

Eureka Math

2nd Grade Module 4 Lesson 29

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Directions for customizing presentations are available on the next slide.



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Customize this Slideshow

Reflecting your Teaching Style and Learning Needs of Your Students

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- The view now looks like Screen B.
- Within Google Slides (not Chrome), choose FILE.
- Choose MAKE A COPY and rename your presentation.
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- It is now editable & housed in MY DRIVE.



Icons



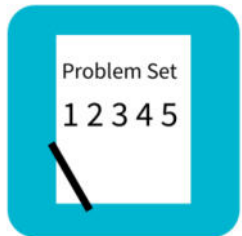
Read, Draw, Write



Learning Target



Personal White Board



Problem Set



Manipulatives Needed



Fluency



Think Pair Share



Whole Class



Individual



Partner



Small Group



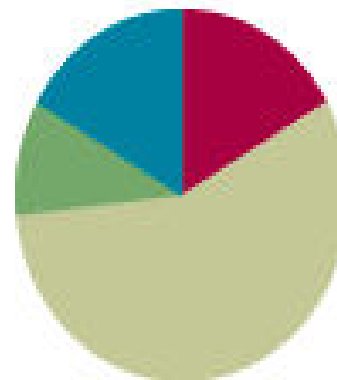
Small Group Time

Lesson 29

Objective: Use and explain the totals below method using words, math drawings, and numbers.

Suggested Lesson Structure

■ Fluency Practice	(10 minutes)
■ Application Problem	(6 minutes)
■ Concept Development	(34 minutes)
■ Student Debrief	(10 minutes)
Total Time	(60 minutes)





I can use and explain the totals below method using words, math drawings, and numbers.

Materials Needed:

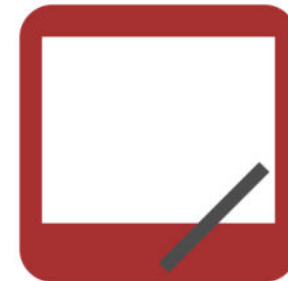


Concept Development:

- (S) paper



Crossing a ten



$$8 + \underline{\quad} = 10$$

Say the complete sentence

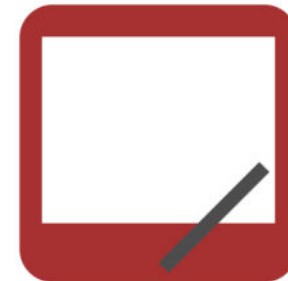
$$10 + 1$$

$$8 + 2 + 1$$

$$8 + 3$$



Rename the Unit



10 tens = _____ hundred. Say the number sentence

11 tens = 1 hundred _____ ten. Say the number sentence

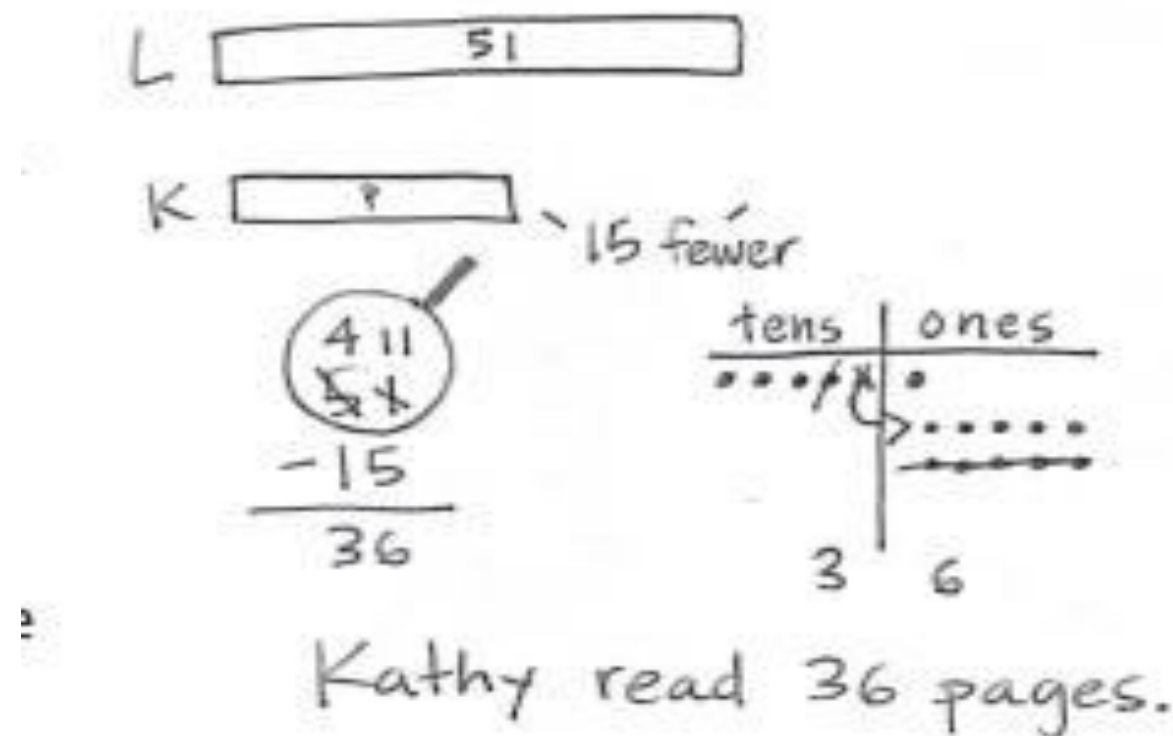
14 tens = 1 hundred _____ tens. Say the number sentence

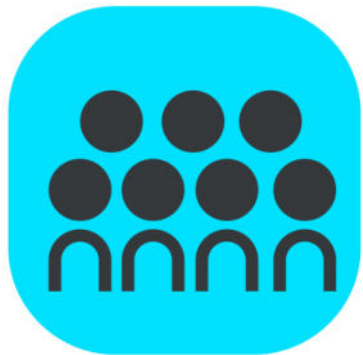


Application problems



Kathy read 15 fewer pages than Lucy. Lucy read 51 pages. How many pages did Kathy read?





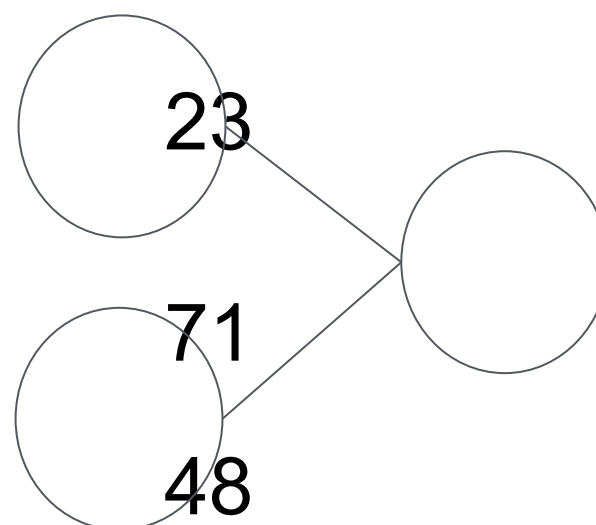
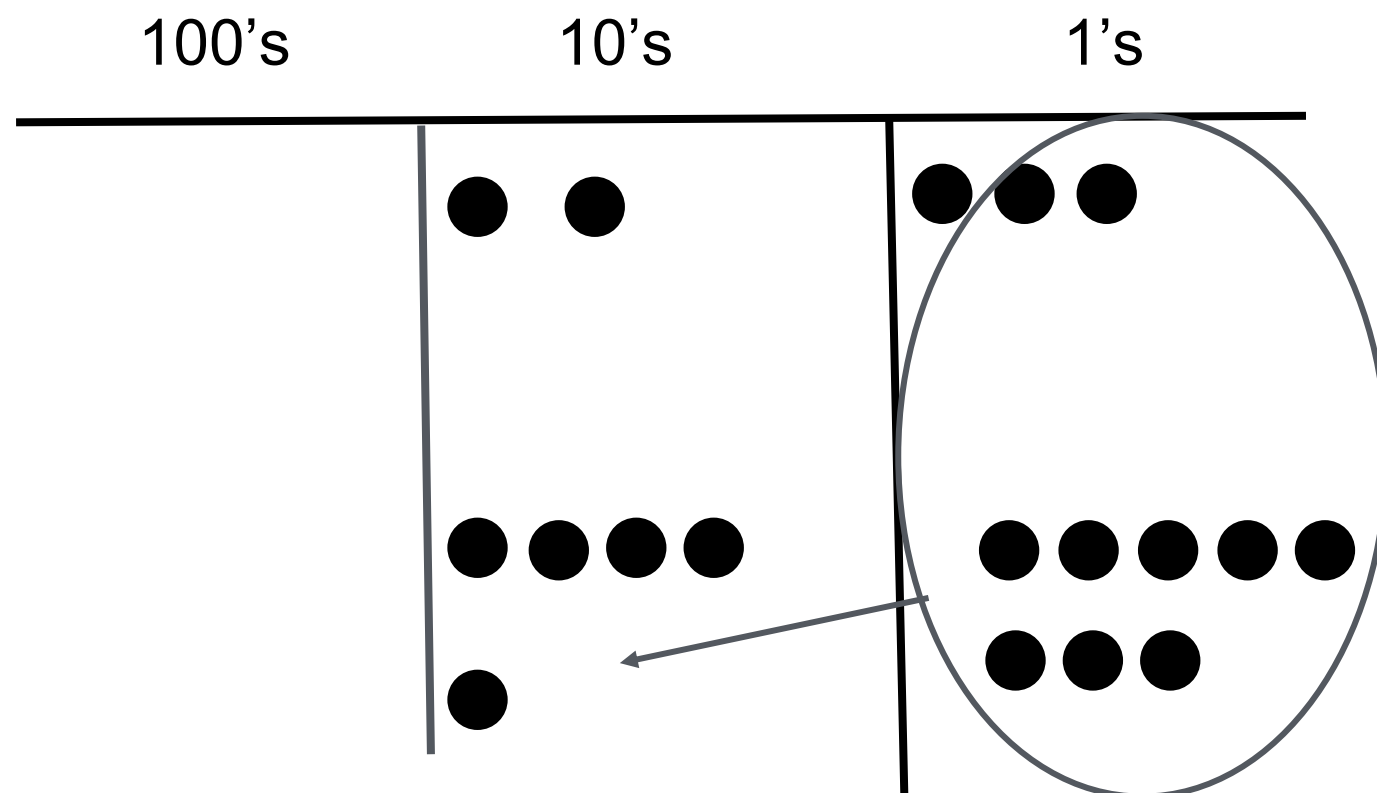
CONCEPT DEVELOPMENT

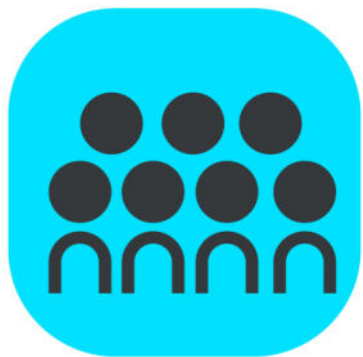


What expression am I modeling?

$$\begin{array}{r} 23 \\ + 48 \\ \hline 71 \end{array}$$

Let's look at this as a number bond. What are the parts?





CONCEPT DEVELOPMENT



Let's look at this same place value model another way. How do we write 23 in expanded form?

$$\begin{array}{r} 23 \\ +48 \\ \hline \\ \hline \end{array}$$

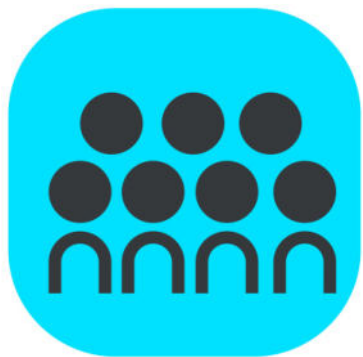
$$\begin{array}{r} 20 + 3 \\ 10 + 8 \\ \hline 60 + 11 \end{array}$$

How do we write 48 in expanded form?

Let's add what these two totals equal. Talk to your partner about the sum of $60 + 11$.

Let's record these totals below the line while we add our numbers vertically.

We added the ones first and then the tens. Talk with your partner. Would we get the same answer if we added the tens first and then added the ones?



CONCEPT DEVELOPMENT



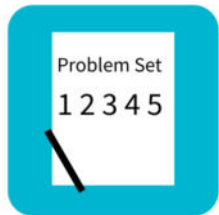
Let's record these **totals** **below** the line while we add our numbers vertically.

$$\begin{array}{r} 23 \\ +48 \\ \hline \end{array} \qquad \begin{array}{r} 20 + 3 \\ 40 + 8 \\ \hline 60 + 11 \end{array}$$

$$\begin{array}{r} 23 \\ + 48 \\ \hline \end{array} \qquad \begin{array}{r} 23 \\ + 48 \\ \hline \end{array}$$

We added the ones first and then the tens. Talk with your partner. Would we get the same answer if we added the tens first and then added the ones? Let's see.

So, we can add in either direction! When we add this way, no matter where we start, we can see the different parts, 11 ones and 6 tens.



Problem Set

A STORY OF UNITS

Lesson 29 Problem Set

2•4

Name _____

Date _____

1. Solve each addition expression using both the totals below and new groups below methods. Draw a place value chart with chips and two different number bonds to represent each.

a. $27 + 19$

New Groups Below	Totals Below	Place Value Chart	Number Bonds



Debrief

For Problem 1, what connections can you make between the totals below method and number bonds? Place value chart?

For Problem 1(b), how were the two written methods the same and different? How did you show your understanding of place value?

In Problem 2(a), how did you record the totals below? Why does the answer include a hundred when you are only adding tens and ones?



Debrief

For Problem 2(b), let's make a chip model to show the addition (draw on board). How does our model relate to the totals below method?

Pretend you are explaining the totals below method to a first grader: Why are we decomposing numbers first and then adding?



Exit Ticket

A STORY OF UNITS

Lesson 29 Exit Ticket

2•4

Name _____

Date _____

Add like units and record the totals below.

1.

$$\begin{array}{r} 45 \\ + 64 \\ \hline \\ \hline \\ \hline \end{array}$$

2.

$$\begin{array}{r} 109 \\ + 72 \\ \hline \\ \hline \\ \hline \end{array}$$

3.

$$\begin{array}{r} 144 \\ + 58 \\ \hline \\ \hline \end{array}$$

4.

$$\begin{array}{r} 167 \\ + 52 \\ \hline \\ \hline \end{array}$$