

Lesson 18: Equations with Unknowns

Standards Alignments

Addressing 1.OA.A.1, 1.OA.B.4, 1.OA.D.8

Teacher-facing Learning Goals

- Interpret equations with a symbol for the unknown in relation to story problems.
- Solve a variety of story problem types.

Student-facing Learning Goals

- Let's make sense of equations with empty boxes.

Lesson Purpose

The purpose of this lesson is for students to interpret equations with a symbol for the unknown and connect them to story problems.

In the previous lesson, students compared different types of story problems. They solved story problems and wrote equations to match the problems. In this lesson, students work with a symbol for the unknown in an equation for the first time. A box is used for the unknown to build on the previous work in the unit where students put a box around the number in the equation that answered the question. In this lesson, students explain how their equation matches the story by relating it to the quantities and the unknown in the story problem.

Access for:



Students with Disabilities

- Representation (Activity 1)



English Learners

- MLR6 (Activity 2)

Instructional Routines

Notice and Wonder (Warm-up)

Materials to Gather

- Connecting cubes or two-color counters: Activity 2

Materials to Copy

- Equation Cards Grade 1 (groups of 2): Activity 1
- Story Problem Cards Grade 1 (groups of 2): Activity 1

Lesson Timeline

Warm-up	10 min
Activity 1	20 min
Activity 2	15 min
Lesson Synthesis	10 min
Cool-down	5 min

Teacher Reflection Question

Reflect on how comfortable your students are asking questions of you and of each other. What can you do to encourage students to ask questions?

Cool-down (to be completed at the end of the lesson)

🕒 5 min

Lin's Bingo Chips

Standards Alignments

Addressing 1.OA.A.1

Student-facing Task Statement

Lin has 5 bingo chips on her board.
She also has some chips on the table.
All together she has 9 bingo chips.
How many bingo chips does Lin have on the table?

Circle 2 equations that match the story problem.

$$9 - 5 = \square$$

$$5 + \square = 9$$

$$5 - 9 = \square$$

$$5 + 9 = \square$$

Student Responses

$$9 - 5 = \square, 5 + \square = 9$$