

Tally Chart

What is the most popular Superpower in our class?

Superpowers	Tally	Total
Invisibility		
Super Strength		
Super Speed		
Flight		

Picture graph

Title: Most Popular Superpower

Invisibility	
Super Strength	
Super Speed	
Flight	

Key: means 1 vote

Mathematical Standards and Practices

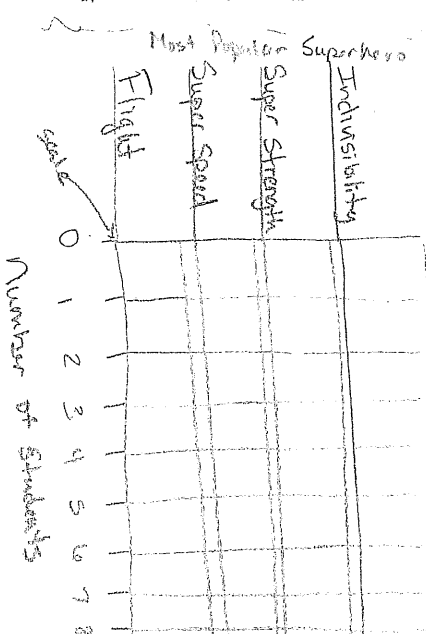
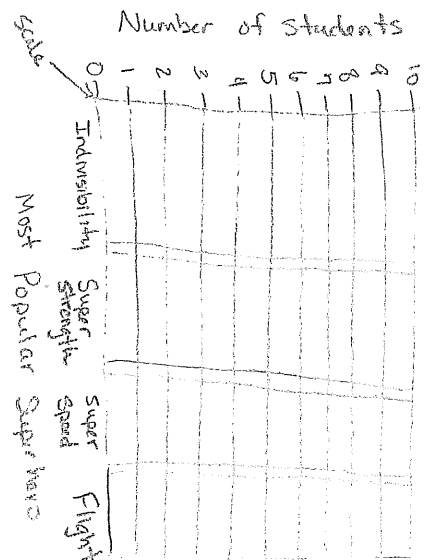
- 1) We will draw picture graphs and bar graphs to represent data by attending to precision.
- 2) We will use appropriate tools when generating measurement data and show the data on a line plot.

Data collection of facts

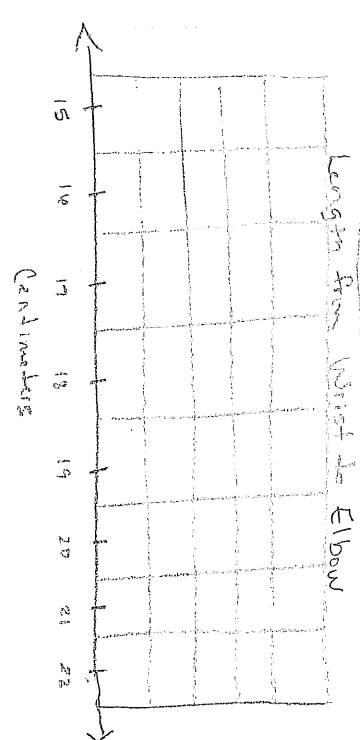
Vertical ↓

Bar graphs

Horizontal ↔



Line Plot



What we know about data...

Inquiry

What we want to learn about data...

UNIT PLANNING TOOL

Planning Focus: Addition and Subtraction with word problems **Module(s)/Unit(s)** Stepping Stones Modules 6 & 9 Data
CCSSM:

2.MD.D.10: Draw a picture graph and a bar graph (with single-unit scale) to represent a data set with up to four categories. Solve simple put-together, take-apart, and compare problems using information presented in a bar graph.

2.MD.D.9: Generate measurement data by measuring lengths of several objects to the nearest whole unit, or by making repeated measurements of the same object. Show the measurements by making a line plot, where the horizontal scale is marked off in whole-number units.

Mathematical practices being emphasized:

- Use appropriate tools strategically. (#5)
- Attend to precision. (#6)

Essential Questions

- How do we use a survey to collect data?
- Why is it important to be able to organize and graph data?
- How does a line plot help me share my data?
- How can we use a picture graph, bar graph, chart, or table to organize data and answer questions?

Key Concepts

- Draw picture graphs and bar graphs that represent a data set with up to four categories
- Solve simple put-together, take-apart, and compare problems using the data presented in graph
- Generate measurement data
- Show measurements in a line plot

Visual Models/ Algorithms/ Diagrams for Compendium

The visual models include:

- A bar graph with four bars of varying heights.
- A picture graph with four categories represented by different symbols.
- A Tally Chart with two columns: the first has four groups of three vertical lines each, and the second has two groups of three vertical lines each.
- A table with a title 'Title:' and three rows of data represented by symbols.
- A line plot with a horizontal axis and several 'x' marks above it.

Pre Assessment



Write the number 7. Show me how to write 7 with tally marks.

Favels to Cream Pies

Chocolate	🍦	🍦	🍦	🍦	🍦	🍦	🍦	🍦	🍦	🍦	
Vanilla	🍦	🍦	🍦	🍦							
Strawberry	🍦	🍦	🍦	🍦	🍦	🍦	🍦	🍦	🍦	🍦	
Cherry	🍦	🍦	🍦	🍦	🍦	🍦	🍦	🍦	🍦	🍦	
	1	2	3	4	5	6	7	8	9	10	11



How many students voted for strawberry?



How many more students voted for cherry than vanilla?



How many chocolate and vanilla votes are there altogether?

Connections (Real World Applications)

Students use the gathering of data on a daily basis. Watch for examples of real problems that can be highlighted.

- *How many more boys than girls are here today?*
- *How many more students like math more than science?*
- *Where do we want to go on a field trip?*
- Record your scores from your pre and post test in your data journal. (student progress)
- How did we do on our last I-ready or I-station test?
- Any survey
- Value or cost of items

Language Functions/Structures

Functions: Explain. Analyze, Interpret, Compare.

Structures:

How many more _____ than _____?

How much more _____ than _____?

The graph tells us _____.

How many fewer _____ than _____.

How many _____ and _____ are there altogether?

The _____ and _____ have the same amount as _____.

Vocabulary

survey	bar graph	line plot	data
tally marks	horizontal	picture graph	key
scale	vertical	categories	altogether
more than	fewer than		

Focus and Motivation

Brain Pop Jr. – Tally Charts and Bar Graphs
Pictographs

Chants – Data Here, There (DLeNM chant bank)

Literature – *Lemonade for Sale* by Stuart J. Murphy
Follow an Ice-cream Cone Around the World by Neale S. Godfrey
Talley O-Malley by Stuart J. Murphy

Activity – Any type of surveys conducted by students and the creation of graphs (real objects or pictures)