

Leaf It Sorted

Build clear stem-and-leaf plots from numerical data.

GRADE 5 • 5.PS.1.d

5.PS.1.d "Organize and represent numerical data using a stem-and-leaf plot with a title and key, where the stems are listed in ascending order and the leaves are in ascending order, with or without commas between the leaves."

NAME _____

DATE _____

BUILD THE PLOT

Put the data in order from least to greatest. Use the tens digit as each stem and the ones digit as each leaf. Write a title and key, and keep both stems and leaves in ascending order.

WORKED EXAMPLE

Make a stem-and-leaf plot for 43, 46, 51, 53, 57, 62, 62.

1. Put the data in order: 43, 46, 51, 53, 57, 62, 62.
2. Use the tens digits as stems: 4, 5, and 6.
3. Write the ones digits as leaves in each row: 3 6, then 1 3 7, then 2 2.

Answer: Number List Key: 4 | 3 = 43 4 | 3 6 5 | 1 3 7 6 | 2 2

PRACTICE 6 problems

- 1** Make a stem-and-leaf plot titled Garden Heights for these heights in centimeters: 15, 18, 22, 26, 29, 33.

ANSWER _____

- 2** List all the data values shown in this plot.
Bike Ride Miles Key: 4 | 2 = 42 4 | 2 5 5 | 0 8

ANSWER _____

- 3** The leaves in this plot are not in ascending order. Rewrite the plot correctly. Library Books Read Key: 6 | 3 = 63 6 | 9 3 7 7 | 4 1

ANSWER _____

- 4** Make a stem-and-leaf plot titled Practice Scores for these scores: 7, 9, 11, 14, 14, 16.

ANSWER _____

- 5** This plot is missing its key. Write a key that shows what 8 | 4 means. Art Club Paintbrushes 8 | 0 4 4 7 9 | 2

ANSWER _____

- 6** Choose the plot that correctly represents 23, 23, 28, 30, 36. A. Key: 2 | 3 = 23 2 | 8 3 3 | 6 0 B. Key: 2 | 3 = 23 2 | 3 3 8 3 | 0 6 C. Key: 2 | 3 = 23 3 | 0 6 2 | 3 3 8

ANSWER _____

APPLY IT Show your work

- 1** A game club recorded the number of points earned by seven players in one round: 26, 29, 29, 34, 38, 41, 41. Make a stem-and-leaf plot titled Game Round Points.

WORK SPACE

ANSWER _____

- 2** A robotics team timed seven robot runs in seconds: 54, 59, 61, 61, 66, 70, 73. Make a stem-and-leaf plot titled Robot Run Times. Then tell how many runs lasted from 60 through 69 seconds.

WORK SPACE

ANSWER _____

CHALLENGE One step up

CHALLENGE

A science fair recorded these visitor counts during eight time blocks: 104, 109, 112, 115, 115, 121, 128, 130. Make a stem-and-leaf plot titled Science Fair Visitors. Use the first two digits as each stem.

PART 1 • PRACTICE

#	PROBLEM	ANSWER
1	Make a stem-and-leaf plot titled Garden Heights for these heights in centimeters: 15, 18, 22, 26, 29, 33.	Garden Heights Key: 1 5 = 15 1 5 8 2 2 6 9 3 3
2	List all the data values shown in this plot. Bike Ride Miles Key: 4 2 = 42 4 2 5 5 0 8	42, 45, 50, 58
3	The leaves in this plot are not in ascending order. Rewrite the plot correctly. Library Books Read Key: 6 3 = 63 6 9 3 7 7 4 1	Library Books Read Key: 6 3 = 63 6 3 7 9 7 1 4
4	Make a stem-and-leaf plot titled Practice Scores for these scores: 7, 9, 11, 14, 14, 16.	Practice Scores Key: 0 7 = 7 0 7 9 1 1 4 4 6
5	This plot is missing its key. Write a key that shows what 8 4 means. Art Club Paintbrushes 8 0 4 4 7 9 2	Key: 8 4 = 84
6	Choose the plot that correctly represents 23, 23, 28, 30, 36. A. Key: 2 3 = 23 2 8 3 3 3 6 0 B. Key: 2 3 = 23 2 3 3 8 3 0 6 C. Key: 2 3 = 23 3 0 6 2 3 3 8	B

PART 2 • APPLY IT

- Game Round Points Key: 2 | 6 = 26 2 | 6 9 9 3 | 4 8 4 | 1 1** Order the points, use the tens digits as stems, and use the ones digits as leaves.
- Robot Run Times Key: 5 | 4 = 54 5 | 4 9 6 | 1 1 6 7 | 0 3 3 runs** Make the plot using tens digits as stems. Count the leaves in the stem 6 row to find the runs from 60 through 69 seconds.

CHALLENGE

Science Fair Visitors Key: 10 | 4 = 104 10 | 4 9 11 | 2 5 5 12 | 1 8 13 | 0

Accept leaves separated by spaces or commas if they are in ascending order. Accept an equivalent correct key that clearly shows the value of one stem-and-leaf pair.