## Birthday Surprise



## Task

Lily Laceby's 2 sons, 3 daughters, 14 grandchildren, 35 great-grandchildren, 1 great-grandchild, and 47 friends surprised her for her 90th birthday. How many people were at the nighttime surprise party? How do you know?

## Standards and Learning Targets

Standard 2.NBT. 6 Add up to four two-digit numbers using strategies based on place value and properties of operations.

Standard 2.NBT. 7 Add and subtract within 1,000 using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method. Understand that in adding or subtracting three-digit numbers, one adds or subtracts hundreds and hundreds, tens and tens, and ones and ones, and that it is sometimes necessary to compose or decompose tens or hundreds.

Learning Target: Add multiple numbers within a thousand using strategies based on place value or properties of operations

## Lesson Outline

Anticipate Strategies: Before you begin this lesson, be sure to anticipate the strategies your students might use to determine how many people were at the surprise party using the Picture Book Problem Monitoring Chart. For example, students might use base ten blocks, a number line, or an invented algorithm.

Launch: Read aloud Night Noises by Mem Fox. Ask students to think about what they notice or wonder that could be answered using math.

Gather student ideas. Then propose the following problem: Lily Laceby's 2 sons, 3 daughters, 14 grandchildren, 35 great-grandchildren, 1 great-grandchild, and 47 friends surprised her for her 90th birthday. How many people were at the nighttime surprise party? How do you know?

Use numbers or pictures to explain your thinking.
Birthday Surprise Recording Sheet
Explore: Students work independently or in pairs to figure out how many people came to the surprise party. Provide students with manipulatives such as base ten blocks if necessary. As students work, use the monitoring chart to identify strategies students are using as they solve the problems to help facilitate the discussion. Purposefully select students to share how they solved each of the double problems.

Summarize: Once students have solved the problem, purposefully select students to share how they determined how many people were at the party. Be sure to explore strategies students use for adding more than two numbers.

Thank you for using one of our Picture Book Tasks! We would love to know more about your students' strategies when solving the problem, ideas you had for improving the task, and other math problems you and your students noticed or wondered about after reading the book.

Please complete our Picture Book Task Survey so that we can learn more about your experience teaching, how students solve problems, and improve our Picture Book Task Bank.

