

Chart Detectives

Read graphs, compare data, and describe results.

GRADE 3 • 3.PS.1.e.i

3.PS.1.e.i "Analyze data represented in pictographs and bar graphs, and communicate results orally and in writing: describe the categories of data and the data as a whole (e.g...."

NAME _____

DATE _____

READ THE DATA

Read the labels to learn what each category means. To describe all the data, find a total or compare which categories have more or fewer.

WORKED EXAMPLE

A bar graph shows music choices: Rock 3, Pop 6, Jazz 9. How many students answered? Which choice had the most votes?

1. Add the votes: $3 + 6 + 9 = 18$.
2. Compare the counts. 9 is the greatest count.

Answer: 18 students answered. Jazz had the most votes.

PRACTICE 5 problems

- 1** Bar graph data: Snacks, Apples 8; Crackers 4; Yogurt 2. List the categories.

ANSWER _____

- 2** Bar graph data: Snacks, Apples 8; Crackers 4; Yogurt 2. How many votes were collected?

ANSWER _____

- 3** Pictograph key: ● = 2 votes. Pets: Fish ●●●●, Cats ●●, Dogs ●●●●. Which categories are tied for most votes?

ANSWER _____

- 4** Bar graph data: Team colors, Red 12; Blue 4; Green 8. How many students chose a color?

ANSWER _____

- 5** Bar graph data: Game choices, Board games 7; Card games 11; Outdoor games 10. Write one sentence that describes the data.

ANSWER _____

APPLY IT Show your work

- 1** At an invention club, a bar graph shows projects: Robots 12, Bridges 16, Games 8. How many projects are shown? Which category has the most projects?

WORK SPACE

ANSWER _____

- 2** The school store surveys sticker choices. Key: ● = 5 students. Robots ●●●●, Flowers ●●. How many more students chose robot stickers than flower stickers?

WORK SPACE

ANSWER _____

CHALLENGE One step up

CHALLENGE

A bar graph shows recess choices: Art 12, Music 8, Drama 4. Nia says, "Art is half of all the choices." Is Nia correct? Explain.

PART 1 • PRACTICE

#	PROBLEM	ANSWER
1	Bar graph data: Snacks, Apples 8; Crackers 4; Yogurt 2. List the categories.	Apples, Crackers, Yogurt.
2	Bar graph data: Snacks, Apples 8; Crackers 4; Yogurt 2. How many votes were collected?	14 votes.
3	Pictograph key: ● = 2 votes. Pets: Fish ●●●●, Cats ●●, Dogs ●●●●. Which categories are tied for most votes?	Fish and Dogs.
4	Bar graph data: Team colors, Red 12; Blue 4; Green 8. How many students chose a color?	24 students.
5	Bar graph data: Game choices, Board games 7; Card games 11; Outdoor games 10. Write one sentence that describes the data.	Card games were chosen most, and board games were chosen least.

PART 2 • APPLY IT

- 36 projects; Bridges.** Add $12 + 16 + 8$ to get 36. Compare the three counts, and 16 is greatest.
- 10 more students.** Robot stickers have 20 votes, and flower stickers have 10 votes. Subtract 10 from 20.

CHALLENGE

Yes. There are 24 choices altogether, and half of 24 is 12.

Accept any accurate one-sentence description for Problem 5 that identifies card games as most and board games as least. Accept equivalent clear wording for the challenge explanation.