LESSON MAKER PRO

Data Question Quest

Ask questions that need real information.

GRADE 4 · 4.PS.1.a

4.PS.1.a "Formulate questions that require the collection or acquisition of data."

NAME _____ DATE _____

ASK FOR DATA

A data question asks about a group and can have different answers. Say who you will ask or what records you will use, then ask for information you need to collect.

WORKED EXAMPLE

The art teacher wants to learn which paint color the 24 students in Ms. Lee's class prefer. Write a data question.

1. Name the group, the 24 students in Ms. Lee's class.
2. Decide what information is needed, each student's preferred paint color.
3. Ask a question that lets each student give an answer.

Answer: Which paint color do the 24 students in Ms. Lee's class prefer?

PRACTICE 6 problems

1 Write a data question you could ask students in your class to find out how many minutes they read last night.

ANSWER _____

2 Which question needs data? Circle the letter. A. Is 9 + 5 equal to 14? B. How many pets does each student in our class have? C. What color is a banana?

ANSWER _____

3 Change this yes-or-no question into a data question that finds out which recess game students prefer: Do you like recess?

ANSWER _____

4 The librarian will buy one new comic series. Write a question to ask students which series they want most.

ANSWER _____

5 The science class is growing bean plants. Write a question that can be answered by measuring every plant on Friday.

ANSWER _____

6 A cafeteria manager wants to learn which fruit students choose at lunch. Write a data question. Then name one way to collect the answers.

ANSWER _____

APPLY IT Show your work

1 The student council is planning Family Fun Night. Students can choose relay races, sidewalk chalk, or a scavenger hunt. Write one survey question that will help the council choose the activity students want most.

WORK SPACE

ANSWER _____

2 A soccer coach has a practice log that lists how many minutes the team spent practicing passing at each practice this month. Write a question the coach can answer by using the log.

WORK SPACE

ANSWER _____

CHALLENGE One step up

The principal wants to learn about after-school activities for fourth grade. Write one survey question about what students want. Write one record-based question that could be answered by using sign-in sheets from activities. Then explain why both questions need data.

WORK SPACE AND ANSWER

ANSWER KEY

Data Question Quest

GRADE 4 · 4.PS.1.a

PART 1 · PRACTICE

#	PROBLEM	ANSWER
1	Write a data question you could ask students in your class to find out how many minutes they read last night.	**How many minutes did each student in our class read last night?**
2	Which question needs data? Circle the letter. A. Is 9 + 5 equal to 14? B. How many pets does each student in our class have? C. What color is a banana?	**B. How many pets does each student in our class have?**
3	Change this yes-or-no question into a data question that finds out which recess game students prefer: Do you like recess?	**Which recess game does each student in our class prefer?**
4	The librarian will buy one new comic series. Write a question to ask students which series they want most.	**Which new comic series would each student in our class most like the library to buy?**
5	The science class is growing bean plants. Write a question that can be answered by measuring every plant on Friday.	**How tall is each bean plant on Friday?**
6	A cafeteria manager wants to learn which fruit students choose at lunch. Write a data question. Then name one way to collect the answers.	**Question: Which fruit does each student choose at lunch? Collection method: Ask students at lunch and tally their answers.**

PART 2 · APPLY IT

1. **Which activity would you most want at Family Fun Night: relay races, sidewalk chalk, or a scavenger hunt?** Survey students using the question. Tally the choices to see which activity has the most votes.
2. **How many minutes did the team spend practicing passing at each practice this month?** The coach can read the passing minutes in the practice log for each practice. The question needs information from the records.

CHALLENGE

Survey question: Which after-school activity would students in fourth grade choose first? Record-based question: How many fourth-grade students attended each after-school activity last month? Both questions need information from many students or school records, so they cannot be answered by one person's guess.

Accept other clear questions that name a group or source and ask for information with more than one possible answer. For collection methods, accept reasonable methods such as a survey, tally, measurement, log, or sign-in sheet.