

Lesson 9.1 Intro to Statistics

Statistics: collecting, organizing, analyzing, and interpreting data.

Statistical Question: a question for which you do not expect to get a single answer.

Statistical Question

Non-Statistical Question

Example 1: Answering a Statistical Question

You conduct a science experiment on house mice. Your teacher asks you, “What is the weight of a mouse?”

a. Is this a statistical question? Explain.

Example 1: Answering a Statistical Question (continued)

You conduct a science experiment on house mice. Your teacher asks you, “What is the weight of a mouse?”

- b. You weigh some mice and record the weights (in grams) in the table. Display the data in a dot plot. Identify any clusters, peaks, or gaps in the data.

Weights (grams)			
20	19	21	20
18	20	27	21
28	23	20	19
20	21	18	27
19	22	21	20

Example 1: Answering a Statistical Question (continued)

c. Use the distribution of the data to answer the question.

Example 1: On Your Own

1. The table shows the ages of some people who retired early. You are asked, “How old are people who retire early?”

Ages			
60	61	59	60
62	56	64	59
58	60	61	60
59	60	58	61

- a. Is this a statistical question? Explain.

- b. Display the data in a dot plot. Identify any clusters, peaks, or gaps in the data.

- c. Use the distribution of the data to answer the question.

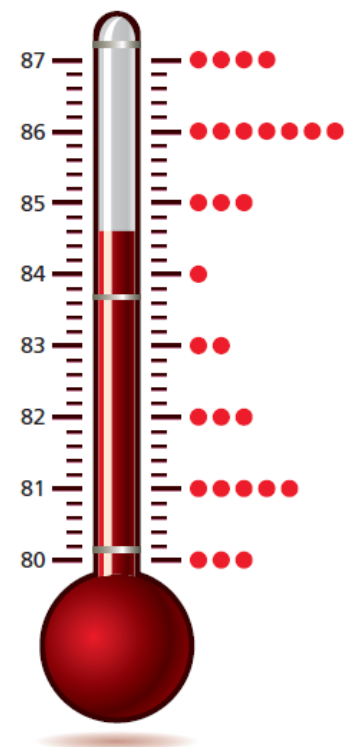
Example 2: Using a Dot Plot

You record the high temperature every day while at summer camp in August. Then you create the vertical dot plot.

a. How many weeks were you at summer camp?

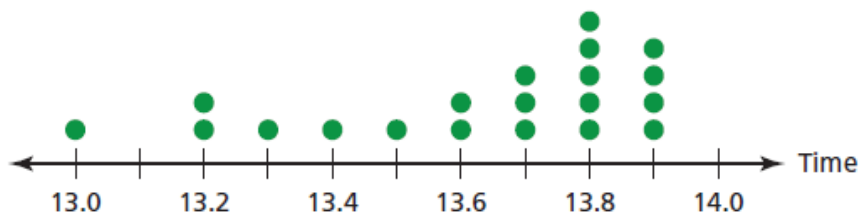
b. How can you collect these data? What are the units?

c. Write a statistical question that you can answer using the dot plot. Then answer the question.



Example 2: On Your Own

2. The dot plot shows the times of sixth grade students in a 100-meter race.



- How many students ran in the race?
- How can you collect these data? What are the units?
- Write a statistical question that you can answer using the dot plot. Then answer the question.