

Lesson 2-2

Reinforce Understanding

Represent and Describe Data in a Histogram

I can make and read a histogram to display data in intervals.

Worked model

Seven plants grew these heights in cm: 61, 74, 88, 76, 63, 71, 79. Use ten-unit intervals.

1. Choose equal intervals that cover the data with no gaps: 60-69, 70-79, 80-89.
2. Tally each value into exactly one interval. 61 and 63 both land in 60-69.
3. Count each interval. 60-69 holds two plants, 70-79 holds four, 80-89 holds one.
4. Draw touching bars at those heights above the three interval labels.

Answer: The frequency table reads 60-69: 2, 70-79: 4, 80-89: 1, and the tallest bar is 70-79.

Practice

Complete each exercise. Show the reasoning that supports your answer.

1. In a histogram, what does the height of each bar represent?

Circle the letter of the best answer. Show how you know.

- A. The frequency (count) of data in that interval
- B. The average of the data in that interval
- C. The range of the interval
- D. The median of the data

Show your work

2. Order the steps for making a histogram.

Write the name of the correct group on each line.

Groups: Steps (in order)

- _____ Step 1: Choose equal-sized intervals that cover all the data
- _____ Step 2: Count how many data values fall in each interval (frequency)
- _____ Step 3: Draw bars for each interval — height = frequency
- _____ Step 4: Make sure bars touch with no gaps

3. A histogram bar for the interval 20–29 reaches a height of 7. What does the 7 tell you?

Circle the letter of the best answer. Show how you know.

- A. The largest value is 7
- B. There are 7 intervals
- C. The interval is 7 wide
- D. 7 data values fall between 20 and 29

Show your work
