

Data Detectives

Read, organize, and compare data.

GRADE 3 • MA.3.DP.1

MA.3.DP.1 "Collect, represent and interpret numerical and categorical data."

NAME _____

DATE _____

READ DATA CLOSELY

Categorical data sorts information into groups, such as kinds of pets or games. Numerical data uses numbers, such as scores or amounts. To compare two category counts, subtract the smaller count from the larger count.

WORKED EXAMPLE

A class vote shows 19 students chose robots and 16 students chose puzzles. How many more students chose robots?

1. Find the two counts: 19 and 16.
2. Subtract: $19 - 16 = 3$.
3. Robots has the larger count.

Answer: 3 more students chose robots.

PRACTICE 6 problems

- 1** A movie survey shows these choices:
Comedy: 8 Adventure: 5 Nature: 4 Which movie type was chosen the most?

ANSWER _____

- 2** A book survey is shown with tally marks:
Mystery: ||||| Fantasy: ||||| || Sports: |||| How many students chose fantasy?

ANSWER _____

- 3** Pages read on three days are shown below:
Monday: 1 Tuesday: 7 Wednesday: 10
Which day had the greatest number of pages read?

ANSWER _____

- 4** The numbers of goals scored in five games were 1, 4, 4, 4, and 7. Which number appears most often?

ANSWER _____

- 5** A poll found that 7 students chose skating. Write 7 as tally marks.

ANSWER _____

- 6** A club chart shows these activities: Soccer: 12 Track: 8 Chess: 1 How many students were surveyed altogether?

ANSWER _____

APPLY IT Show your work

- 1** The student council surveyed students about a new recess activity. Swings got 13 votes, climbing got 8 votes, and basketball got 7 votes. Which activity got the most votes, and how many more votes did it get than basketball?

WORK SPACE

ANSWER _____

- 2** Mia recorded the number of jump-rope jumps she made in several rounds: 12, 15, 12, 12, 12, 18. Make a frequency table with the jump totals and their counts. Which jump total appears most often?

WORK SPACE

ANSWER _____

CHALLENGE One step up

CHALLENGE

A team survey has 32 students total. Fourteen students chose red, 7 students chose green, and the rest chose blue. How many students chose blue? Explain how you know.

PART 1 • PRACTICE

#	PROBLEM	ANSWER
1	A movie survey shows these choices: Comedy: 8 Adventure: 5 Nature: 4 Which movie type was chosen the most?	Comedy
2	A book survey is shown with tally marks: Mystery: Fantasy: Sports: How many students chose fantasy?	8 students
3	Pages read on three days are shown below: Monday: 1 Tuesday: 7 Wednesday: 10 Which day had the greatest number of pages read?	Wednesday
4	The numbers of goals scored in five games were 1, 4, 4, 4, and 7. Which number appears most often?	4
5	A poll found that 7 students chose skating. Write 7 as tally marks.	
6	A club chart shows these activities: Soccer: 12 Track: 8 Chess: 1 How many students were surveyed altogether?	21 students

PART 2 • APPLY IT

1. **Swings, 5 more votes.** Swings has the greatest count, 13. Subtract 7 from 13 to find that swings got 5 more votes than basketball.
2. **12: 4, 15: 1, 18: 1; 12 jumps appears most often.** Count each number in the list. The number 12 appears 4 times, while 15 and 18 each appear 1 time.

CHALLENGE

11 students chose blue. I added 14 and 7 to get 21, then subtracted 21 from 32.

Accept tally marks grouped as five and then two for problem 5. For the frequency table, accept categories in any order as long as each count is correct.