Numbers or Groups?

Sort data by what each value tells you.

6.12 "Measurement and data. The student applies mathematical process standards to use numerical or graphical representations to analyze problems. The student is expected to: represent numeric data graphically, including dot plots..."

NAME _____ DATE _____

NUMERIC DATA

Numeric data tell a count or measurement. You can find measures such as mean, median, range, and IQR from numeric data.

The masses of five backpacks are 3 kg, 4 kg, 3 kg, 5 kg, and 6 kg.

CATEGORICAL DATA

Categorical data name groups or types. You can count each group and find the percent in each group.

The popsicle flavors chosen are lemon, grape, lemon, and cherry.

1 SORT

8 items

For each item, circle NUMERIC or GROUPS, then choose two items, one from each category, and explain what makes each one fit.

1. Number of seeds in each apple — NUMERIC GROUPS
2. Distance each student walked during PE — NUMERIC GROUPS
3. Favorite board game chosen by each student — NUMERIC GROUPS
4. Minutes spent on homework last night — NUMERIC GROUPS
5. Type of pet owned by each student — NUMERIC GROUPS
6. Bus route number used by each student — NUMERIC GROUPS
7. Number of siblings each student has — NUMERIC GROUPS
8. Music genre chosen by each student — NUMERIC GROUPS

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 NUMERIC data example and one new GROUPS data example.

NUMERIC _____

GROUPS _____

CHALLENGE

Write one survey question that collects both numeric data and groups data, then identify each type of answer.

ANSWER KEY # Numbers or Groups?

GRADE 6 · TEKS 6.12

PART 1 · SORT

#	ITEM	CATEGORY	WHY
1	Number of seeds in each apple	**NUMERIC**	Each value is a count.
2	Distance each student walked during PE	**NUMERIC**	Each value is a measurement.
3	Favorite board game chosen by each student	**GROUPS**	The values are names of game types.
4	Minutes spent on homework last night	**NUMERIC**	Each value measures time.
5	Type of pet owned by each student	**GROUPS**	The values are pet-type labels.
6	Bus route number used by each student	**GROUPS**	Route numbers are labels, not amounts.
7	Number of siblings each student has	**NUMERIC**	Each value is a count.
8	Music genre chosen by each student	**GROUPS**	The values are names of genres.

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**: The number of books on four shelves is 18, 22, 19, and 24.
- **GROUPS**: The colors of four bicycles are red, blue, red, and green.

Challenge: Ask, "How many minutes did you spend reading last night, and where did you read?" Minutes is numeric data. Places, such as home, library, or a car, are groups data.

Accept Part 2 explanations that identify counts or measurements for NUMERIC and names, types, or labels for GROUPS. Emphasize that a number used as a label, such as a bus route number, is categorical data.