

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**. Listed below are a few you will see most often. Charts can also be **stacked** or **clustered**.

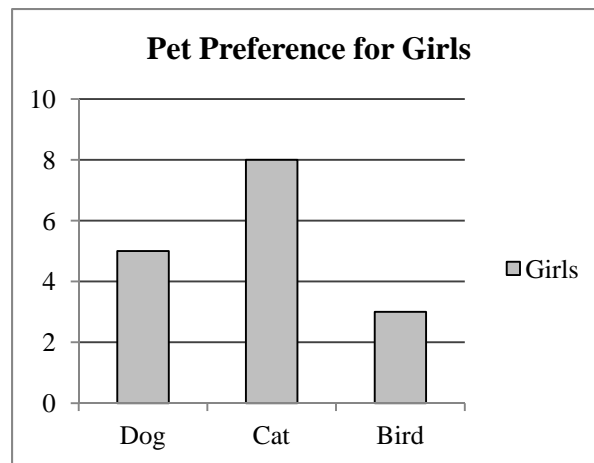


Fig. 1 - **Column charts** often depict data differences over time or are used for comparing different categories. Girls like cats most, what do girls like least?

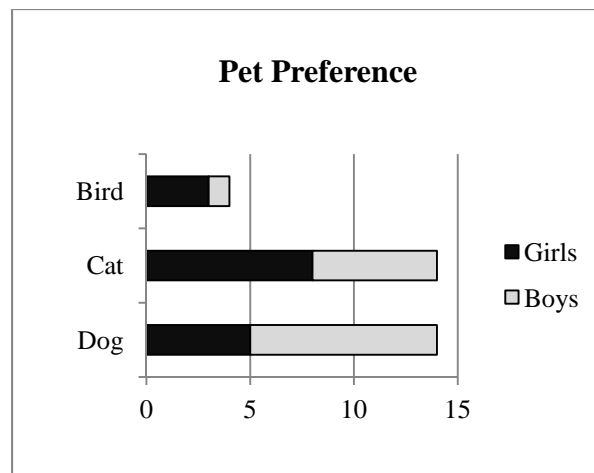


Fig. 2 - A **bar chart** is simply a horizontal column chart. The one above is also stacked changing its name to a **stacked bar chart**. Stacked charts are useful for comparing the contribution of each part to a total such as how many students prefer Dogs or Cats or Birds. In Figure 2 it is easy to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

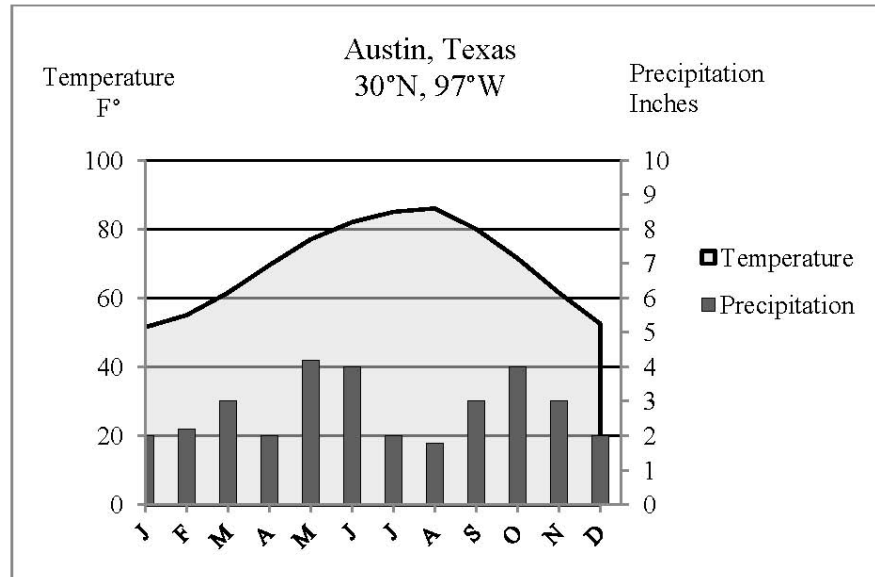


Fig. 27 –This climograph for Austin, Texas, uses two y-axes, one for temperature and one for precipitation.

What does Figure 27 say about Austin, Texas? The hottest months appear to be in mid- to late-summer, July and August. There appears to be two times of year with precipitation maximums, late-spring to early-summer, and late-fall to early-winter, with some rain throughout the year. Using the information from your Atlas, how would you classify Austin's climate?

According to the climograph, Austin shows seasonal temperature differences, but they are not extreme. The winter is mild, with some periods of slightly increased rainfall. The city is drier during summer. There is not an absolute line, however, that separates climate zones. Climate does not have a "do not cross this line" type of boundary. Austin has characteristics of more than one zone.

Find the coordinates for Austin in the Figure 27 climograph chart. Now, try finding that place on the Climate map on [pages 22-23](#). Austin appears to be on the border of two climate zones -- Steppe and Humid Subtropical. Using the North America climate map on [page 49](#), Austin appears to be located in the Humid Subtropical zone.

EXERCISE 11 - ATLAS: World Facts and Trends

Use the maps and charts on pages 18-43 and the World Political Map on pages 8-9 to answer the following questions

1. In which direction does the ocean current north of the point $23\frac{1}{2}^{\circ}$ N, 135° W flow, North, South, East or West? _____
2. How many Metric Tons of fish are caught off the east coast of South America?

3. What is the temperature range in Fahrenheit of Southern Australia in July?

4. The climate for most of Alaska can be described as _____
5. How much of the world's energy is derived from natural gas? _____
6. Who leads the world in uranium production? _____
7. More areas in Africa produce gold than zinc. True or false? _____
8. Where is the risk of acid rain greater, Australia, North Africa, or Southeast United States? _____
9. What percentage of the people living near 4° S, 18° E have access to treated drinking water? _____
10. Approximately how many calories of animal products does a person in the United States consume daily? _____
11. In which two nations is the adult literacy rate less than 40% for both men and women?
_____ and _____
12. What commodity makes up more than 90% of Kuwait's export economy?

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