

Eureka Math

1st Grade Module 4 Lesson 20

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Reflecting your Teaching Style and Learning Needs of Your Students

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- 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



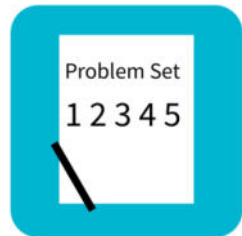
Read, Draw, Write



Learning Target



Personal White Board



Problem Set



Manipulatives Needed



Fluency



Think Pair Share



Whole Class



Individual



Partner



Small Group



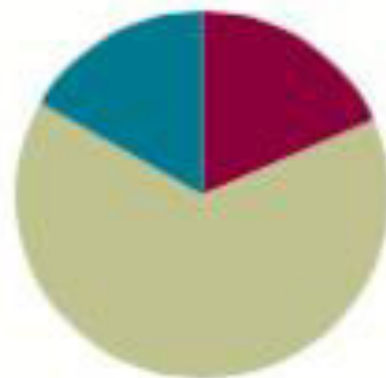
Small Group Time

Lesson 20

Objective: Recognize and make use of part–whole relationships within tape diagrams when solving a variety of problem types.

Suggested Lesson Structure

■ Fluency Practice	(11 minutes)
■ Concept Development	(39 minutes)
■ Student Debrief	(10 minutes)
Total Time	(60 minutes)



Materials Needed

- Fluency
 - (S) Personal white board
 - S) Addition and subtraction cards (Lesson 12 Template), addition and subtraction cards set 2 (Lesson 17 Template)
- Concept Development
 - (S) Problem Set, highlighter

A Note About This Lesson

Note: During Lesson 20, the suggested delivery of instruction is an integration of student work on the Problem Set with guided instruction interspersed between each problem. Today, the unknown in each problem varies between a part and the total. The sequence of problems has been designed to support students in using the RDW process—particularly to keep track of information as they determine whether they are looking for a part or the total—and to use the visual representation of the information to support calculations.

A Note About This Lesson

Suggested Delivery of Instruction for Solving Word Problems

1. Model the problem, calculate, and write a statement.

Choose two pairs of students who have been accurately solving the Application Problems from Topic D and using simple shapes in a straight line when drawing. Invite these two pairs of students to work on chart paper while the others work independently or in pairs at their seats. Vary the selected students as the problems become more complex.

Review the following questions before beginning the first problem:

Can you draw something?

What can you draw?

What can you tell from looking at your drawing?

As students work, circulate. Reread Problem 1, and reiterate the questions above. After a maximum of two minutes, have the pairs of students share their labeled diagrams. Give the students two to three minutes to finish work on that question, sharing their work and thinking with a peer. All should write their equations and statements of the answer.

A Note About This Lesson

2. Assess the solution for reasonableness.

Give students one to two minutes to assess and explain the reasonableness of their solution. For about one minute, have the demonstrating students receive and respond to feedback and questions from their peers.

A Note About This Lesson

3. As a class, notice the ways the drawing depicts the story and the solution.

Ask questions to help students recognize how each part of their drawing matches the story and solution. This helps students begin to see how the same process can help them solve varying word problems. Keep at least one chart paper sample of each solution for reference later in the lesson.



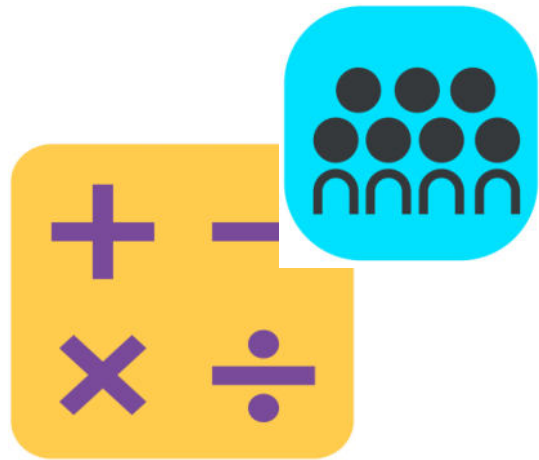
I can recognize and make use of part-whole relationships within tape diagrams when solving a variety of problem types.

Application Problem

The logo consists of the letters 'RDW' in white, bold, sans-serif font, centered within a green rounded square.

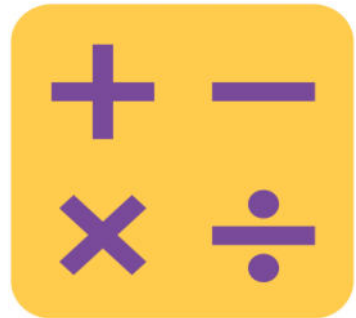
There is no Application Problem for today's lesson.

Beep Counting by Ones and Tens



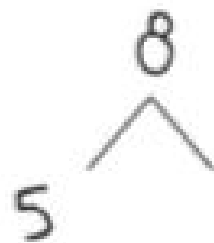
I will say a series of four numbers, but replace one of the numbers with the word “beep” (e.g., “1, 2, 3, beep”). When signaled, you say the number that was replaced by the word “beep” in the sequence.

Number Bond Addition and Subtraction



I will write a number bond for a number between 0 and 10, with a missing part or whole. You write two addition and two subtraction sentences with a box for the missing number in each equation. They then solve for the missing number.

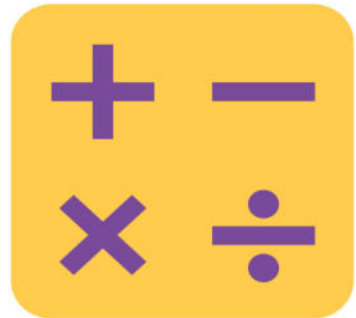
Example:



$$5 + \boxed{3} = 8$$

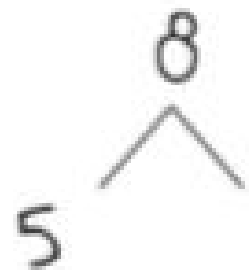
$$8 - 5 = \boxed{3}$$

Number Bond Addition and Subtraction



I will write a number bond for a number between 0 and 10, with a missing part or whole. You write an addition and a subtraction sentence with a box for the missing number in each equation. Then, then solve for the missing number.

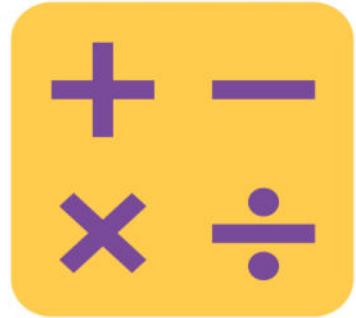
Example:



$$5 + \boxed{3} = 8$$

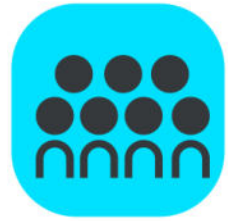
$$8 - 5 = \boxed{3}$$

Addition and Subtraction with Cards

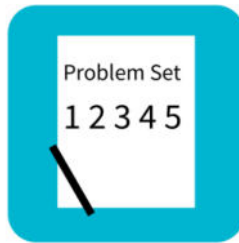


Let's play addition and subtraction with cards!



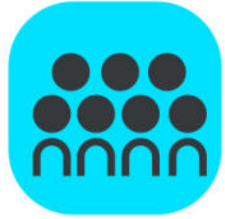


Concept Development



1. 9 dogs were playing at the park. Some more dogs came to the park. Then, there were 11 dogs. How many more dogs came to the park?

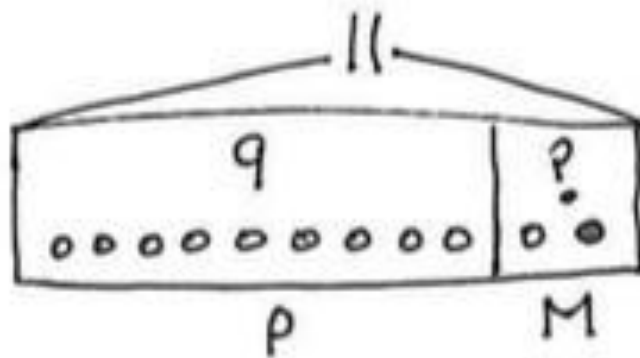
_____ more dogs came to the park.



Concept Development

Problem Set
1 2 3 4 5

1. 9 dogs were playing at the park. Some more dogs came to the park. Then, there were 11 dogs. How many more dogs came to the park?

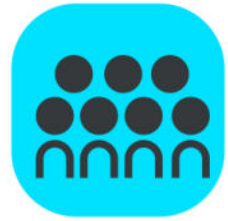


$$9 + \boxed{2} = 11$$

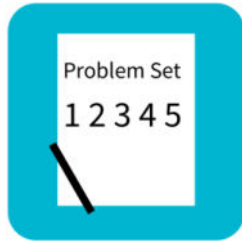
Two more dogs
came to the park.

11

_____ more dogs came to the park.

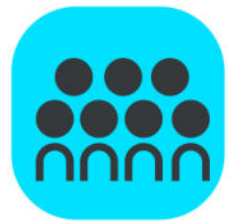


Concept Development



2. 16 strawberries are in a basket for Peter and Julio. Peter eats 8 of them. How many are there for Julio to eat?

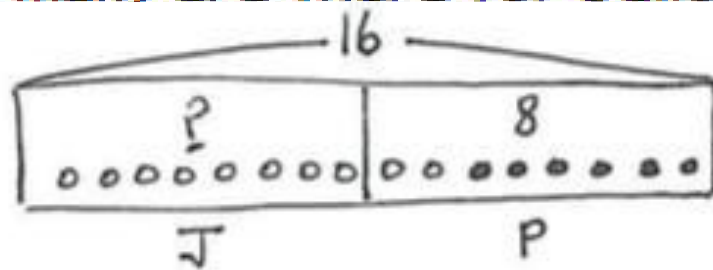
Julio has _____ strawberries to eat.



Concept Development

Problem Set
1 2 3 4 5

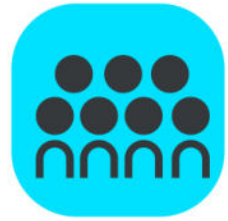
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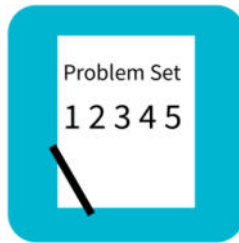
$$16 - 8 = \boxed{8}$$

There are 8 for
Julio to eat.

Julio has 8 strawberries to eat.

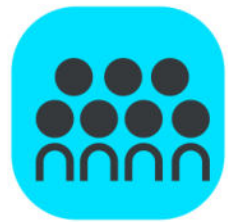


Concept Development



3. 13 children are on the roller coaster. 3 adults are on the roller coaster. How many people are on the roller coaster?

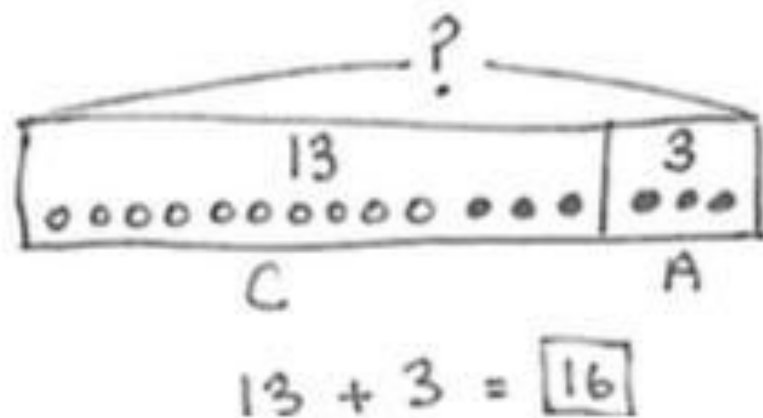
There are _____ people on the roller coaster.



Concept Development

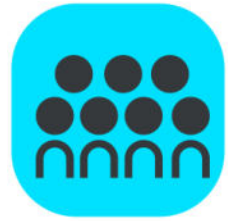
Problem Set
1 2 3 4 5

3. 13 children are on the roller coaster. 3 adults are on the roller coaster. How many people are on the roller coaster?

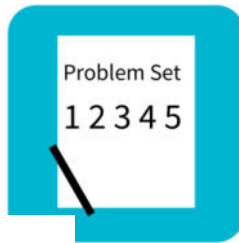


There are 16 people
on the rollercoaster.

There are 16 people on the roller coaster.

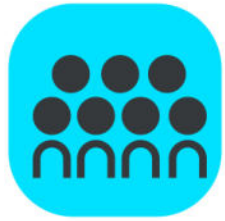


Concept Development

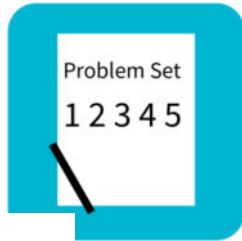


4. 13 people are on the roller coaster now. 3 adults are on the roller coaster, and the rest are children. How many children are on the roller coaster?

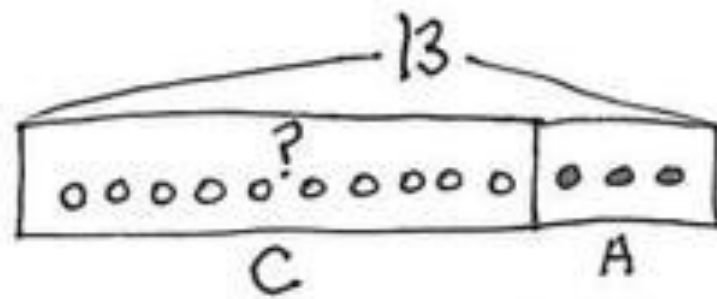
There are _____ children on the roller coaster.



Concept Development



4. 13 people are on the roller coaster now. 3 adults are on the roller coaster, and the rest are children. How many children are on the roller coaster?

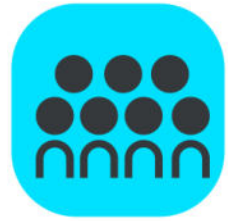


$$13 - 3 = \boxed{10}$$

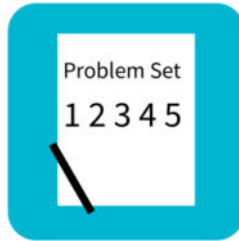
$$3 + \boxed{10} = 13$$

There are 10 children
on the rollercoaster.

There are 13 children on the roller coaster.

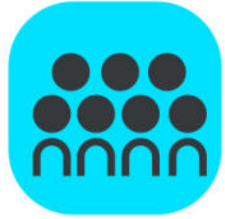


Concept Development



5. Ben has 6 baseball practices in the morning this month. If Ben also has 6 practices in the afternoon, how many baseball practices does Ben have?

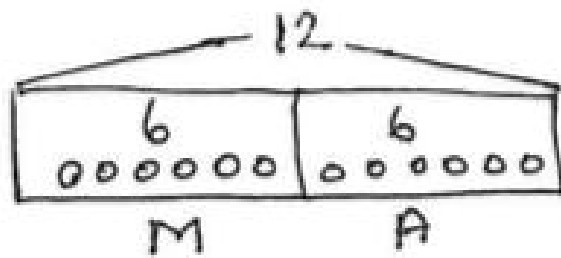
Ben has _____ baseball practices.



Concept Development

Problem Set
1 2 3 4 5

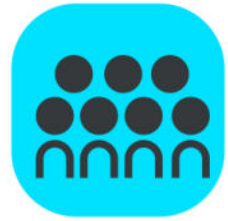
5. Ben has 6 baseball practices in the morning this month. If Ben also has 6 practices in the afternoon, how many baseball practices does Ben have?



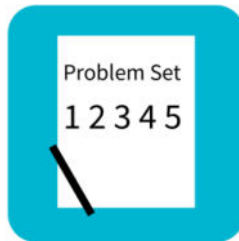
$$6 + 6 = 12$$

Ben has 12 baseball practices.

Ben has 12 baseball practices.

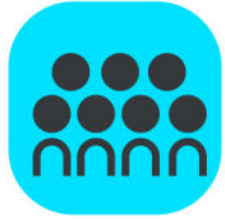


Concept Development



6. Some yellow beads were on Tamra's bracelet. After she put 14 purple beads on the bracelet, there were 18 beads. How many yellow beads did Tamra's bracelet have at first?

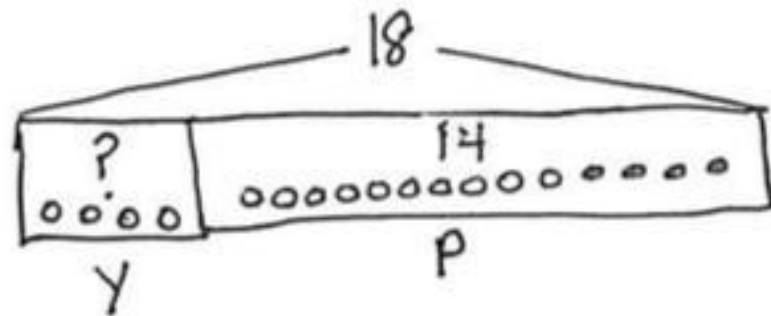
Tamra's bracelet had _____ yellow beads.



Concept Development

Problem Set
1 2 3 4 5

6. Some yellow beads were on Tamra's bracelet. After she put 14 purple beads on the bracelet, there were 18 beads. How many yellow beads did Tamra's bracelet have at first?



$$\boxed{4} + 14 = 18$$

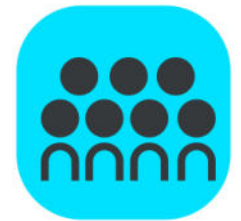
$$14 + \boxed{4} = 18$$

$$18 - 14 = \boxed{4}$$

Tamra's bracelet had 4 yellow beads at first.

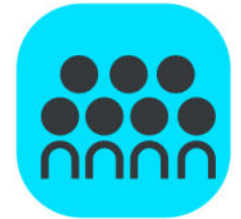
Tamra's bracelet had 14 yellow beads.

Debrief



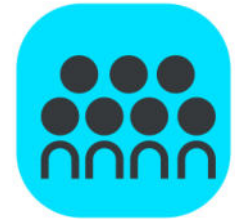
How are Problems 3 and 4 alike? How are they different? How did your drawings help you to solve each problem?

Debrief



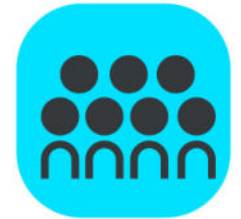
In which problems could making ten help you?
Explain your thinking.

Debrief



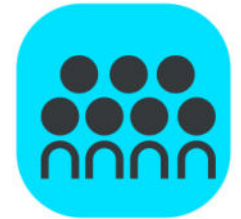
Look at Problem 2 and Problem 3. What is similar, and what is different between the two problems? What do you notice about the size of the rectangles around each part in Problem 2? What do you notice in Problem 3?

Debrief



Look at Problem 6. How did you solve this problem?
What did you draw first? Next? Did anyone do it a
different way?

Debrief



Using a highlighter, underline the question in each problem. Highlight the part of the tape diagram that shows the answer to the question. What do you notice?

Debrief



Some people only write numbers and not circles inside the parts of a tape diagram. Why do we draw the circles sometimes? Why do we just use numbers at times?

Exit Ticket



A STORY OF UNITS

Lesson 20 Exit Ticket

1•4

Name _____

Date _____

Read the word problem.

Draw a tape diagram and label.

Write a number sentence and a statement that matches the story.



There were 6 turtles in the tank. Dad bought some more turtles. Now, there are 12 turtles. How many turtles did Dad buy?

Dad bought _____ turtles.