Name _____

Monica has 24 crayons. Paul has 64 crayons. How many crayons do they have in all?

Solve any way you choose. Explain your work.

Break Apart Numbers to Add

I can …
add within 100 using place-value strategies.

I can also reason about math.

$24 + 64 =$ _____

_____ crayons

COHERENCE: Engage learners by connecting prior knowledge to new ideas.
Students choose any strategy to solve a word problem that involves adding two 2-digit numbers; then they explain their work. This prepares students for the next part of the lesson, where they learn how to break apart numbers into tens and ones to find the sum of two 2-digit numbers.

10–15 min

Solve

Whole Class | BEFORE

1. Pose the Solve-and-Share Problem
If needed, distribute 9 tens rods and 9 ones cubes to students. You may want to distribute the materials after students have attempted to solve the problem to help them explain their strategy.

Reasoning In this problem, students use any method they choose to solve a word problem that involves adding two 2-digit numbers. Then they explain their reasoning.

2. Build Understanding
What are you asked to find? [The number of crayons in all] *What do you know?* [Monica has 24 crayons. Paul has 64 crayons.]

Small Group | DURING

3. Ask Guiding Questions As Needed
Will you add or subtract to find how many crayons they have in all? [Add] *Can you add the numbers in any order? Explain.* [Yes; you can add numbers in any order and the sum will be the same.]

Whole Class | AFTER

4. Share and Discuss Solutions
Solve Start with students' solutions. If needed, project and analyze Avery's work to show one way to add the two 2-digit numbers in the word problem. Focus the discussion on how to choose an efficient strategy.

5. Transition to the Visual Learning Bridge
You have learned that there are different ways to solve addition problems that all lead to the correct sum.

When adding two-digit numbers, think about the value of the digits in each place, and remember to add the tens and the ones.

6. Extension for Early Finishers
How could you add 11 + 22 + 33 using mental math? [Answers will vary.]

Name _____

Solve & Share

Monica has 24 crayons. Paul has 64 crayons. How many crayons do they have in all?

Solve any way you choose. Explain your work.

Lesson 3-4
Break Apart Numbers to Add

I can … add within 100 using place-value strategies.

I can also reason about math.

See margin for sample student work.

$24 + 64 =$ _____

_____ crayons

Analyze Student Work

Avery's Work

$64 + 20 = 84$

$84 + 4 = 88$

$24 + 64 = \underline{88}$ $\underline{88}$ crayons

Matthew's Work

$24 + 64$

8 tens and 8 ones

$80 + 8 = 88$

$24 + 64 = \underline{88}$ $\underline{88}$ crayons

Avery explains that she adds two tens to 64, then she adds 4 ones to 84; so they have 88 crayons in all. Her work is clear and correct.

Matthew draws place-value blocks to show each number. Then he correctly counts the tens and ones to find the total is 88.