Lesson 13: Story Problems and Equations

Standards Alignments

Addressing   2.NBT.B.5, 2.OA.A.1
Building Towards   2.OA.A.1

Teacher-facing Learning Goals

- Make sense of equations that represent story problems.
- Represent and solve one-step story problems within 100.

Student-facing Learning Goals

- Let's make sense of equations and solve story problems.

Lesson Purpose

The purpose of this lesson is for students to make sense of equations and connect them to the quantities in different types of story problems. Students solve story problems of different problem types within 100 that require composing or decomposing a ten.

In previous lessons, students interpreted different types of story problems and matched them to diagrams.

In this lesson, students continue to connect story problems to diagrams and use their work to make sense of equations and symbols that represent the unknown number (MP2). Students solve different types of story problems within 100 using methods that make the most sense to them.

Access for:

♿ Students with Disabilities

- Representation (Activity 2)

🌐 English Learners

- MLR8 (Activity 1)

Instructional Routines

Card Sort (Activity 1), Which One Doesn't Belong? (Warm-up)

Materials to Gather

- Base-ten blocks: Activity 1, Activity 2
- Materials from a previous lesson: Activity 1

Materials to Copy

- Equations for Different Types of Word Problems (groups of 2): Activity 1

Lesson Timeline

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

Teacher Reflection Question

Students shared how they were thinking about using equations throughout today's lesson. What language did students use to make connections between their equations and the story context? What questions did students have for their peers about the equations they used?

Cool-down (to be completed at the end of the lesson)   🕐 5 min

Match the Equation

Standards Alignments

Addressing   2.OA.A.1

Student-facing Task Statement

1. Diego collected 72 seeds. 25 seeds are orange seeds. The rest are apple seeds. How many of Diego's seeds are apple seeds?

    Circle the **2** equations that match this story problem.

    A. $25 + ? = 72$
    B. $72 + 25 = ?$
    C. $72 - 25 = ?$
    D. $? + 72 = 25$

2. Solve the problem. Show your thinking. Draw a diagram if it helps.

Student Responses

1. A and C
2. 47. Sample response:

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        25              ?
   ┌────────┐ ┌──────────────────┐
  ┌──────────┬────────────────────┐
  │  orange  │       apple        │
  └──────────┴────────────────────┘
   └────────────────────────────┘
                 72
```