

Mode Detectives

Find the value that appears most often.

GRADE 5 • 5.PS.2.d

5.PS.2.d "Describe and determine the mode of a set of data values representing data from a given context as a measure of center."

NAME _____

DATE _____

FIND THE MODE

The mode is the data value that appears most often in a set of data. Count how many times each value appears. A set can have one mode, more than one mode, or no mode when all values appear the same number of times.

WORKED EXAMPLE

Find the mode: 14, 18, 21, 18, 27, 18, 14

1. Count 14: it appears 2 times.
2. Count 18: it appears 3 times.
3. Count 21 and 27: each appears 1 time.
4. 18 appears most often.

Answer: Mode: 18

PRACTICE 6 problems

1 Find the mode: 6, 9, 6, 4, 6, 9

ANSWER _____

2 Find the mode: 11, 13, 16, 11, 13, 11

ANSWER _____

3 Find the mode: 2, 5, 7, 2, 5, 7

ANSWER _____

4 Find the mode: 30, 25, 30, 20, 25, 30

ANSWER _____

5 Find the mode: 8, 10, 8, 12, 10, 8, 12

ANSWER _____

6 Find the mode: 3, 1, 4, 1, 5, 1, 3

ANSWER _____

APPLY IT Show your work

- 1** A game club recorded the number of points earned by six players in one round: 35, 40, 35, 45, 40, 35. What is the mode? What does the mode tell you about the scores?

WORK SPACE

ANSWER _____

- 2** Maya tracked how many minutes she read on six days: 24, 26, 24, 28, 26, 24. What is the mode? What does the mode tell you about Maya's reading time?

WORK SPACE

ANSWER _____

CHALLENGE One step up

CHALLENGE

A robotics club recorded the number of buttons on eight student-made controllers: 4, 6, 4, 8, 6, 10, 4, 6. Find all modes. Explain how you know.

PART 1 • PRACTICE

#	PROBLEM	ANSWER
1	Find the mode: 6, 9, 6, 4, 6, 9	6
2	Find the mode: 11, 13, 16, 11, 13, 11	11
3	Find the mode: 2, 5, 7, 2, 5, 7	No mode
4	Find the mode: 30, 25, 30, 20, 25, 30	30
5	Find the mode: 8, 10, 8, 12, 10, 8, 12	8
6	Find the mode: 3, 1, 4, 1, 5, 1, 3	1

PART 2 • APPLY IT

1. **The mode is 35. The score of 35 points occurred most often.** Count the scores. 35 appears 3 times, 40 appears 2 times, and 45 appears 1 time.
2. **The mode is 24. Maya read for 24 minutes on more days than any other reading time.** Count each reading time. 24 appears 3 times, 26 appears 2 times, and 28 appears 1 time.

CHALLENGE

The modes are 4 and 6. Each appears 3 times, which is more often than 8 or 10.

Accept "no mode" when every value occurs the same number of times. For the challenge, accept both 4 and 6 only if the student identifies that each occurs 3 times.