Topic 19: Graphs and Data

Objective: We can show our data with tables and graphs. Tables usually come first, then we make graphs based on the table.

Tables

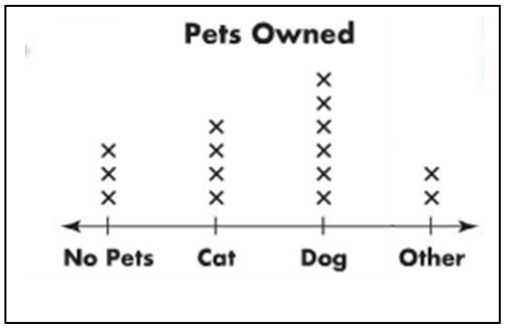
Frequency Table

- Uses #s to show how many times a response occurs
- Title of table
- Titles of categories
- At least 2 categories/columns

Pets Owned	
Type of Pet	Number of Students
No pets	3
Cat	4
Dog	6
Other	2

Line Plot

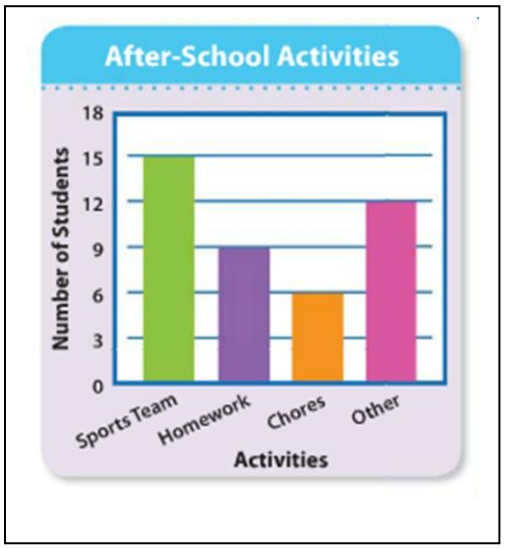
- Uses X's to show results (on X-axis)
- Title
- May need a key because one X means more than one response
- Easy to read
- Don't need a y-axis



Graphs

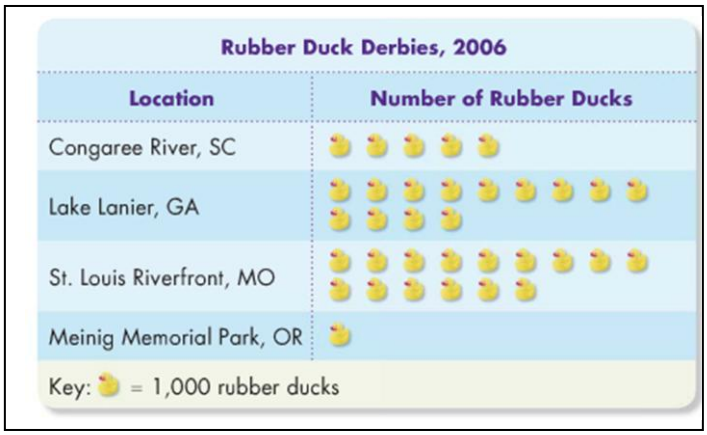
Bar Graph

- Title
- X and Y axis titles
- Bars
- Scale (usually on y axis)
  ***All are equal intervals**
- Used to graph categories (labeled on X-axis)



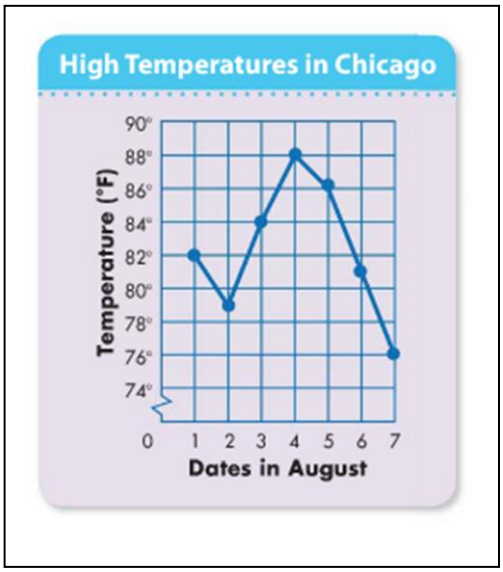
Pictograph

- Pictures and categories
- titles for pictures and categories
- Key for the picture and interval (usually at the bottom)
- Title
- Usually 2 columns
    - Category
    - Picture



Line Graph

- Plot the point (dot)
- Make line segments to connect the dots
- X and Y axis
- Main Title
- X and Y axis titles
- CHANGE OVER TIME! (Time is ALWAYS on X-Axis)



<u>Mode, Median, and Range</u>

Mode: the number (or data) that occurs the most often

Median: the number in the middle of a set of numbers

1. Always put the numbers in order from least to greatest
2. Cross out one from the front, one from the back until you reach the middle
3. Circle the middle number- that is your median

Range: difference (subtract) between the greatest and least values