

Select an appropriate data collection method

1

Sample: 1,000 customers using the chain's rewards app

A

Customers who participate in the coffee chain's loyalty program

B

All customers of a national coffee chain

2

Goal: Customer satisfaction with an online store
Sampling approach: Email a survey only to customers who returned an item

A Selection bias**B** Measurement bias**C** Response bias**D** Voluntary response bias**3**

Population: All trees in a provincial park

A

300 trees located within 50 metres of hiking trails

B

300 trees randomly selected throughout the park

4

Population: All elementary school teachers in Ontario
Sample: 700 teachers enrolled in graduate education courses

A

No, it is not representative of the population

B

Yes, it is representative of the population

5

Survey question: Don't you agree that our school should provide more free parking for students?

A Missing response options**B** Double-barrelled question**C** Leading question**D** Sensitive question**6**

Goal: How many hours employees work from home each week
Sampling approach: Survey only employees who have company laptops

A Employees with company laptops may answer work-from-home questions more quickly than other employees.**B** Employees without company laptops may have different work-from-home patterns.**7**

Survey question: How satisfied are you with your teachers and the amount of homework you receive?

A

The question may require respondents to evaluate two different topics using one answer.

B

The question may require respondents to think about both school and home before answering.

8

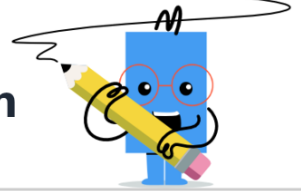
A survey randomly selects adults and asks how many hours they sleep each night and whether they exercise regularly.

A

Observational study

B

Experiment



Select an appropriate data collection method

9

Experiment

- A Researchers randomly select marathon runners and record both their ages and resting heart rates to determine whether the variables are related.
- B Gardeners apply one fertilizer to one group of plants and a different fertilizer to another group before measuring growth.

10

an exit survey

- A Prevents dissatisfied people from skipping the survey
- B Includes people who never used the service
- C Guarantees long-term opinions are measured
- D Collects feedback while the experience is recent

11

Goal: How often students use public transit

- A Count buses passing the school.
- B Ask school staff how students usually travel.
- C Survey a representative sample of students about their travel habits.
- D Survey students waiting at a bus stop and compare how often they report using public transit each week.

12

Goal: Amount of rainfall during a storm

- A Estimate rainfall from puddle sizes afterward.
- B Measure rainfall using rain gauges placed around the area.
- C Ask residents to estimate how much rain fell and compare their estimates with those from other neighbourhoods.
- D Count umbrellas being used during the storm.