What Kind of Data?

Sort data by what each value tells you.

A1P.DSP.C.34 "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 data tell how much or how many. The numbers can be meaningfully compared or used in calculations.

A novel's page count

CATEGORICAL DATA

These data name a group or label. Even if a label uses a number, that number does not tell how much.

An orchestra member's section, such as brass or strings

1 SORT

8 items

For Part 1, circle AMOUNT or GROUP for each item; for Part 2, choose one item from each group and explain how you knew.

1.	Minutes each runner takes to finish a race	AMOUNT GROUP
2.	Eye color of each student	AMOUNT GROUP
3.	Type of pet in each home	AMOUNT GROUP
4.	Number of books each student borrowed last month	AMOUNT GROUP
5.	Length of each pencil in centimeters	AMOUNT GROUP
6.	Number of goals each soccer team scored	AMOUNT GROUP
7.	Favorite movie genre of each student	AMOUNT GROUP
8.	Temperature of each cup of tea in degrees Celsius	AMOUNT GROUP

2 PROVE IT

Explain your thinking

Choose one item from each group and explain how you knew.

ITEM # _____ **HOW I KNEW** _____

ITEM # _____ **HOW I KNEW** _____

3 MAKE YOUR OWN

One of each

Write one new example of AMOUNT data and one new example of GROUP data.

AMOUNT _____

GROUP _____

CHALLENGE

A school records bus route numbers, such as 12, 18, and 24; are these AMOUNT or GROUP data, and would their mean describe a route? Explain.

ANSWER KEY # What Kind of Data?

PART 1 · SORT

#	ITEM	CATEGORY	WHY
1	Minutes each runner takes to finish a race	**AMOUNT**	Time is a measured amount.
2	Eye color of each student	**GROUP**	Eye color is a label.
3	Type of pet in each home	**GROUP**	Pet type names a group.
4	Number of books each student borrowed last month	**AMOUNT**	Books borrowed is a count.
5	Length of each pencil in centimeters	**AMOUNT**	Length is a measured amount.
6	Number of goals each soccer team scored	**AMOUNT**	Goals scored is a count.
7	Favorite movie genre of each student	**GROUP**	Genre names a group.
8	Temperature of each cup of tea in degrees Celsius	**AMOUNT**	Temperature is a measured amount.

PART 2 · PROVE IT

Task: Choose one item from each group and explain how you knew.
Accept any explanation that names the deciding feature from the rule box for the chosen item.

PART 3 · MAKE YOUR OWN (SAMPLE ANSWERS)

- **AMOUNT**: Number of steps each hiker takes.
- **GROUP**: Primary language spoken at home.

Challenge: GROUP. Route numbers are labels, so their mean would not describe a route.

For Part 2, accept explanations that identify a meaningful count or measurement for AMOUNT and a label for GROUP. Students may choose any one item from each group.