

1-10 Gathering and Recording Data

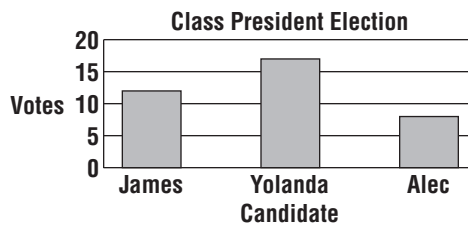
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The results of an opinion poll are often reported using **statistics**. Statistics involves collecting, analyzing, and presenting data. Since it would be impossible to ask everyone in the country their opinion for every opinion poll, smaller groups, called **samples**, are used. Samples are assumed to be representative of the entire population. This is best achieved if the sample is chosen at random.

Statistical data are displayed in many ways. A **frequency table** shows how many times each event in the data occurs. For example, if your class is voting on three people for class president, a frequency table would show the number of votes each person received. A **bar graph** is another way to display data. Using the same class president example, a bar graph would show bars representing the number of votes each candidate received.

EXAMPLES

Class President Election	
Candidate	Votes
James	12
Yolanda	17
Alec	8



PRACTICE

The table at the right shows the weights in ounces of newborns in a hospital nursery.

1. Make a frequency table for the infant weights. Use intervals of 10 (for example, 90–99).
2. In what interval do most of the infant weights fall?
3. Make a bar graph of this data.

119 oz	118 oz	101 oz
113 oz	124 oz	122 oz
106 oz	105 oz	98 oz
117 oz	110 oz	128 oz
133 oz	134 oz	90 oz
108 oz	115 oz	130 oz



4. Standardized Test Practice

Eight cities were graded in four categories. Which category received the lowest grades?

- A Personnel
- B Information
- C Management
- D Overall

City	Personnel	Information	Management	Overall
Phoenix	A	A	A	A
New Orleans	F	B	D	C
Minneapolis	B	A	B	B
Long Beach	C	B	B	B
Philadelphia	B	B	B	B
Houston	C	C	B	B
Denver	B	C	B	B
Chicago	C	B	C	B

Answers: 1. See Answer Key. 2. 110–119 3. See Answer Key. 4. A