

Choose the Right Graph

GRADE 6

MATHEMATICS

D1.3

Good data displays answer a clear question. Choose the graph type that best fits each data set and justify your choice.

PART A: MATCH DATA TO GRAPH TYPE

Match each data set with the best graph type.

- | | | |
|--|-------|-----------------------------|
| 1. One student's balance at the end of each week for 8 weeks | _____ | A Multiple-bar graph |
| 2. How many purchases fall in each \$5 price interval | _____ | B Stacked-bar graph |
| 3. Total spending by reward category in one month | _____ | C Circle graph |
| 4. Class earnings and spending for each week | _____ | D Bar graph |
| 5. Shares of one monthly budget (save/spend/donate) | _____ | E Broken-line graph |
| 6. Compare two classes' total earnings by week | _____ | F Histogram |

PART B: INTERPRET AND DEFEND

7. A purchase-price distribution is grouped into bins: \$0-\$4 (3 purchases), \$5-\$9 (8), \$10-\$14 (6), \$15-\$19 (2). Which graph type is best and what does it show?

SHOW YOUR WORK

Answer: _____

- 8.** Weekly balances are: 40, 52, 48, 60, 75, 70. Which graph should you use and what trend do you notice?

SHOW YOUR WORK

Answer: _____

- 9.** A student used a histogram to show balance over 6 weeks. Explain why that choice is weak and suggest a better one.

SHOW YOUR WORK

Answer: _____

- 10.** Class spending by category is: Snacks \$45, Supplies \$30, Events \$25, Savings deposits \$50. Which graph type would you choose for comparing categories and why?

SHOW YOUR WORK

Answer: _____

Choose the Right Graph

ANSWER KEY

1. E — Broken-line graph
2. F — Histogram
3. D — Bar graph
4. B — Stacked-bar graph
5. C — Circle graph
6. A — Multiple-bar graph
7. Histogram. It shows how purchase prices are distributed across intervals, with most purchases in the \$5-\$9 bin.
8. Broken-line graph. Overall trend is upward with a dip from week 2 to week 3 and from week 5 to week 6.
9. Histogram is for grouped distributions, not time series. A broken-line graph is better for balance changes over time.
10. A bar graph, because it compares separate category totals clearly.

TEACHER NOTES

Have students use real class transaction data. Require source, title, axis labels, and scale in every graph before presenting.