

Lesson 22: Story Problems and Equations (Optional)

Standards Alignments

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

Teacher-facing Learning Goals

- Use data to ask and answer questions.
- Use data to write equations.
- Write equations that represent a story problem.

Student-facing Learning Goals

- Let's write our own equations.

Lesson Purpose

The purpose of this lesson is for students to build their understanding of the relationship between addition and subtraction and the meaning of the equal sign to represent data with equations.

This lesson is optional because it does not address any new mathematical content standards. This lesson does provide students with an opportunity to apply precursor skills of mathematical modeling. In the previous lessons, students solved new types of story problems within 10 using the relationship between addition and subtraction. They developed an understanding of the meaning of the equal sign and connected story problems to equations.

In this lesson, students use previously collected survey data to generate equations, story problems, and ask and answer questions. When students make choices about their approach, determine relevant numbers to use in their own equations, and determine appropriate ways to represent their own questions, they model with mathematics. (MP4)

If the modeling lesson was not completed in Unit 1, use the sample data provided or do a quick whole-class survey to generate data with 3 to 4 categories.

Access for:

Students with Disabilities

- Action and Expression (Activity 2)

Instructional Routines

Notice and Wonder (Warm-up)

Materials to Gather

- Materials from a previous activity: Activity 2
- Materials from a previous lesson: Activity 1

Lesson Timeline

Warm-up	10 min
Activity 1	20 min
Activity 2	20 min
Lesson Synthesis	10 min

Materials to Copy

- Revisit Data (groups of 1): Activity 1

Teacher Reflection Question

Think about a recent time from class when your students were confused. What did you do to support them in reasoning about their confusion together as a community of learners?