Lesson 15: Problem Solving with Line Plots

Standards Alignments

Addressing   5.MD.B.2, 5.NF.A.2, 5.NF.B.4

Teacher-facing Learning Goals

- Create line plots to display fractional measurement data, and use the information to solve problems.

Student-facing Learning Goals

- Let's solve problems using a line plot.

Lesson Purpose

The purpose of this lesson is for students to make line plots and solve problems using the data.

In this lesson, students use line plots to solve multi-step problems about the data presented in line plots. They add and subtract fractions and work together to solve problems about data using the Info Gap routine. The data for line plots can all be expressed using eighths, making the arithmetic accessible with the challenge being on partner communication to share the information needed to solve the problems. The second optional activity also uses data from a line plot and here students relate repeated addition of fractions to multiplication and estimate the sum of all of the data presented in the line plot.

This lesson has a Student Section Summary.

Access for:

⦿ Students with Disabilities

- Representation (Activity 1)

Instructional Routines

MLR4 Information Gap (Activity 1), Number Talk (Warm-up)

Materials to Copy

- Info Gap: Picking Fruit (groups of 2): Activity 1

Lesson Timeline

Warm-up	10 min
Activity 1	25 min
Activity 2	10 min
Lesson Synthesis	10 min
Cool-down	5 min

Teacher Reflection Question

As you finish up this section, reflect on the norms and activities that have supported each student in learning math. List ways you have seen each student grow as a young mathematician throughout this work. List ways you have seen yourself grow as a teacher. What will you continue to do and what will you improve on in the next section?

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

Reflect

Standards Alignments

Addressing   5.MD.B.2

Student-facing Task Statement

In this section, you added and subtracted fractions and worked with data on line plots. What did you get better at during this section?

Student Responses

Sample response: I can add fractions that don't have the same denominator.