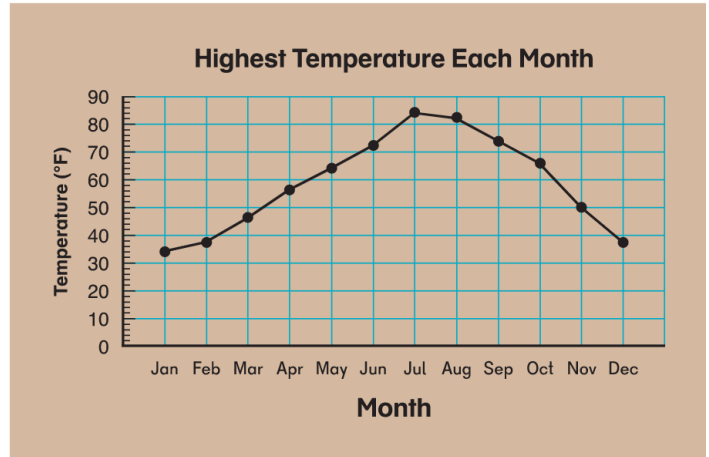


Home Connection

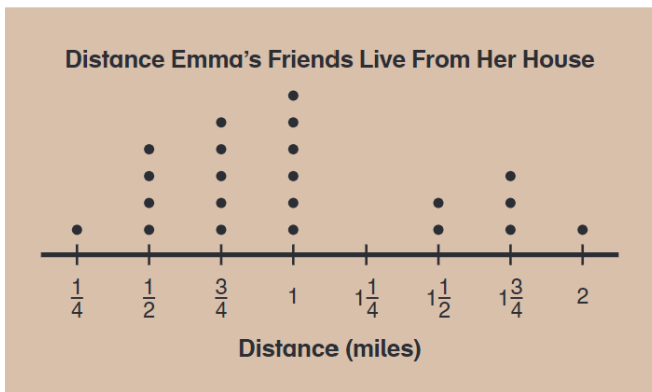
In this chapter, students will learn how to read and interpret data in line graphs and line plots. They will also create line graphs from data.

Line Graphs

Line graphs are used to show change over time. The horizontal axis usually shows the time periods, and the vertical axis shows the data collected for those time periods. Data points are recorded on a grid, and then those points are connected via straight lines. These graphs are helpful for showing trends over time.



Line Plots



Line plots, also known as dot plots, show frequency of data values along a number line.

For example, on the line plot, you can see that more friends live 1 mile away from Emma’s house, than any other distance.

The scale on a line plot usually starts with the smallest value and ends at the greatest value on the number line.

Tips for reading graphs

1. Read the title for the graph
2. Read the labels on the horizontal axis and the vertical axis (horizontal only if reading a line plot)
3. Students should then ask themselves, “What is the data showing me?”

What Can We Do At Home?

Engage your student in creating data tables at home and making line graphs and/ or line plots from the data. Some sources of data you might use...

- Pour a cup of M&Ms on the table. Have your student create a table of how many red, yellow, blue, etc... Then have your student create a line graph or line plot of the data.
- Sort a handful trail mix into individual ingredients, sunflower seeds, cranberries, chocolate chips, peanuts, etc. Create a data chart showing how many of each ingredient is in a handful of trail mix. Create a graph showing the information.
- On the next trip to the grocery store, have your student tally how many red, blue, and white cars he/she sees. Create a data chart from that information and then graph.
- Have your student use a weather app on your phone to track the high temperature over the course of a week and then graph to see the trend of the temperature.



Questions to ask your child as they complete these activities:

- How could you arrange your data so that it is easy to read?
 - What would be best to show this data- a line graph or a line plot? Or could you show it either way?
 - What would be a good title for your graph?
 - If a student is creating a line graph- How would you label the horizontal and vertical axes?
 - If a student is doing a line plot, ask them what values would go on the number line, and what data would be plotted by dots above the values.
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