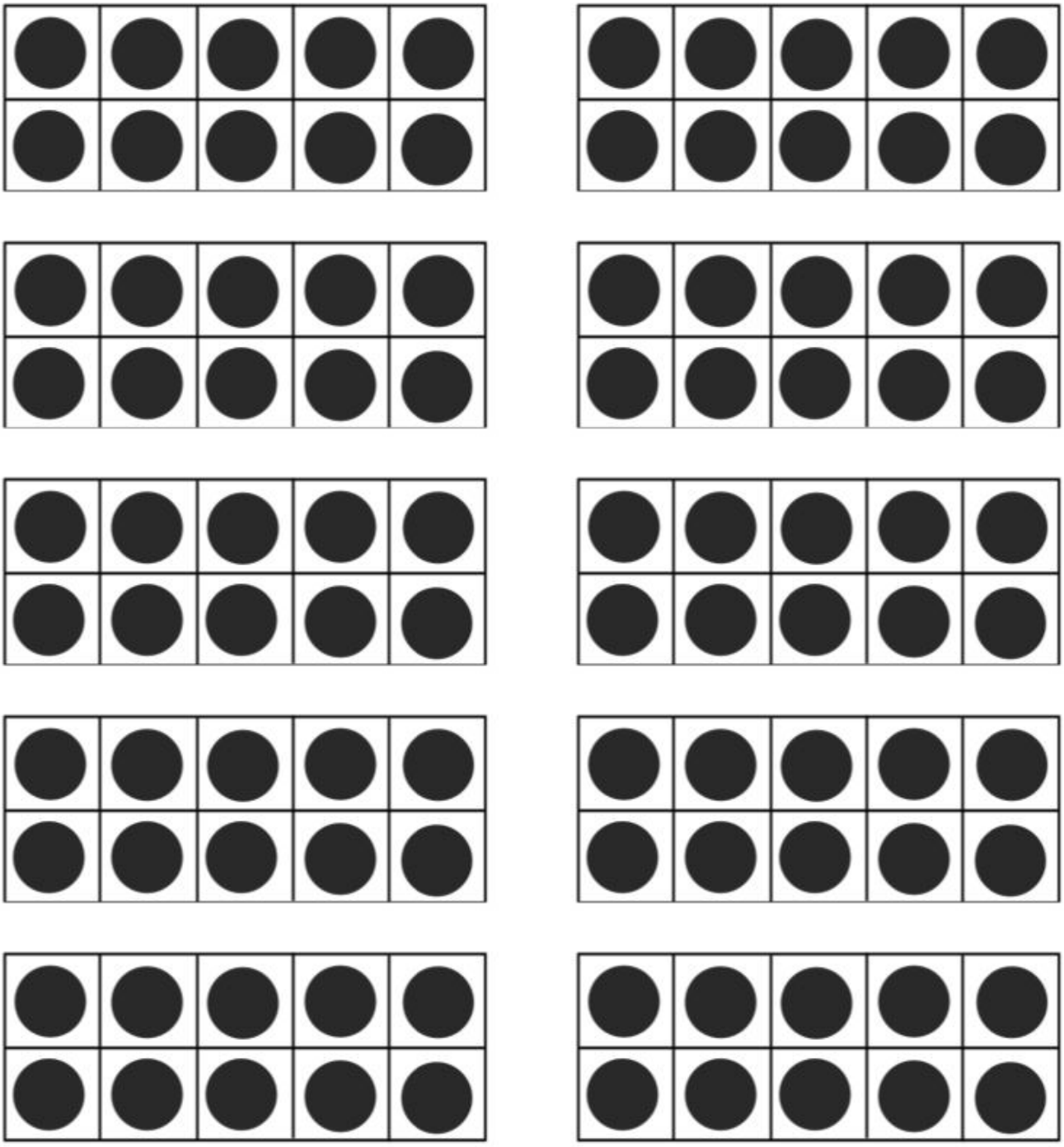
donuts



small 10-frame cards