

# MP3d-Represent And Interpret Data On Line Plots

Content Area: **Mathematics**  
Course(s): **Math 4 Resource Room**  
Time Period: **Marking Period 3**  
Length: **MP3 Topic 11 11-1 to 11-4**  
Status: **Published**

## Essential Questions

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- How can you read data on a line plot?
- How can you make a line plot?

## Big Ideas

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- **Line Plots:** Students read and interpret line plots and use data from line plots to solve problems involving addition and subtraction.
- **Outliers:** Students consider outliers in data sets.
- **Use Fractions in Data Problems:** Students solve problems involving adding and subtracting fractions and mixed numbers with like denominators.

## Cross-Curricular Integration

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**Integration Area:** Science

4-ESS1-1 Identify evidence from patterns in rock formations and fossils in rock layers to support an explanation for changes in a landscape over time.

Activity:

Students will use the internet and other sources to learn about earth formation. Create a line plot of different land formations that are found within a specific state of the students choosing. The following landforms can be used; canyons, bodies of water, plateau, etc.

## Enduring Understandings

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**Number and Operations—Fractions**

4.NF.A.1 Explain why a fraction  $\frac{a}{b}$  is equivalent to a fraction  $\frac{n \times a}{n \times b}$  by using visual fraction models, with attention to how the number and size of the parts differ even though the two fractions themselves

are the same size. Use this principle to recognize and generate equivalent fractions.

4.NF.B.3d Solve word problems involving addition and subtraction of fractions referring to the same whole and having like denominators, e.g., by using visual fraction models and equations to represent the problem.

### **Measurement and Data**

4.MD.B.4[M] Make a line plot to display a data set of measurements in fractions of a unit ( $\frac{1}{2}$ ,  $\frac{1}{4}$ ,  $\frac{1}{8}$ ). Solve problems involving addition and subtraction of fractions by using information presented in line plots.

### **Mathematical Practices Focus**

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3. Construct viable arguments and critique the reasoning of others