

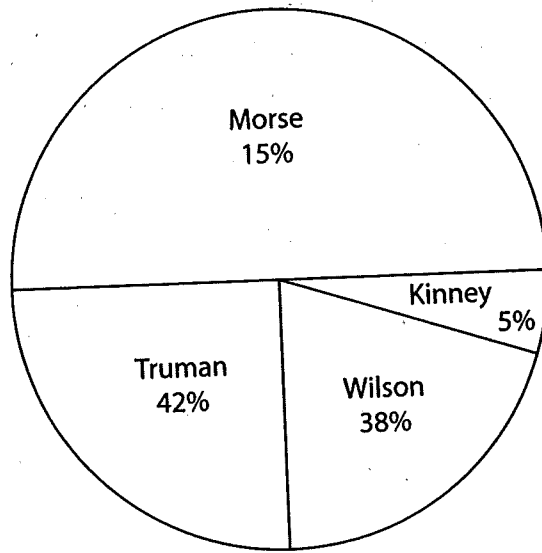
12 Representing Data

Sometimes graphs can be used to make data look or sound better by presenting information in misleading ways. For example, advertisements might present information in ways that make consumer products more appealing. In politics, information can be used in positive or negative ways to make a candidate look better or worse.

In the exercises below, look at each graph closely to see if it might be misleading. Then answer the questions that follow.

- The circle graph below shows the results of a voters' poll. Voters were asked which candidate they planned to vote for in the next election.

Percentage of Voters Who Plan to Vote for Each Candidate



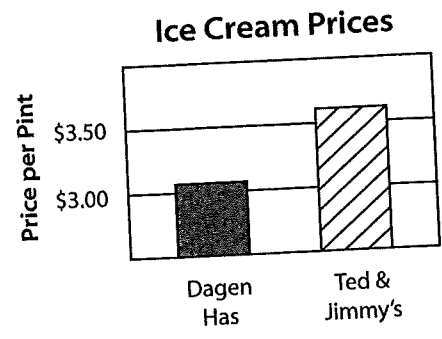
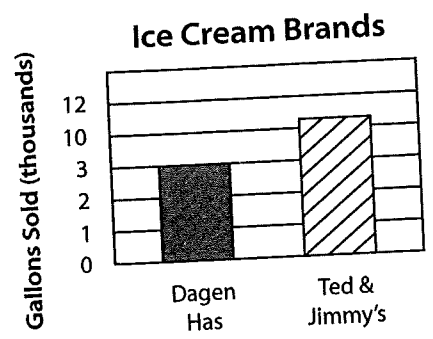
- According to this graph, which candidates are leading the race?

- How is this graph misleading?



Representing Data (continued)

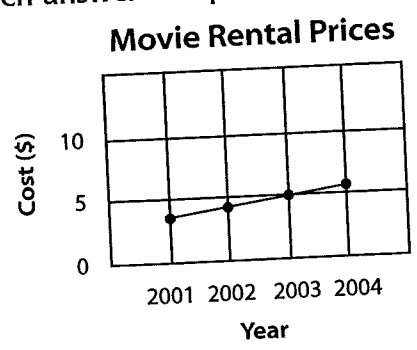
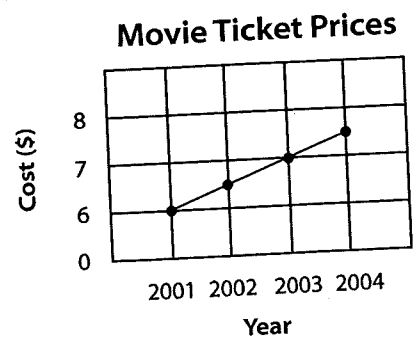
2. These two graphs compare the sales and prices of two brands of ice cream. Think about what these graphs show. Then answer the questions.



a. What does the "Ice Cream Brands" graph suggest about Dagen Has ice cream, and how is the graph misleading?

b. What does the "Ice Cream Prices" graph suggest about Ted & Jimmy's ice cream, and how is the graph misleading?

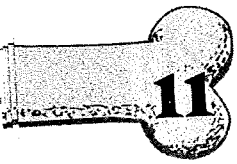
3. These line graphs show changes in the costs of movie tickets and movie rentals from 2001 to 2004. Take a look at the graphs. Then answer the questions.



a. According to these graphs, how did the costs of movie tickets and movie rentals change from 2001 to 2004?

b. How are these graphs misleading?

Scholastic Teaching Resources



11 Constructing Graphs

Let's try making some charts and graphs! Each kind of display can be used to present certain kinds of information. For each exercise below, read the information given. Choose the best kind of display to present the information and construct your display. Be sure to label your displays clearly and correctly.

Exercise 1: Teens' Time

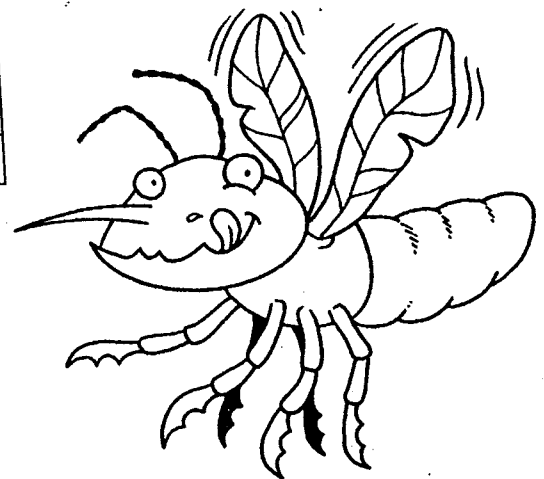
Claudia took a survey to see what teenagers do in their spare time. Here are the results of the survey. Construct a graph to show these results.

Activity	Amount of Time Spent
Playing sports	25%
Listening to music	10%
Playing video games	15%
Talking on phone	10%
Chilling	25%
Watching TV	15%

Exercise 2: Bug Bites

Timothy made a tally chart to keep track of how many bug bites he got during a camping trip. Make a display to show these results.

Day	Bug Bites
1	✓ ✓ ✓ ✓ ✓ ✓ ✓
2	✓ ✓ ✓ ✓
3	✓ ✓ ✓ ✓ ✓ ✓ ✓
4	✓ ✓ ✓ ✓ ✓
5	✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓

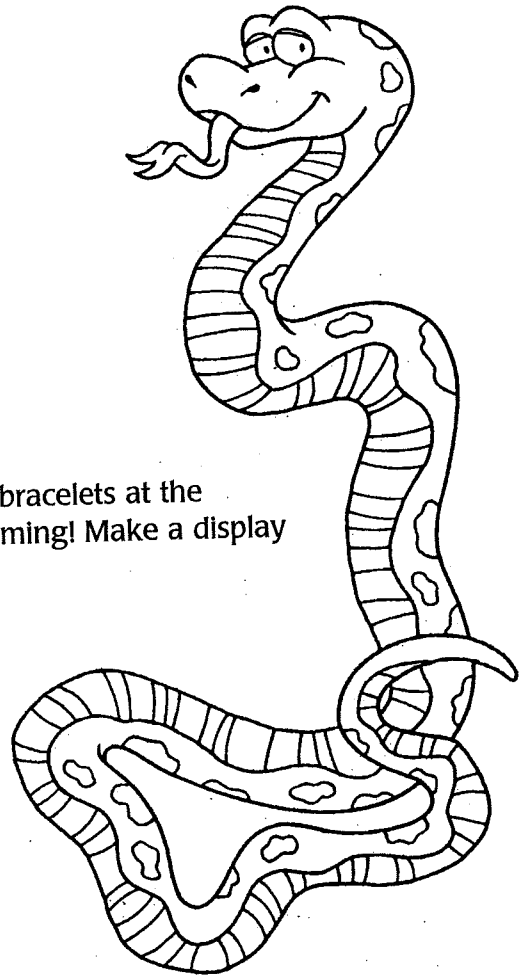


Constructing Graphs *(continued)*

Exercise 3: Exotic Pet Sales

Margo's Pet Store sells exotic and unusual pets. The chart below shows how many pets Margo sold last month. Make a display to present these data.

Type of Pet	Number Sold
Lizards	12
Ferrets	6
Snails	5
Fighting fish	8
Snakes	9
Talking birds	11



Exercise 4: Friendship Bracelets

Tori and Megan started making and selling friendship bracelets at the beginning of the summer. Before long, sales were booming! Make a display to show their sales record for the first six weeks.

Week	Sales
1	\$25
2	\$30
3	\$45
4	\$80
5	\$75
6	\$90