

Eureka Math

1st Grade Module 2 Lesson 21

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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

- When the Google Slides presentation is opened, it will look like Screen A.
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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.
- Google Slides will open your renamed presentation.
- 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



Materials Needed

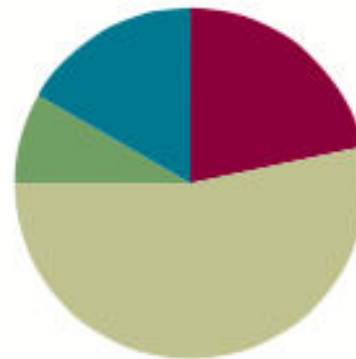
- (T) Hide Zero cards (Lesson 18 Fluency Template 1)
- (S) Subtract 7, 8, 9 Sprint
- (T) Student work samples—take from ten strategies (Template)
- (S) Personal white board

Lesson 21

Objective: Share and critique peer solution strategies for *take from with result unknown* and *take apart with addend unknown* word problems from the teens.

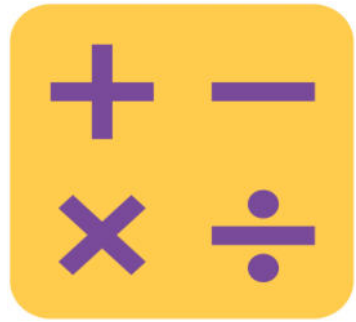
Suggested Lesson Structure

■ Fluency Practice	(13 minutes)
■ Application Problem	(5 minutes)
■ Concept Development	(32 minutes)
■ Student Debrief	(10 minutes)
Total Time	(60 minutes)





I can share and critique peer solution strategies for take from with result unknown and take apart with addend unknown word problems from the teens.



Subtraction with Hide Zero Cards

Let's practice subtracting with our Hide Zero Cards!



Sprint: Subtract 7, 8, 9

Let's do a Sprint!

A STORY OF UNITS			Lesson 21 Sprint 1•2		
A			Number Correct:		
Name _____			Date _____		
*Write the missing number.					
1.	$10 - 9 = \square$		16.	$12 - 7 = \square$	
2.	$11 - 9 = \square$		17.	$13 - 7 = \square$	
3.	$13 - 9 = \square$		18.	$14 - 7 = \square$	
4.	$10 - 8 = \square$		19.	$15 - 9 = \square$	
5.	$11 - 8 = \square$		20.	$15 - 8 = \square$	
6.	$13 - 8 = \square$		21.	$15 - 7 = \square$	
7.	$10 - 7 = \square$		22.	$17 - 7 = \square$	
8.	$11 - 7 = \square$		23.	$16 - 7 = \square$	
9.	$13 - 7 = \square$		24.	$17 - 7 = \square$	
10.	$12 - 9 = \square$		25.	$16 - \square = 9$	
11.	$13 - 9 = \square$		26.	$16 - \square = 8$	
12.	$14 - 9 = \square$		27.	$17 - \square = 8$	
13.	$12 - 8 = \square$		28.	$17 - \square = 9$	
14.	$13 - 8 = \square$		29.	$17 - \square = 16 - 8$	
15.	$14 - 8 = \square$		30.	$\square - 7 = 17 - 8$	



Sprint: Subtract 7, 8, 9

Let's do a Sprint!

A STORY OF UNITS				Lesson 21 Sprint 1•2	
B			Number Correct:		
Name _____			Date _____		
*Write the missing number.					
1.	$10 - 9 = \square$		16.	$11 - 7 = \square$	
2.	$11 - 9 = \square$		17.	$12 - 7 = \square$	
3.	$12 - 9 = \square$		18.	$15 - 7 = \square$	
4.	$10 - 8 = \square$		19.	$15 - 9 = \square$	
5.	$11 - 8 = \square$		20.	$15 - 8 = \square$	
6.	$12 - 8 = \square$		21.	$15 - 7 = \square$	
7.	$10 - 7 = \square$		22.	$15 - 8 = \square$	
8.	$11 - 7 = \square$		23.	$16 - 8 = \square$	
9.	$12 - 7 = \square$		24.	$16 - 7 = \square$	
10.	$11 - 9 = \square$		25.	$16 - \square = 9$	
11.	$12 - 9 = \square$		26.	$16 - \square = 8$	
12.	$15 - 9 = \square$		27.	$16 - \square = 7$	
13.	$11 - 8 = \square$		28.	$16 - \square = 9$	
14.	$12 - 8 = \square$		29.	$16 - \square = 15 - 8$	
15.	$15 - 8 = \square$		30.	$\square - 8 = 15 - 7$	



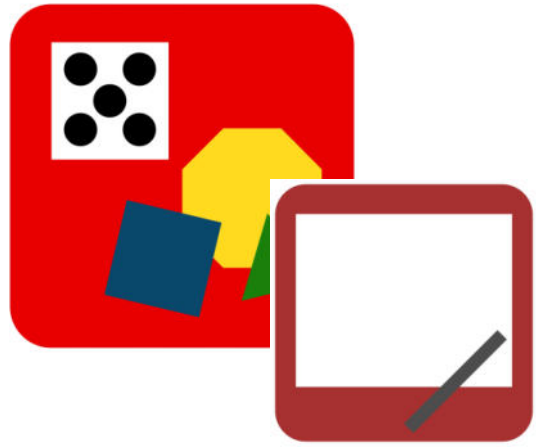
Application Problem

There are 16 reading mats in the classroom. If 9 reading mats are being used, how many reading mats are still available?



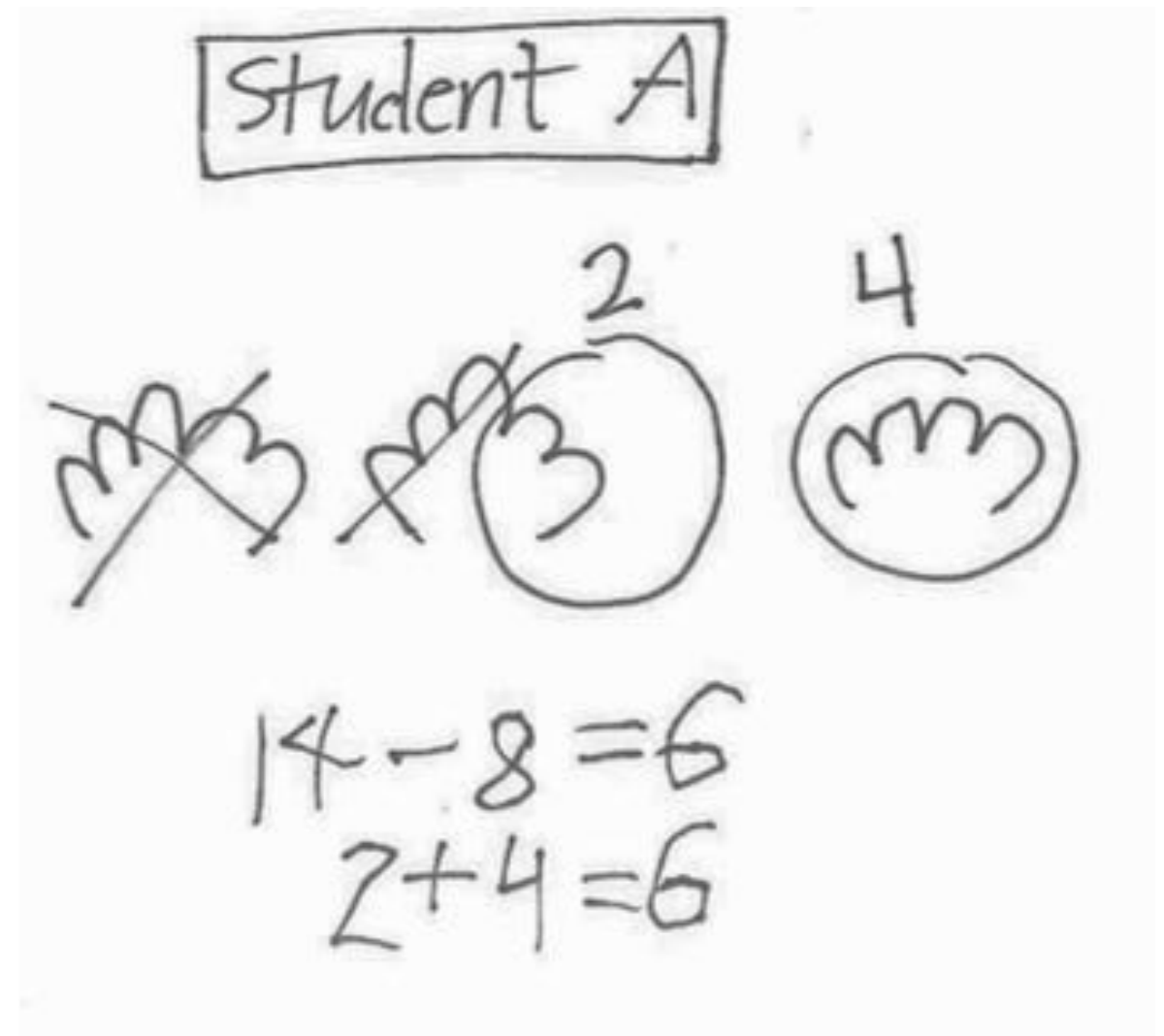
Concept Development

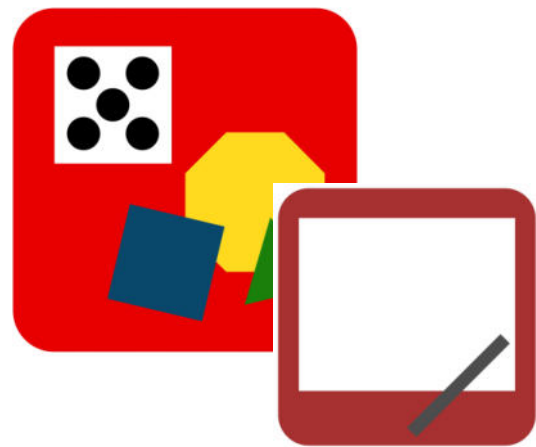
Colby is reading a book that is 14 pages long. She has already read 8 pages. How many more pages does Colby need to read to finish the book? Turn and talk to your partner about how you would solve this problem.



Concept Development

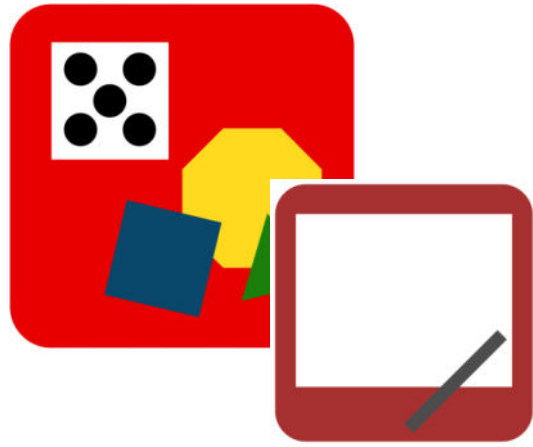
How did Student A solve this problem? Explain to your partner what this student was thinking. What strategy did Student A use?





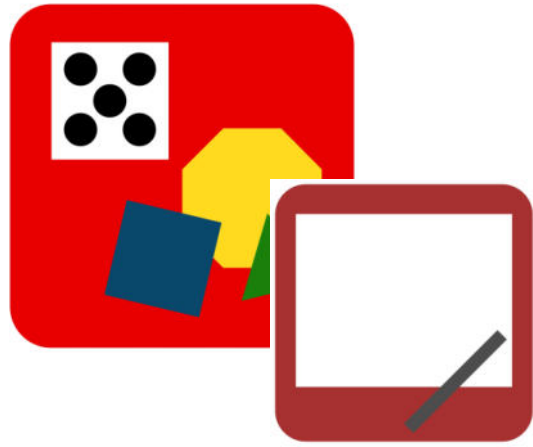
Concept Development

Can you think of another
good way to make a math
drawing?



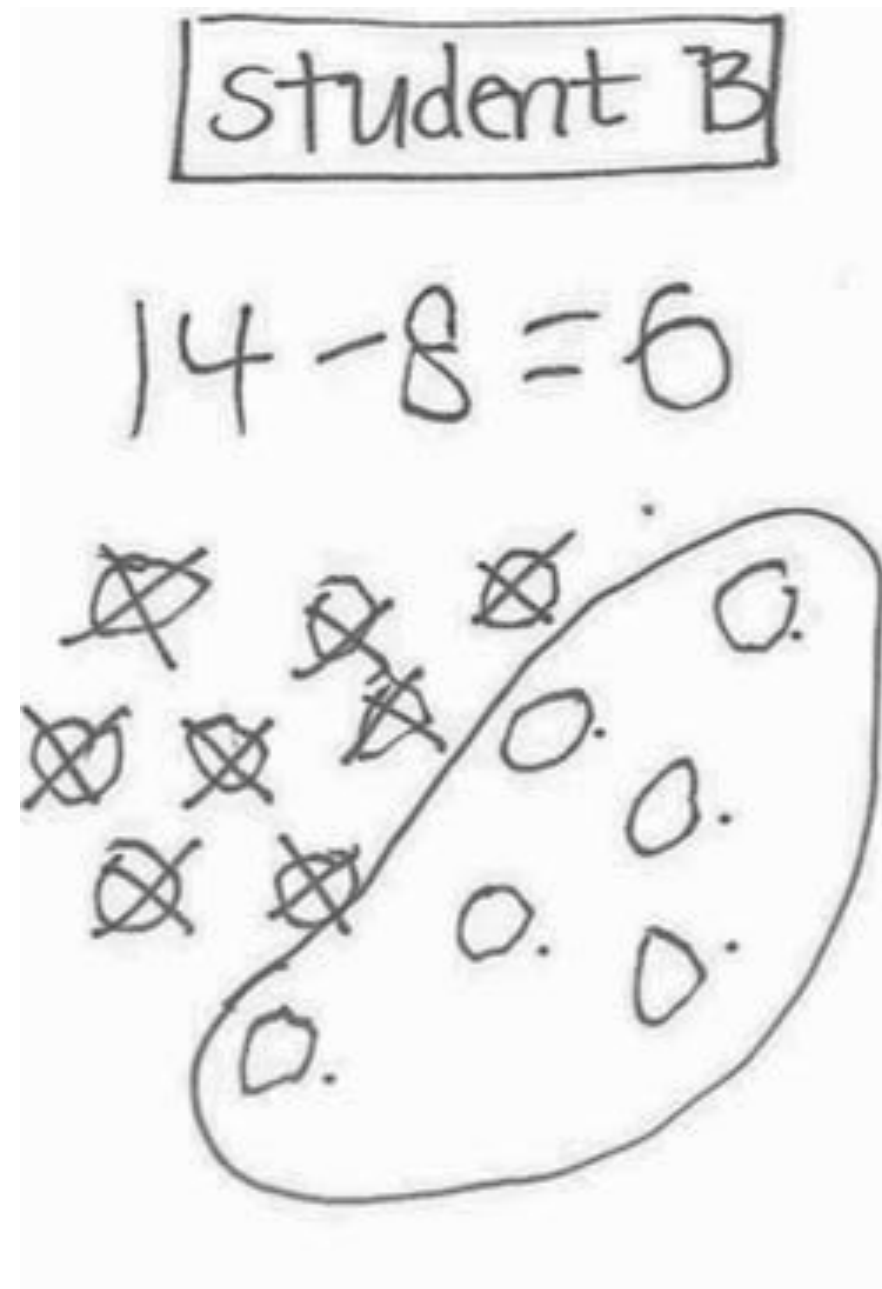
Concept Development

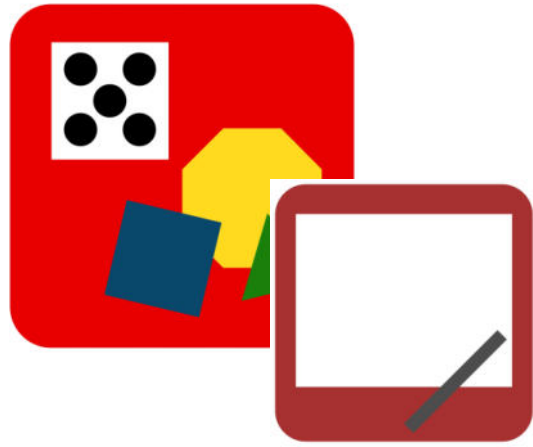
Use a 5-group row drawing. That's another easy way to see the take from ten strategy!



Concept Development

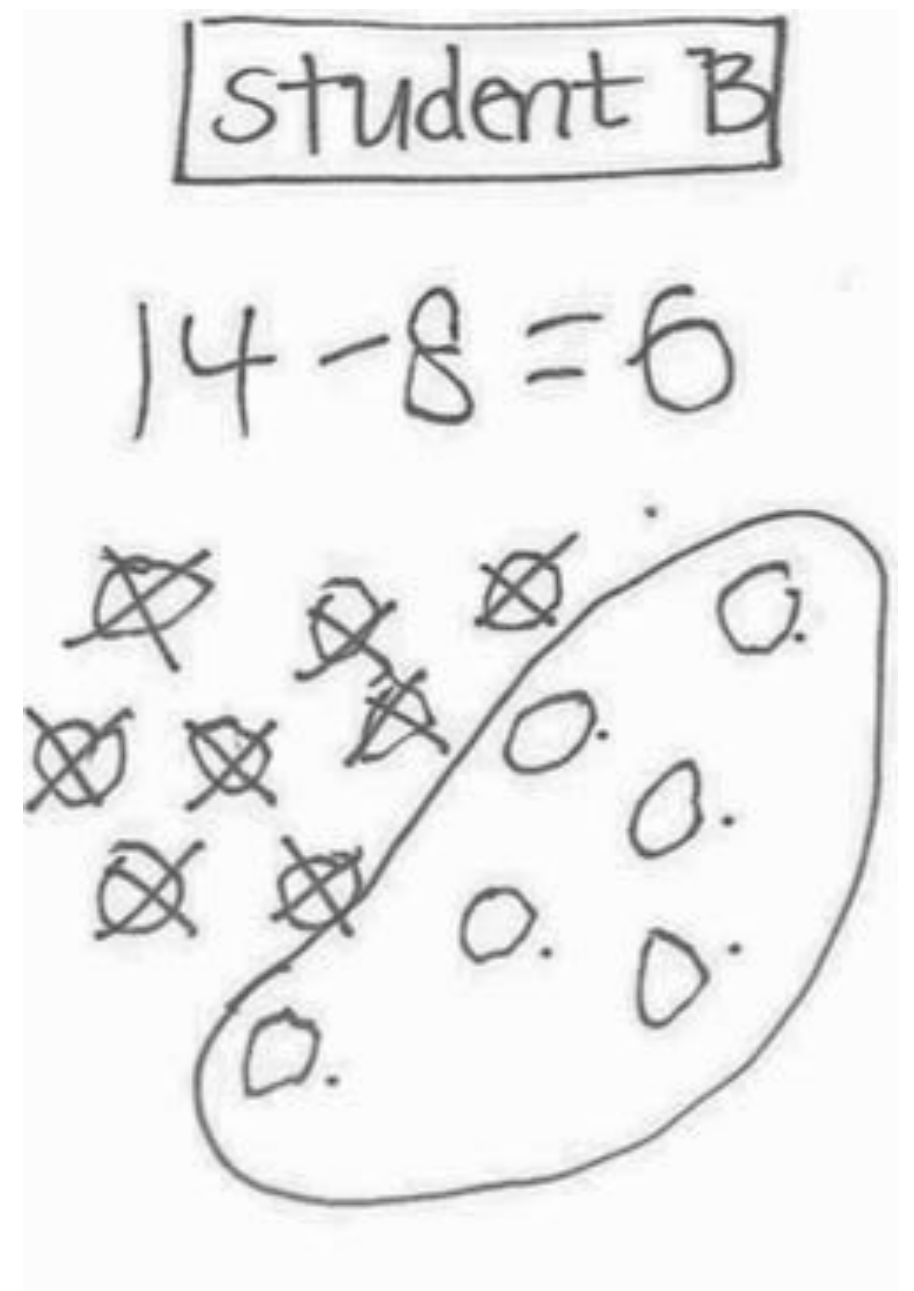
How did Student B solve the problem?

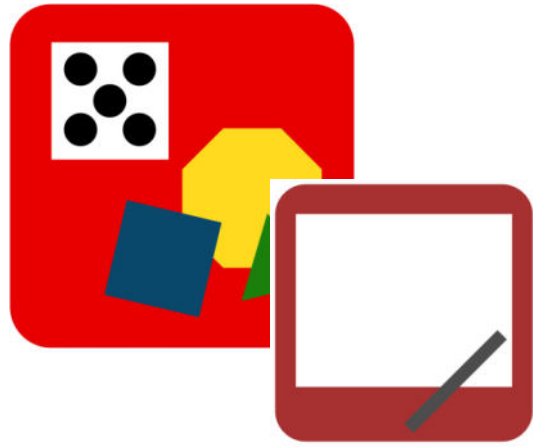




Concept Development

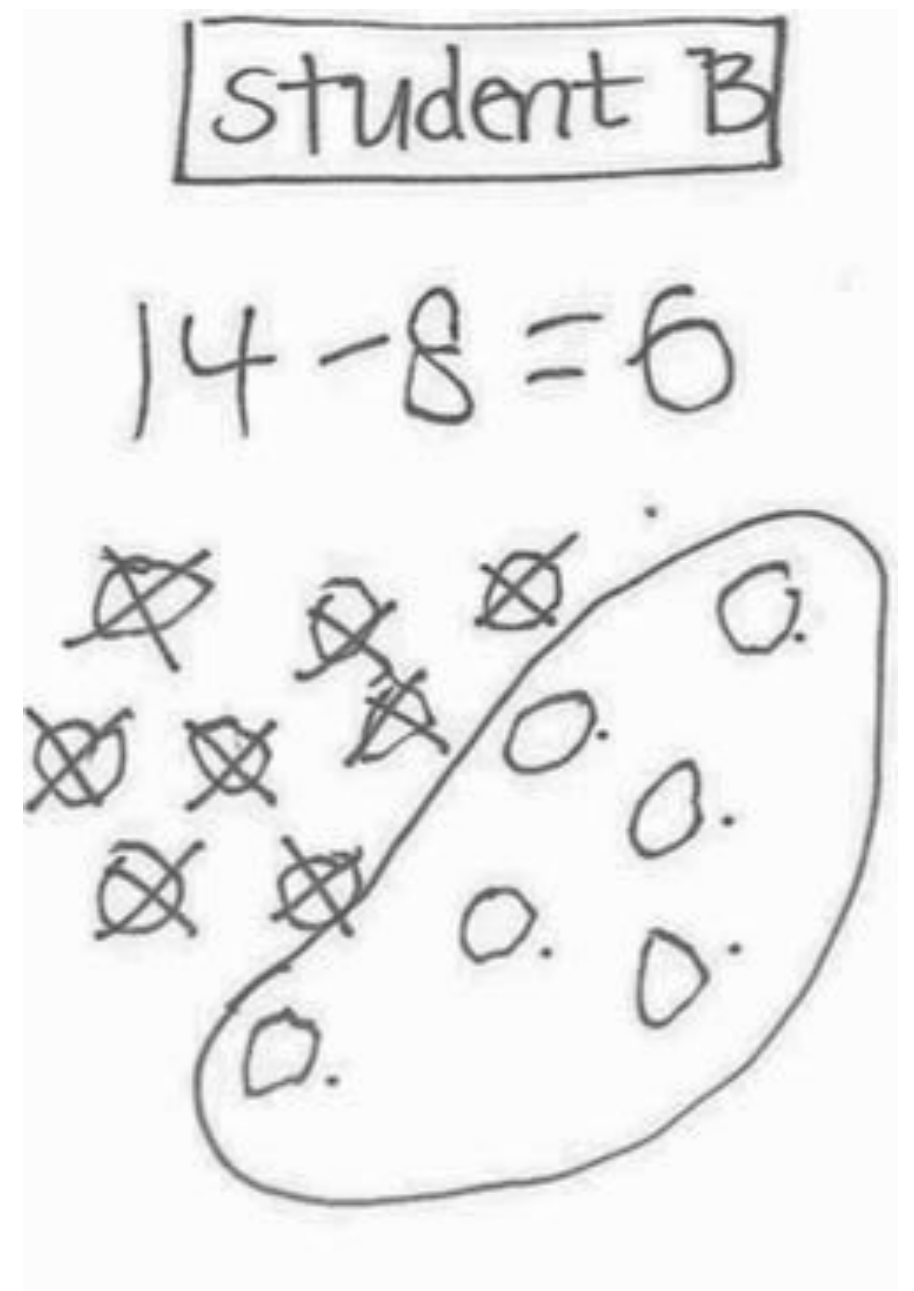
I heard you say e drew a picture, but it's a little hard to see because the shapes are not organized. He drew 14 circles and took away 8 and circled the leftovers. He counted the leftovers: 1, 2, 3, 4, 5, 6.





Concept Development

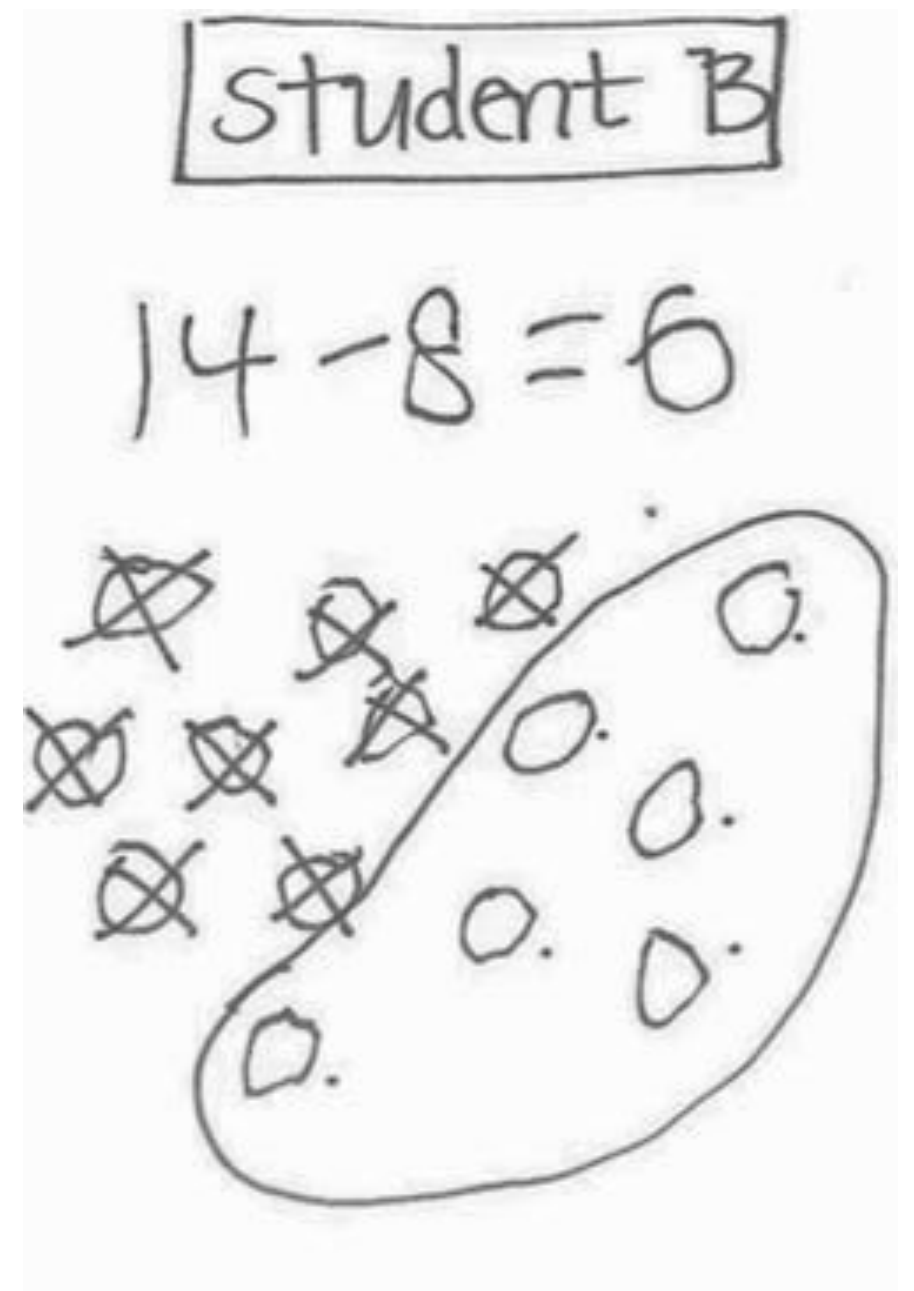
Let's label this sample Draw
a Picture!





Concept Development

Let's label this sample Draw
a Picture!





Concept Development

Take a look at Student C's work. Her answer is 14. Is that correct? Did she do her work correctly? Turn and talk to your partner.

Student C

$$14 - 8 = 14$$
$$\begin{array}{r} 10 \\ \swarrow \searrow \\ 4 \end{array}$$
$$4 - 8 = 4$$
$$10 + 4 = 14$$



Concept Development

I heard a lot of you say no!
What do you mean? What
did she do wrong here?
Well, did she do anything
right?

Student C

$$14 - 8 = 14$$

10 4

$$4 - 8 = 4$$
$$10 + 4 = 14$$



Concept Development

She broke apart 14 into 10 and 4. That's correct. But look at her number sentence. She says $4 - 8 = 4$. This is not correct!

Student C

$$14 - 8 = 14$$

14 is broken apart into 10 and 4.

$$4 - 8 = 4$$
$$10 + 4 = 14$$



Concept Development

I love the way you looked at her work so carefully. How can you help her get the correct answer? How would you teach her? What strategy did she try to use? Turn and talk to your partner.

Student C

$$14 - 8 = 14$$

10 4

$$4 - 8 = 4$$
$$10 + 4 = 14$$



Concept Development

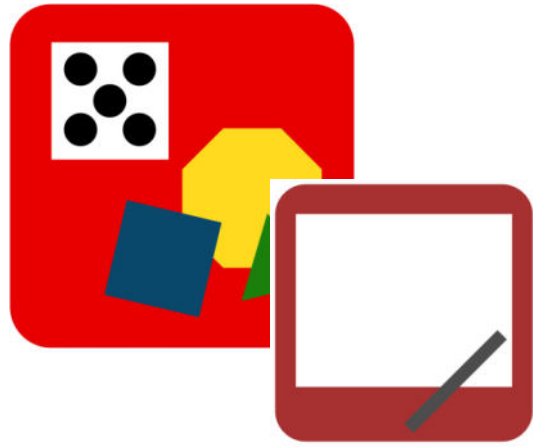
I heard many of you say you would tell her that you should always check what number you are taking away. In this problem, you have to take away 8. You need to subtract 8 from 10.

Student C

$$14 - 8 = 14$$

10 4

$$4 - 8 = 4$$
$$10 + 4 = 14$$



Concept Development

Let's label this work Take from 10!

Student C

$$14 - 8 = 14$$
$$\begin{array}{c} \swarrow \quad \searrow \\ 10 \quad 4 \end{array}$$
$$4 - 8 = 4$$
$$10 + 4 = 14$$



Concept Development

Let's label this work Take from 10!

Student C

$$14 - 8 = 14$$
$$\begin{array}{c} \diagup \quad \diagdown \\ 10 \quad 4 \end{array}$$
$$4 - 8 = 4$$
$$10 + 4 = 14$$

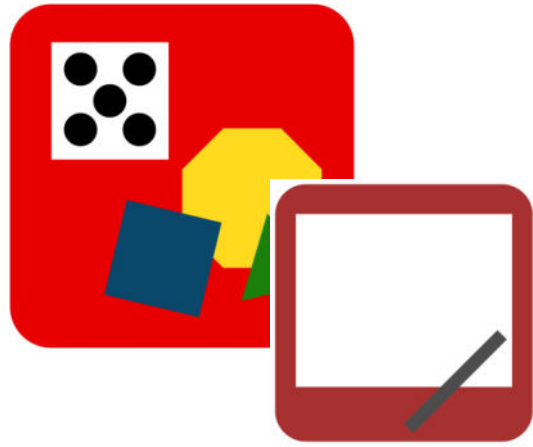


Student D

$8 + \boxed{6} = 14$

8 9 10 11 12 13 14
 | | | | | |

⑥

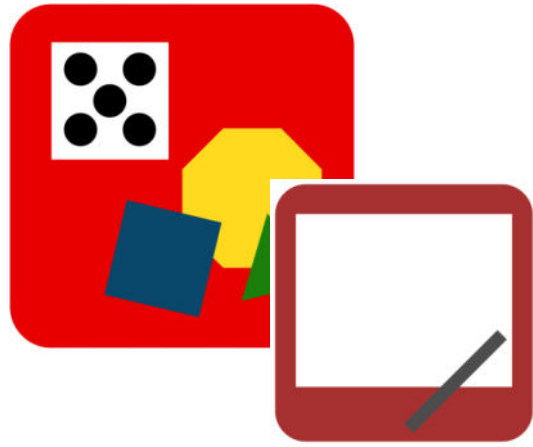


Concept Development

Now let's talk about and label this strategy!

Student E

$$\begin{array}{c} +2 \quad \quad +4 \\ 8 \quad \rightarrow \quad 10 \quad \rightarrow \quad 14 \end{array}$$
$$2 + 4 = 6$$



Concept Development

Let's compare these strategies!

Student D

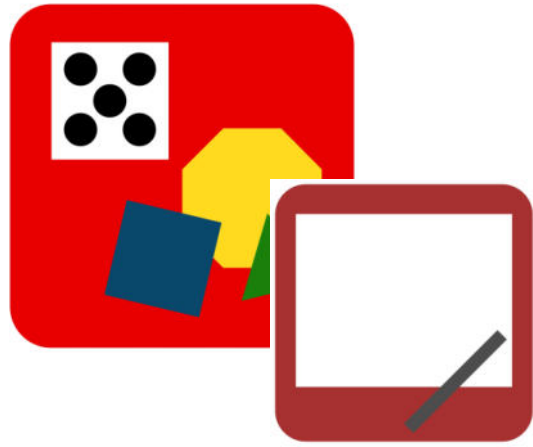
$$8 + \boxed{6} = 14$$

8 9 10 11 12 13 14

6

Student E

$$\begin{array}{c} +2 \quad +4 \\ 8 \quad \rightarrow \quad 10 \quad \rightarrow \quad 14 \end{array}$$
$$2 + 4 = 6$$



Concept Development

Antalya collected 15 leaves. Nine are yellow.
The rest are red. How many leaves are red?
Solve this problem by showing your work
clearly on your personal white board.

Problem Set

1 2 3 4 5

Problem Set

A STORY OF UNITS

Lesson 20 Problem Set 1•2

Name _____ Date _____

Solve the problems below. Use drawings or number bonds.

1. $11 - 9 = \underline{\quad}$ 2. $11 - 8 = \underline{\quad}$

3. $13 - 9 = \underline{\quad}$ 4. $13 - 8 = \underline{\quad}$

5. $13 - 7 = \underline{\quad}$ 6. $12 - 7 = \underline{\quad}$

7. Match the equal expressions.

- | | |
|-------------|----------|
| a. $16 - 7$ | $13 - 9$ |
| b. $17 - 7$ | $18 - 9$ |
| c. $12 - 8$ | $15 - 9$ |
| d. $14 - 8$ | $18 - 8$ |

Complete the subtraction sentences to make them true.

a.	b.	c.
8. $12 - 9 = \underline{\quad}$	$13 - 9 = \underline{\quad}$	$14 - 9 = \underline{\quad}$

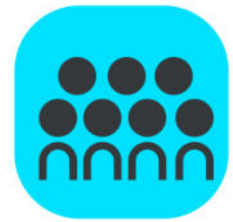
9. $12 - 8 = \underline{\quad}$	$13 - 8 = \underline{\quad}$	$14 - 8 = \underline{\quad}$
---------------------------------	------------------------------	------------------------------

10. $11 - 7 = \underline{\quad}$	$12 - 7 = \underline{\quad}$	$13 - 7 = \underline{\quad}$
----------------------------------	------------------------------	------------------------------

11. $16 - 9 = \underline{\quad}$	$18 - 9 = \underline{\quad}$	$17 - 9 = \underline{\quad}$
----------------------------------	------------------------------	------------------------------

12. $16 - \underline{\quad} = 9$	$15 - \underline{\quad} = 9$	$15 - \underline{\quad} = 7$
----------------------------------	------------------------------	------------------------------

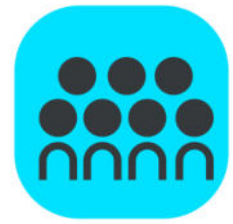
13. $15 - \underline{\quad} = 6$	$11 - \underline{\quad} = 3$	$16 - \underline{\quad} = 7$
----------------------------------	------------------------------	------------------------------



Debrief



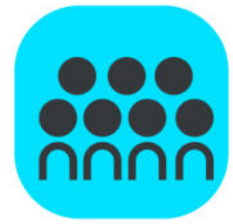
- Compare your solution to Problems 2 and 3 with your partner. How is your work similar or different from your partner's?



Debrief



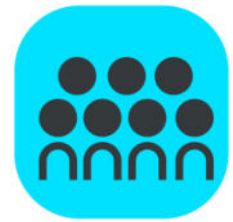
- Explain how your partner solved Problem3.



Debrief



Study the ways 16 – 7 was solved. Which solutions seem to be the longest way to solve the problem? Which seem to be the best shortcut?



Debrief



What have you learned from studying the mistakes from these students' work?

Student C

$$14 - 8 = 14$$

10 4

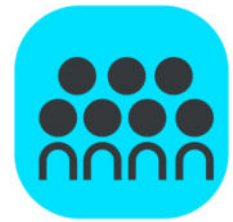
$$4 - 8 = 4$$
$$10 + 4 = 14$$

d.

⑦ 8 9 10 11 12 14 15 16

8

$$16 - 7 = 8$$



Debrief



Look at your Application Problem with a partner. Did you solve it the same way or a different way? Is your strategy or your partner's strategy similar to one of the samples in our Problem Set? If so, explain how it is similar. Is your strategy or your partner's strategy different from all of the samples in the Problem Set? If so, explain your strategy.



Exit Ticket

A STORY OF UNITS

Lesson 21 Exit Ticket

1•2

Name _____

Date _____

Meg thinks using the take from ten strategy is the best way to solve the following word problem. Bill thinks that solving the problem using the count on strategy is a better way. Solve both ways, and explain which strategy you think is best.

Mike and Sally have 6 cats. They have 14 pets in all. How many pets do they have that are not cats?

Strategies:

- Take from 10
- Make 10
- Count on
- I just knew

Meg's strategy

Bill's strategy

I think _____ strategy is best because _____
