LESSON MAKER PRO

Center That Fits

Choose the measure that tells the clearest story.

GRADE 6 · 6.D.1.2

6.D.1.2 "Explain and justify which measure of center (mean, median, or mode) would provide the most descriptive information for a given set of data."

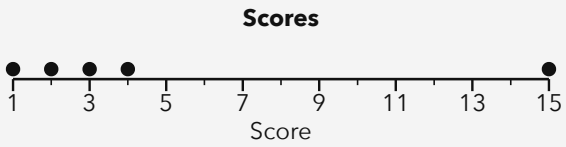
NAME _____ DATE _____

CHOOSE WITH A REASON

The mean uses every value, the median is the middle value, and the mode is the value that appears most often. An unusually high or low value can pull the mean away from a typical value, so think about what the question asks.

WORKED EXAMPLE

The dot plot shows five scores. Which measure best describes a typical score? Find it and explain.



1. The scores in order are 1, 2, 3, 4, 15.
2. The middle score is 3. The mean is (1 + 2 + 3 + 4 + 15) / 5 = 5.
3. The score of 15 pulls the mean above most scores.

Answer: The median, 3, best describes a typical score.

PRACTICE 4 problems

1 Counts: 10, 12, 14, 16, 18. Which center best uses every count? Find it and explain.

ANSWER _____

2 Scores: 10, 11, 12, 13, 29. Which center best shows a typical score? Find it and explain.

ANSWER _____

3 Sizes: 21, 21, 21, 23, 25. Which center shows the most common size? Find it and explain.

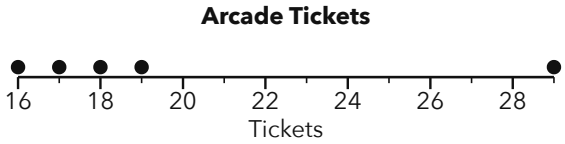
ANSWER _____

4 Scores: 30, 32, 34, 36. Which center uses all four scores? Find it and explain.

ANSWER _____

APPLY IT Show your work

1 The dot plot shows tickets won by five arcade players. Which center best describes a usual ticket total? Find it and explain.



ANSWER _____

2 At the school store, 8 students chose blue notebooks, 6 chose green, and 7 chose red. Which measure of center shows the most popular color? Name the color and explain.

WORK SPACE

ANSWER _____

CHALLENGE One step up

A gamer plays for 20, 22, 24, 26, and 88 minutes over five days. Which center gives an equal daily share of the total time? Which better shows a usual day? Find both and explain.

WORK SPACE AND ANSWER

ANSWER KEY

Center That Fits

GRADE 6 · 6.D.1.2

PART 1 · PRACTICE

#	PROBLEM	ANSWER
1	Counts: 10, 12, 14, 16, 18. Which center best uses every count? Find it and explain.	**Mean, 14. It uses every count, and there is no unusually high or low count.**
2	Scores: 10, 11, 12, 13, 29. Which center best shows a typical score? Find it and explain.	**Median, 12. The high score of 29 pulls up the mean.**
3	Sizes: 21, 21, 21, 23, 25. Which center shows the most common size? Find it and explain.	**Mode, 21. It appears more often than any other size.**
4	Scores: 30, 32, 34, 36. Which center uses all four scores? Find it and explain.	**Mean, 33. It uses all four scores.**

PART 2 · APPLY IT

1. **Median, 18 tickets. The total of 29 is unusually high.** The middle of the five totals is 18. The high total pulls the mean to 19.8, so the median better describes a usual total.
2. **Mode, blue. More students chose blue than any other color.** Color is a category, so mean and median do not apply. Blue has the highest count, 8.

CHALLENGE

The mean, 36 minutes, gives an equal daily share because (20 + 22 + 24 + 26 + 88) / 5 = 36. The median, 24 minutes, better shows a usual day because 88 minutes pulls the mean up.

Accept a different center in a typical-value question only when the student gives a sound reason tied to the data. For the school store problem, only mode applies to the colors.