## Lesson 16: Interpret Measurement Data

## Standards Alignments

Addressing 2.MD.D.9, 2.NBT.B. 5

## Teacher-facing Learning Goals

- Interpret data presented in a line plot.
- Represent numerical data in a line plot using an appropriate scale.


## Student-facing Learning Goals

- Let's represent and make sense of data in line plots.


## Lesson Purpose

The purpose of this lesson is for students to create and interpret a line plot.

The purpose of this lesson is for students to continue to consider what numbers to use to label the tick marks as they create line plots. Students will use data presented in a table to determine the longest and shortest length and then create a line plot and interpret the data to answer questions. When working with measurements with larger numbers, students learn to set up their number line to start with the shortest length. Students also answer questions that require calculations. This lesson has a Student Section Summary.

## Access for:

## (ta) Students with Disabilities

- Representation (Activity 1)
© English Learners
- MLR8 (Activity 2)


## Instructional Routines

Number Talk (Warm-up)

## Lesson Timeline

| Warm-up | 10 min |
| :--- | :--- |
| Activity 1 | 20 min |

## Materials to Copy

- Line Plot Template (groups of 1): Activity 1


## Teacher Reflection Question

In another unit, students are introduced to the number line. They learn how to represent numbers and equations on the number line.

| Activity 2 | 15 min | How will their work with line plots support that <br> learning? |
| :--- | ---: | :--- |
| Lesson Synthesis | 10 min |  |
| Cool-down | 5 min |  |

Cool-down (to be completed at the end of the lesson)
(1) 5 min

Diego's Art Project

## Standards Alignments

## Addressing 2.MD.D. 9

## Student-facing Task Statement

Diego collected sticks for an art project and measured them. His data is shown in this line plot.
Diego's Sticks

|  |  | $\times$ |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\times$ |  | $\times$ |  |  | $\times$ |  |
| $\times$ |  | $\times$ | $\times$ | $\times$ |  | $\times$ |
| $\times$ |  | $\times$ |  |  |  |  |
| 20 | 21 | 22 | 23 | 24 | 25 | 26 |
|  |  | 27 | 28 |  |  |  |
|  | length (centimeters) |  |  |  |  |  |

Answer the questions based on Diego's line plot.

1. How many sticks collected were 22 cm ?
2. How many sticks did Diego collect?
3. How long was the longest stick?
4. How many sticks were 21 cm ?

## Student Responses

1. 3 sticks were 22 cm long.
2. Diego collected 10 sticks.
3. 28 cm
4. 0 . There are no Xs at 21 , so none of the sticks measured 21 cm .
