What Kind of Data?

Sort responses by what they tell you.

8A.DSP.B.38 "Distinguish between quantitative and categorical data and between the techniques that may be used for analyzing data of these two types."

NAME _____ DATE _____

QUANTITATIVE DATA

These responses are counts or measurements. You can use them in calculations such as finding an average.

Temperature of soup in degrees Celsius

CATEGORICAL DATA

These responses name groups or use labels. You can count how many responses fall in each group.

Color of a backpack

1 SORT

8 items

For each item, circle NUMERIC or CATEGORY, then choose two items and explain in writing how you knew where each belongs.

1.	Minutes spent reading last night	NUMERIC	CATEGORY
2.	Number of siblings in a family	NUMERIC	CATEGORY
3.	Preferred sport to play	NUMERIC	CATEGORY
4.	Length of a pencil in centimeters	NUMERIC	CATEGORY
5.	Number of books borrowed this month	NUMERIC	CATEGORY
6.	Kind of pet owned	NUMERIC	CATEGORY
7.	Main way a student travels to school	NUMERIC	CATEGORY
8.	Amount of water in a bottle, in milliliters	NUMERIC	CATEGORY

2 PROVE IT

Explain your thinking

Pick two items from Part 1. For each one, tell how you knew where it belonged.

ITEM # _____ **HOW I KNEW** _____

ITEM # _____ **HOW I KNEW** _____

3 MAKE YOUR OWN

One of each

Write one new data-collection question that gives NUMERIC data and one that gives CATEGORY data.

NUMERIC _____

CATEGORY _____

CHALLENGE

A survey asks students which lunch combo they chose: 1, 2, or 3. Is this data quantitative or categorical? Explain why and name a graph that could show the results.

ANSWER KEY

What Kind of Data?

GRADE 8 · 8A.DSP.B.38

PART 1 · SORT

#	ITEM	CATEGORY	WHY
1	Minutes spent reading last night	**NUMERIC**	Minutes are a measurement of time.
2	Number of siblings in a family	**NUMERIC**	Siblings are counted.
3	Preferred sport to play	**CATEGORY**	Each response names a type of sport.
4	Length of a pencil in centimeters	**NUMERIC**	Length is a measurement.
5	Number of books borrowed this month	**NUMERIC**	Books are counted.
6	Kind of pet owned	**CATEGORY**	Each response names a type of pet.
7	Main way a student travels to school	**CATEGORY**	Each response names a way of traveling.
8	Amount of water in a bottle, in milliliters	**NUMERIC**	The amount is measured in milliliters.

PART 2 · PROVE IT

Accept any explanation that names the deciding feature from the rule box for the chosen item.

PART 3 · MAKE YOUR OWN (SAMPLE ANSWERS)

- **NUMERIC**: How many windows are in your home?
- **CATEGORY**: What type of tree grows near your home?

Challenge: Categorical. The numbers label lunch combos, not amounts. A bar graph could show how many students chose each combo.

For Part 2, look for explanations that identify a count or measurement for numeric data and a group label for categorical data. Accept other suitable Part 3 questions and challenge graphs that show the count for each combo.