

Identify the SAMPLING METHOD used in each scenario:

1. A researcher wants to study the impact of a new training program on employees. They randomly select 10 departments and survey all employees in those departments.  
**Cluster Sampling**
2. You want to study the opinions of shoppers at a mall and stands at the entrance to interview the first 100 people who walk in.  
**Convenience Sampling (Why? – Because right time, right place)**
3. A government agency wants to survey households in a city. They use a random number generator to select 500 households from a complete list.  
**Simple Random Sampling**
4. A sociologist is studying a rare community and starts by interviewing a few members, who then refer the researcher to others in the community.  
**Snowball Sampling**
5. A researcher is studying voter preferences in a country. They first randomly select states, then districts within those states, and finally households within those districts.  
**Multi-stage Sampling (Why? - population is divided into multiple hierarchical stages, and sampling is conducted at each stage.)**
6. A researcher is studying a rare disease. They first conduct a broad survey to identify potential cases and then conduct detailed interviews with those who tested positive.  
**Multi-phase Sampling (Why? - data is collected in multiple phases, with each phase providing more detailed information about a subset of the population.)**
7. A marketing team wants to survey 200 people, ensuring that 100 are men and 100 are women. They stop recruiting once they reach the quota for each group.  
**Quota Sampling**
8. A researcher wants to survey employees in a large company. They select every 10th employee from an alphabetical list of all employees.  
**Systematic Sampling**
9. A researcher is studying the effectiveness of a new teaching method and intentionally selects schools that have implemented the method and schools that have not, ensuring a balanced comparison.  
**Purposive Sampling (Why? – Sample taken with the purpose of selecting schools using the new teaching method and those that do not so that a balanced comparison can be done)**
10. A public health researcher wants to study vaccination rates in a large city. The city is divided into 100 neighborhoods, and the researcher randomly selects 15 neighborhoods. All households within the selected neighborhoods are surveyed.  
**Cluster Sampling (Why? – Divide population into groups, randomly select some of the groups, then select all within each of the selected groups)**

11. A researcher wants to study income levels in a city and divides the population into high, middle, and low-income groups. They then randomly select individuals from each group, proportional to the size of each group.

Stratified Sampling (Why? – Divide population into groups, randomly select individuals from each group proportional to the size of the group)