Who Do They Represent?

Sort studies by how far their results can reach.

S.DC.1.3 "Determine the appropriate scope of inference for generalizing results."

NAME _____ DATE _____

CAN GENERALIZE	CANNOT GENERALIZE
When people are randomly selected from a complete list of a defined population, the results can support conclusions about that population. An aquarium randomly selects people from its complete season-pass roster and asks about the jellyfish exhibit.	A volunteer or convenience sample does not support conclusions about everyone in the target population. Its results describe only the people who responded. An aquarium asks only people standing near the jellyfish tank about the exhibit.

1 SORT

8 items

Circle BROAD or LIMITED for each study, then choose one item from each category and explain how the sampling method led to your choice.

1.	A school asks the first 30 students in the lunch line about lunch options.	BROAD LIMITED
2.	A school randomly picks 90 students from its full student roster and asks about homework time.	BROAD LIMITED
3.	A county randomly picks 200 voters from its full voter roll and asks about a proposed law.	BROAD LIMITED
4.	A city posts a survey link and asks residents to volunteer their views on bus routes.	BROAD LIMITED
5.	A student asks only their friends what they think of a new school rule.	BROAD LIMITED
6.	A gym randomly picks 60 members from its full membership list and asks about class times.	BROAD LIMITED
7.	A company randomly picks 100 workers from its full employee list and asks about commutes.	BROAD LIMITED
8.	A library randomly picks 80 cardholders from its full cardholder list and asks about reading habits.	BROAD LIMITED

2 PROVE IT

Explain your thinking

Choose one item from each category and explain how the sampling method led to your choice.

ITEM # _____ **HOW I KNEW** _____

ITEM # _____ **HOW I KNEW** _____

3 MAKE YOUR OWN

One of each

Write one new BROAD study and one new LIMITED study. For each, name the population the study aims to describe.

BROAD _____

LIMITED _____

CHALLENGE

A college randomly picks students from its full first-year roster and asks about campus dining. Can it generalize the results to all students at the college? Explain which group the results can represent.

ANSWER KEY

Who Do They Represent?

HIGH SCHOOL · S.DC.1.3

PART 1 · SORT

#	ITEM	CATEGORY	WHY
1	A school asks the first 30 students in the lunch line about lunch options.	**LIMITED**	The first students in line are a convenience sample, not a random sample of the school.
2	A school randomly picks 90 students from its full student roster and asks about homework time.	**BROAD**	Random selection from the full roster supports generalizing to the school's students.
3	A county randomly picks 200 voters from its full voter roll and asks about a proposed law.	**BROAD**	Random selection supports generalizing to the county's registered voters.
4	A city posts a survey link and asks residents to volunteer their views on bus routes.	**LIMITED**	People choose whether to respond, so the results cannot be generalized to all city residents.
5	A student asks only their friends what they think of a new school rule.	**LIMITED**	Friends are a convenience sample, not a random sample of the school's students.
6	A gym randomly picks 60 members from its full membership list and asks about class times.	**BROAD**	Random selection from the full list supports generalizing to that gym's members.
7	A company randomly picks 100 workers from its full employee list and asks about commutes.	**BROAD**	Random selection from the full list supports generalizing to that company's employees.
8	A library randomly picks 80 cardholders from its full cardholder list and asks about reading habits.	**BROAD**	Random selection from the full list supports generalizing to that library's cardholders.

PART 2 · PROVE IT

Task: Choose one item from each category and explain how the sampling method led to your choice.
Accept any explanation that names the deciding feature from the rule box for the chosen item.

PART 3 · MAKE YOUR OWN (SAMPLE ANSWERS)

- **BROAD**: A park district randomly selects households from its complete household list to ask about trail use. The target population is all households in the district.
- **LIMITED**: A park district asks only people leaving one trailhead about trail use. The target population is all households in the district.

Challenge: No. Random selection from the first-year roster supports generalizing to the college's first-year students, not to all its students.

For Part 2, explanations should identify random selection from a complete list or a volunteer or convenience sample. A random sample supports generalization only to the population it was drawn from, not claims about cause and effect.