

Maps, Graphs, and Charts Concepts

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BASICS OF GRAPHS AND CHARTS

The *Atlas* uses numerous graphs and charts to convey information.

Graph Types and Uses

There are many types of charts and graphs, some of which are common like **column charts**, **bar charts**, **line graphs**, and **pie charts**. Others are more specific such as **stock charts**, **surface charts** and **area charts**. Below are a few you will see often. Charts can also be **stacked** or **clustered**.

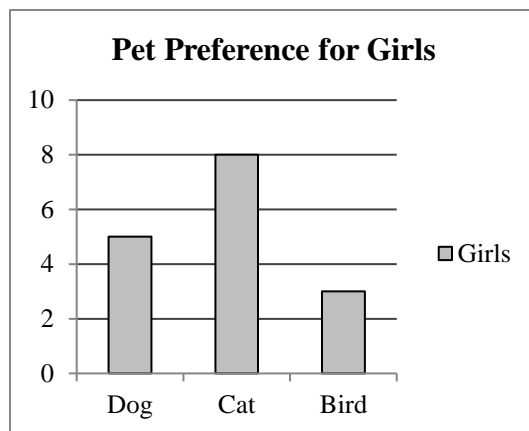


Fig. 1 - **Column charts** often depict data differences over time or are used for comparing different categories. Girls like cats most, what do girls like least?

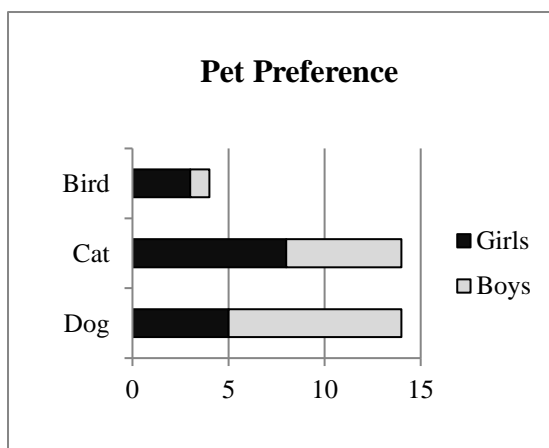


Fig. 2 - A **bar chart** is simply a horizontal column chart. The one above is also stacked changing its name to a **stacked bar chart**. Stacked charts are useful for comparing the contribution of each part to a total such as how many students prefer Dogs or Cats or Birds. In Figure 2 it is easy to see that more girls like birds than boys. What do boys like most? What do boys like least?

ELEMENTS OF GRAPHS AND CHARTS

Graphs and charts are composed of several parts. Once you learn the basic layout of a graph or chart, it will be easier to understand graphs and charts that are presented in a slightly different format.

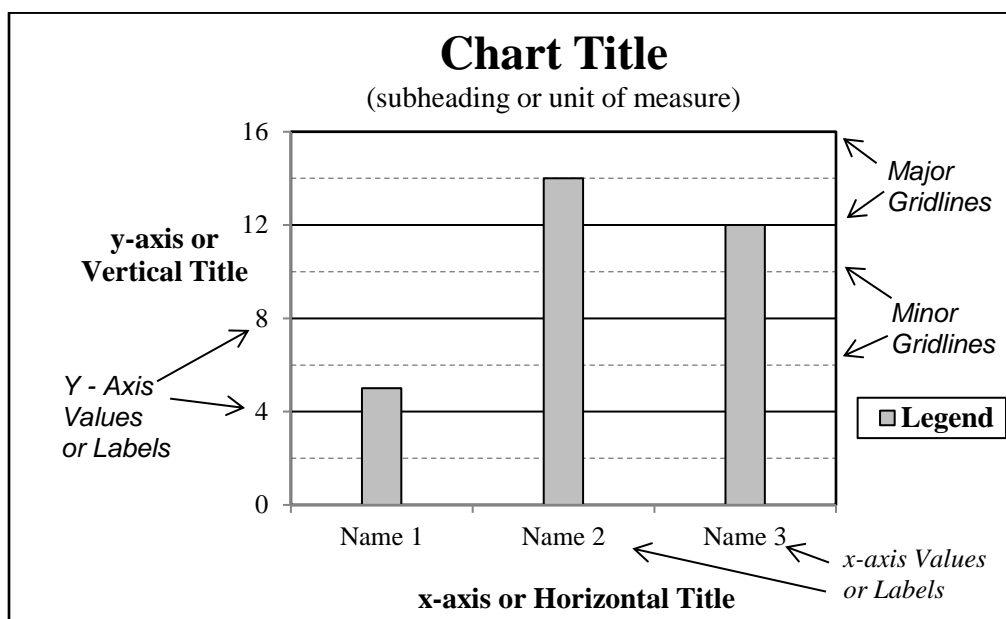


Fig. 6 Basic elements of a chart or graph

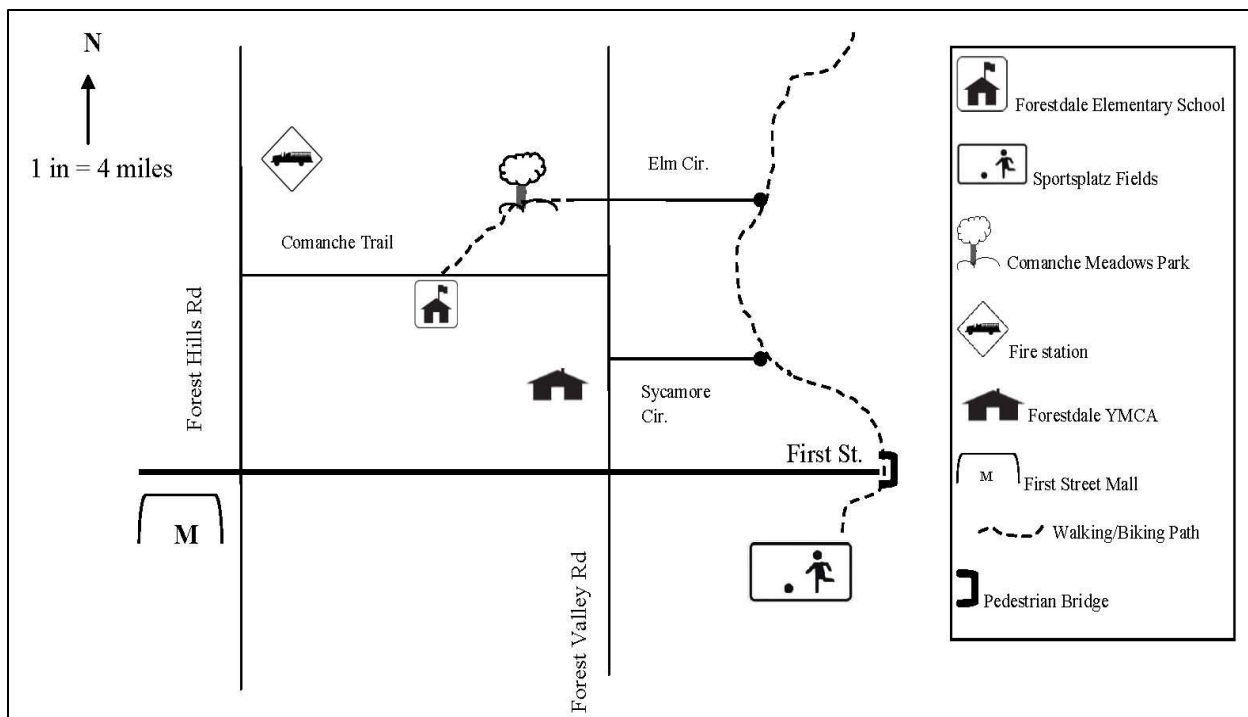
Title - The title tells you about the graph or the information it is trying to convey. The graphs in the previous section were all trying to let the reader know which pet category (Dog, Cat, Bird) was preferred most by boys and which was preferred most by girls. The title may also convey units or other information about the chart. Never forget to read the title and think about what it says before you jump right into reading the data.

y-axis - The y-axis refers to the line that is vertical. It is positioned up and down like the stem of the capital Y. The scale corresponds to the major gridlines – the minor gridlines will not show a value. The label of the axis sometimes will convey units. The units could be in the "100s" or in "U.S. dollars," etc., so reading the y-axis vertical title is important in order to understand how many of something in which you are dealing.





x-axis - The x-axis is horizontal and its label or title will generally appear on the bottom of the chart. Most often the label is centered between the gridlines, but it is important to check this since sometimes the label is not as obvious.

EXERCISE 8 - Legends and Direction

Use the map below to answer the questions.



1. Match the following symbols and descriptions

- A. _____ 
- B. _____ 
- C. _____ 
- D. _____ 

1. Bridge
2. Park
3. Mall
4. School

2. Is there a bicycle path from the Park to the School? _____
3. In what direction is the fire station from the Sportsplatz Fields? _____
4. How many miles is it, by road, from the school to the fire station? _____
5. Using the bike path, about how far is it from Elm Cir. to Sycamore Cir.? _____