

Class Survey and Data Report

3rd Grade Math Project · Data & Surveys

Grade 3 · Advanced

Name: _____ Date: _____ Class: _____

The Challenge

You are the class data team! Collect lunch votes (no names), make graphs, and measure pencils for a line plot.

You will make: Data Report Poster

I can…

- I can draw a scaled picture graph and bar graph from data.
- I can solve one- and two-step how-many-more and how-many-less problems with a graph.
- I can measure to the nearest quarter inch and make a line plot.

Materials

- Pencil
- Ruler
- Grid paper

Steps

1. Part 1: Survey Data
2. Part 2: Bar Graph
3. Part 3: Pencil Line Plot
4. Part 4: Choose the Scale
5. Check your work and share your data report poster.

Part 1: Survey Data

Use the sample data in the table (or your own class votes).

Lunch	Votes
Pizza	14
Tacos	9
Pasta	6
Salad	3

1. In a picture graph, each ★ = 2 votes. How many ★ for Pizza?

2. How many ★ for Tacos?

Part 2: Bar Graph

Make a bar graph with a scale that counts by 2s.

3. How many more votes for Pizza than for Salad?

4. How many more votes for Pizza than for Tacos and Salad together?

Part 3: Pencil Line Plot

Measure pencils to the nearest quarter inch. Sample lengths: $3\frac{1}{4}$, $3\frac{1}{2}$, 4, $3\frac{1}{2}$, $4\frac{3}{4}$, $3\frac{1}{4}$, 4, $3\frac{1}{2}$ inches.

5. Which length appears most often?

6. How many pencils are longer than $3\frac{1}{2}$ inches?

7. How should the line plot scale be marked?

Part 4: Choose the Scale

A bigger school voted: Pizza 140, Tacos 95, Pasta 60, Salad 35.

8. Choose a key for a picture graph so every number uses whole or half symbols. Explain.

9. How many more votes for Pizza than Pasta and Salad together?

Extension Challenge

Make a second bar graph of the same data with a scale that counts by 4s. Which bars end between grid lines?

How your project will be scored

Learning target	4 Exceeds	3 Meets	2 Approaching	1 Beginning
I can draw a scaled picture graph and bar graph from data.	Correct and complete; explains how	Mostly correct	Partly correct	Not yet
I can solve one- and two-step how-many-more and how-many-less problems with a graph.	Correct and complete; explains how	Mostly correct	Partly correct	Not yet
I can measure to the nearest quarter inch and make a line plot.	Correct and complete; explains how	Mostly correct	Partly correct	Not yet
I can explain my thinking with pictures, numbers and words.	Clear for every part	Clear for most parts	Some explanation	Little explanation
My data report poster is complete and matches my math.	Complete, neat, accurate	Complete	Partly complete	Not complete