

10 Using Graphics

5.6 a 5.7 b

As you saw with the idea web in Lesson 7, it can be easier to show information with **graphics**, in visual form, instead of plain text. There are many kinds of graphics, most of which use a **title** or **caption** to describe what they are or where they came from.

- **Pictures**, such as drawings or photos, show what things look like. As the old saying goes, “a picture is worth a thousand words” of description.
- **Maps** show where things are. They use a **direction arrow** or **compass** to mark directions. They use a **scale** to show how distance on the map reflects distance in the real world. Some maps use special symbols, which are explained in a **legend** or **key**.
- **Charts** and **diagrams** show how things are related. For example, a flow chart might list the steps involved in making video games. A diagram might show the parts of a television. Throughout Unit III, you will work with more examples of charts and diagrams that help you make sense of what you read.
- **Tables** list data in the order the author thinks is important. For example, a list of Virginia counties might be in alphabetical order, or in order by size, population, or wealth.
- **Graphs** show data visually. They may use lines, bars, circles, or other figures, but they have one goal in common: making a relationship or pattern in the data clear. For example, a line graph might show how average temperatures have changed over time. A circle graph might show how much of a typical student’s day is spent on each subject.

Example

The map on page 23 supports the idea that people in Goma are in danger from the Nyiragongo volcano by—

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|--|--|
| <p>(A) showing how lava flows through the volcano.</p> | <p>(C) showing the plumes of smoke and ash the volcano sends out.</p> |
| <p>(B) showing how close Goma is to the volcano.</p> | <p>(D) showing which countries border the Democratic Republic of the Congo</p> |

DISCUSS

- (A) The map does not show how the lava flows. A **diagram** would show that process better than a map would.
- (B) Maps show where things are. Showing how close Goma is to the volcano emphasizes the danger people there are in.

- (C) The plumes are shown by the **picture** on the page before the map. Maps are not as good as pictures at showing complicated events like that.
- (D) Showing where countries are is what a map does. But that information does not help us understand *why* Goma is in danger.

Ask Graphics can be a lot of work to make, so authors are usually careful about using them. As you figure out a graphic, ask yourself how it helps the author present or support her ideas.

Example

Use the table below to answer the question and the *Connections* that follow.

Selected Recent Volcanic Eruptions in the United States		
Volcano	Location	Dates
Spurr	Alaska	1992
Veniaminof	Alaska	1983-1984, 1993-1995, 2004-2005
Pavlof	Alaska	1980, 1981, 1983, 1986-1988, 1996-1997
Shishaldin	Alaska	1986-1987, 1995-1996, 1999
Kilauea	Hawaii	1983-present
Mauna Loa	Hawaii	1984
Mt. St. Helens	Washington	1980-1986, 2004-2005

Source: U.S. Geological Survey

The entries on the table are listed according to—

- (A) year of eruption.
- (B) alphabetical order, by name of volcano.
- (C) alphabetical order, by location.
- (D) frequency of eruptions.

D I S C U S S	(A) Table entries should be in a logical order. These dates do not begin with the earliest or latest and go in order.	(C) Skimming the "Location" column confirms that these entries are alphabetical.
	(B) Skimming the column marked "Volcano" quickly tells us that the names are not listed alphabetically.	(D) This choice seems unlikely. Some of the entries with the most eruption dates are in the middle of the table.



Connections The author chose to present the information in the table in a particular order. Why might the author have chosen this way to arrange the table?
