

Bee Visit Detectives

Read a bar graph, then choose a graph for changing data.

4.1.c.i "interpreting, analyzing, and evaluating data organize and represent data in bar graphs and line graphs"

NAME _____

DATE _____

1 READ AND MARK

Read it twice

YOUR JOB Underline the sentence that begins "The height of a bar." Circle the sentence that begins "It cannot show." These sentences help you tell what a graph shows and what it does not show.

Bees in the School Garden

- ① Scientists at a school garden watched bees visit four kinds of flowers during one sunny hour. Each time a bee landed on a flower, the scientists added one tally. Later, they used the totals to make the bar graph below. The graph organizes their observations so the flower types are easy to compare.

BEE VISITS TO FLOWERS



- ② Each bar stands for one flower type. The height of a bar shows the number of bee visits during the hour. A taller bar means more visits, not a larger flower. The numbers along the side use equal steps. This lets readers compare totals from the bar heights alone.
- ③ The bar graph can show which flower received more visits in this one hour. It cannot show why bees chose a flower or whether the same pattern would happen on another day. A line graph would be useful if scientists recorded bee visits at several times during the day because it can show change over time.

2 ANSWER WITH EVIDENCE _____ Use the passage

1 What does each bar in the graph represent?

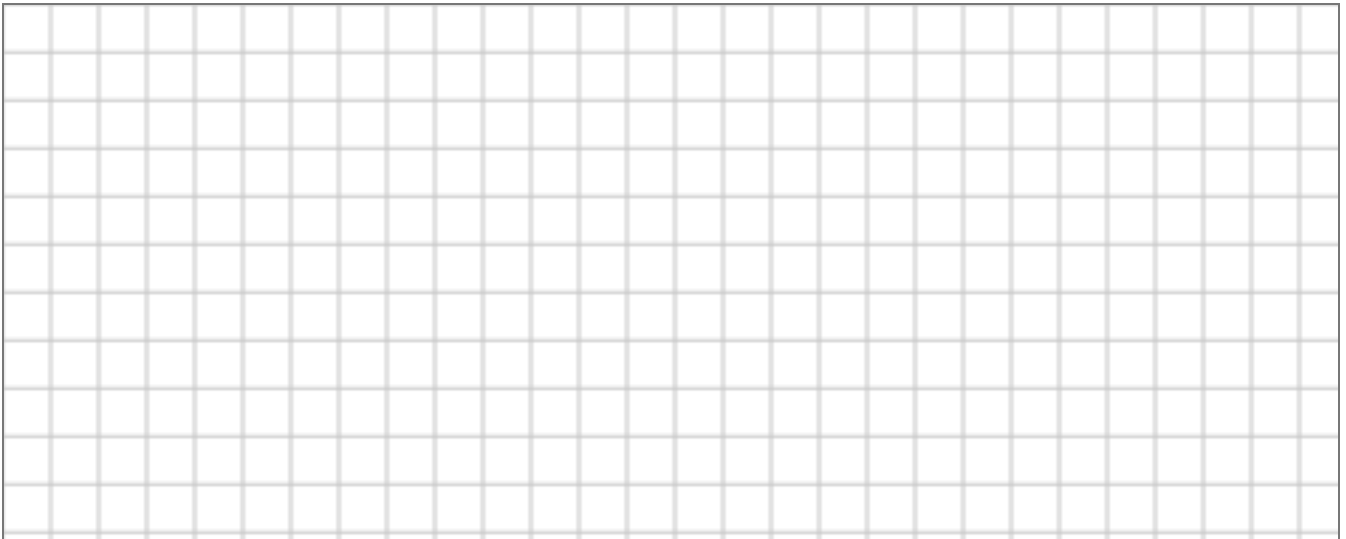
2 What does the height of a bar show?

3 How many more bee visits did coneflowers receive than sunflowers?

4 Which type of graph would help show bee visits changing from morning to afternoon? Explain why.

3 YOUR TURN _____ Your own words

On the grid, make a line graph for these bee visits: 9 a.m., 3 visits; 10 a.m., 6 visits; 11 a.m., 10 visits; noon, 7 visits. Add a title and labels, plot and connect the points, then write one sentence telling when visits were highest.



PART 1 • READ AND MARK

Underline the sentence that begins “The height of a bar.” Circle the sentence that begins “It cannot show.” These sentences help you tell what a graph shows and what it does not show. Accept any marking that follows this job and points at the right text.

PART 2 • ANSWERS

#	QUESTION	ANSWER
1	What does each bar in the graph represent?	One flower type.
2	What does the height of a bar show?	The number of bee visits during the hour.
3	How many more bee visits did coneflowers receive than sunflowers?	4 more bee visits.
4	Which type of graph would help show bee visits changing from morning to afternoon? Explain why.	A line graph, because it can show change over time.

PART 3 • YOUR TURN (SAMPLE ANSWER)

Line graph titled “Bee Visits During the Morning,” with time on the horizontal axis and number of visits on the vertical axis. Plot and connect (9 a.m., 3), (10 a.m., 6), (11 a.m., 10), and (noon, 7). Bee visits were highest at 11 a.m.

Accept equivalent wording for graph parts and graph purpose. For the line graph, check for correctly plotted, connected points, a title, labeled axes, and a statement that 11 a.m. was highest.