

Picture Data Detectives

Read keys, count data, and share what you find.

GRADE 2 • 2.PS.1

2.PS.1 "The student will apply the data cycle (pose questions; collect or acquire data; organize and represent data; and analyze data and communicate results) with a focus on pictographs and bar graphs. Pose questions..."

NAME _____

DATE _____

READ THE KEY

A pictograph uses pictures to show data. Read the key first, then count the pictures or bars to answer the question.

WORKED EXAMPLE

At a game table, each ● stands for 2 tickets. The chart shows ● ● ●. How many tickets are shown?

1. Read the key: each ● means 2 tickets.
2. Count 3 circles.
3. Count by 2s: 2, 4, 6.

Answer: 6 tickets

PRACTICE 4 problems

- 1** Beach Chart Key: each ▲ = 1 shell
Sand: ▲ ▲ ▲ ▲ ▲ How many shells are on the sand?

ANSWER _____

- 2** Apple Chart Key: each ● = 5 apples
Green basket: ● How many apples are in the green basket?

ANSWER _____

- 3** Snack Bar Graph Title: Favorite
Snack Vertical label: Snack
Horizontal label: Votes Crackers |
| | | | | | | | | Grapes |
| | | | | Scale: each block = 1 vote
How many more votes did crackers get than grapes?

ANSWER _____

- 4** A bike chart shows ● ● ● ●. The chart shows 20 bikes. What key fits the chart?

ANSWER _____

APPLY IT Show your work

- 1** The pet club asks members to vote for a favorite pet. Dogs get 5 votes, cats get 4 votes, and fish get 1 vote. Make a pictograph. Use the key each ★ = 1 vote.

WORK SPACE

ANSWER _____

- 2** An after-school club makes this bar graph. Title: Favorite Club Vertical label: Club Choice Horizontal label: Votes Soccer | ██████████ Art | ██████ Coding | ██████ Scale: each block = 1 vote How many more students chose soccer than art?

WORK SPACE

ANSWER _____

CHALLENGE One step up

CHALLENGE

The classroom library chart has this key: each ★ = 5 votes. Books: ★★★★★ Puzzles: ★ Which kind should the librarian bring more of? Explain with the number of votes.

PART 1 • PRACTICE

#	PROBLEM	ANSWER
1	Beach Chart Key: each ▲ = 1 shell Sand: ▲ ▲ ▲ ▲ ▲ How many shells are on the sand?	5 shells
2	Apple Chart Key: each ● = 5 apples Green basket: ● How many apples are in the green basket?	5 apples
3	Snack Bar Graph Title: Favorite Snack Vertical label: Snack Horizontal label: Votes Crackers  Grapes  Scale: each block = 1 vote How many more votes did crackers get than grapes?	5 more votes
4	A bike chart shows ● ● ● ●. The chart shows 20 bikes. What key fits the chart?	Each ● = 5 bikes.

PART 2 • APPLY IT

- Key: each ★ = 1 vote Dogs: ★★★★★ Cats: ★★★★★ Fish: ★** Draw one star for each vote. The rows need 5 stars, 4 stars, and 1 star.
- 5 more students** Soccer has 9 votes and art has 4 votes. $9 - 4 = 5$.

CHALLENGE

Books. Books have 20 votes, and puzzles have 5 votes.

For the pictograph, accept clearly drawn matching symbols if the key and all row totals are correct. For comparison questions, accept the number with or without the unit words.