

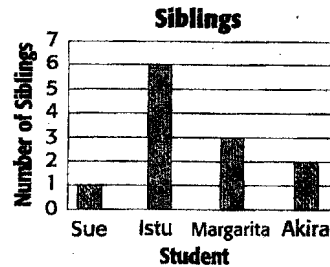
## Study Guide and Intervention

### Bar Graphs and Histograms

A **bar graph** is one method of comparing data by using solid bars to represent quantities. A **histogram** is a special kind of bar graph. It uses bars to represent the frequency of numerical data that have been organized into intervals.

**EXAMPLE 1** **SIBLINGS** Make a bar graph to display the data in the table below.

Student	Number of Siblings
Sue	1
Isfu	6
Margarita	3
Akira	2

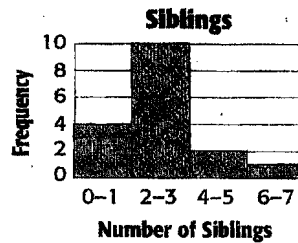


**Step 1** Draw a horizontal and a vertical axis. Label the axes as shown. Add a title.

**Step 2** Draw a bar to represent each student. In this case, a bar is used to represent the number of siblings for each student.

**EXAMPLE 2** **SIBLINGS** The number of siblings of 17 students have been organized into a table. Make a histogram of the data.

Number of Siblings	Frequency
0-1	4
2-3	10
4-5	2
6-7	1



**Step 1** Draw and label horizontal and vertical axes. Add a title.

**Step 2** Draw a bar to represent the frequency of each interval.

### EXERCISES

1. Make a bar graph for the data in the table.

Student	Number of Free Throws
Luis	6
Laura	10
Opal	4
Gad	14

2. Make a histogram for the data in the table.

Number of Free Throws	Frequency
0-1	1
2-3	5
4-5	10
6-7	4

# Practice: Skills

## Bar Graphs and Histograms

**ZOOS** For Exercises 1 and 2, use the table. It shows the number of species at several zoological parks.

1. Make a bar graph of the data.

**Animal Species in Zoos**


Los Angeles	350
Lincoln Park	290
Cincinnati	700
Bronx	530
Oklahoma City	600

2. Which zoological park has the most species?

**ZOOS** For Exercises 3 and 4, use the table at the right. It shows the number of species at 37 major U.S. public zoological parks.

3. Make a histogram of the data. Use intervals of 101–200, 201–300, 301–400, 401–500, 501–600, 601–700, and 701–800 for the horizontal axis.

**Animal Species in Zoos**


200	700	290	600	681
300	643	350	794	400
360	600	134	200	800
305	384	500	330	250
530	715	303	200	471
465	340	347	300	708
184	800	375	350	450
337	221			

4. Which interval has the largest frequency?

**HEALTH** For Exercises 5 and 6, use the graph at the right.

5. What does each bar represent?
6. Determine whether the graph is a bar graph or a histogram. Explain how you know.

