

Picture Data Detectives

Use keys to read picture charts.

GRADE 2 • 2.PS.1.c

2.PS.1.c "Organize and represent a data set using a pictograph where each symbol represents up to 2 data points. Determine and use a key to assist in the analysis of the data."

NAME _____

DATE _____

READ THE KEY

A pictograph uses symbols to show data. A key tells what one symbol means. A symbol can stand for 1 or 2 things, so read the key before you count.

WORKED EXAMPLE

Book chart Key: ▲ = 2 books
▲ ▲ ▲ How many books are on the shelf?

1. One triangle means 2 books.
2. There are 3 triangles.
3. $2 + 2 + 2 = 6$.

Answer: 6 books

PRACTICE 5 problems

- 1** Snack chart Key: ● = 2 crackers ● ● ●
● How many crackers are shown?

ANSWER _____

- 2** A ball chart needs to show 10 balls.
Key: ■ = 2 balls Which row is correct? A. ■ ■ ■ ■ B. ■ ■ ■ ■ ■ C. ■ ■ ■ ■ ■ ■ ■ ■ ■ ■

ANSWER _____

- 3** A game chart has 5 circle symbols for 10 points. Each circle symbol means ____ points.

ANSWER _____

- 4** Toy chart Key: ★ = 2 toys Robots: ★ ★ ★ ★ ★ Dolls: ★ ★ How many more robot toys than doll toys are shown?

ANSWER _____

- 5** Maya's shell chart has 14 shells. Key: △ = 2 shells How many triangle symbols should Maya use?

ANSWER _____

APPLY IT Show your work

- 1** At field day, 14 children chose beanbag toss. Key: ▲ = 2 children. Which row shows the beanbag toss group? A. ▲ ▲ ▲ ▲ ▲ B. ▲ ▲ ▲ ▲ ▲ ▲ C. ▲ ▲ ▲ ▲ ▲
▲ ▲ ▲

WORK SPACE

ANSWER _____

- 2** An animal shelter chart uses this key: ★ = 2 pets. The puppy row has 6 stars. The kitten row has 2 stars. How many more puppies than kittens are shown?

WORK SPACE

ANSWER _____

CHALLENGE One step up

CHALLENGE

A classroom chart has 9 circle symbols for 18 glue sticks. What key fits the chart? Then, if the marker row has 5 circle symbols, how many markers does it show?

PART 1 • PRACTICE

#	PROBLEM	ANSWER
1	Snack chart Key: ● = 2 crackers ● ● ● ● How many crackers are shown?	8 crackers
2	A ball chart needs to show 10 balls. Key: ■ = 2 balls Which row is correct? A. ■ ■ ■ ■ B. ■ ■ ■ ■ ■ C. ■ ■ ■ ■ ■ ■	B. ■ ■ ■ ■ ■
3	A game chart has 5 circle symbols for 10 points. Each circle symbol means ___ points.	2 points
4	Toy chart Key: ★ = 2 toys Robots: ★ ★ ★ ★ Dolls: ★ ★ How many more robot toys than doll toys are shown?	4 more robot toys
5	Maya's shell chart has 14 shells. Key: △ = 2 shells How many triangle symbols should Maya use?	7 triangle symbols

PART 2 • APPLY IT

1. **B. ▲ ▲ ▲ ▲ ▲ ▲ ▲** Each triangle stands for 2 children. Seven triangles show 14 children.
2. **8 more puppies** The puppy row shows 12 pets, and the kitten row shows 4 pets. $12 - 4 = 8$.

CHALLENGE

○ = 2 items; 10 markers

Accept numerals or words when the quantity is correct. For the challenge, students should give both parts, a key of 2 items and 10 markers.