

# Sampling

	What it is	When to use	Advantages	Disadvantages
Census	A collection of data from an entire population	Gives a completely accurate result	<ul style="list-style-type: none"><li>• Small population</li><li>• Easy to collect data</li><li>• Large variation of opinion</li></ul>	<ul style="list-style-type: none"><li>• Time consuming+Expensive</li><li>• Can not be used when testing involves destruction</li><li>• Large volume of data to process</li></ul>
Random Sampling	Each thing has an equal chance of being selected	<ul style="list-style-type: none"><li>• Large population</li><li>• Have a sampling frame</li></ul>	<ul style="list-style-type: none"><li>• Numbers truly random and free from bias</li><li>• Easy to use</li><li>• Each number has a known equal chance of being selected</li></ul>	<ul style="list-style-type: none"><li>• Needs a sampling frame</li></ul>
Systematic sampling	Required elements are chosen at regular intervals in an ordered list	<ul style="list-style-type: none"><li>• Time constraint</li></ul>	<ul style="list-style-type: none"><li>• Simple to use</li><li>• Suitable for large samples</li></ul>	<ul style="list-style-type: none"><li>• Only random if ordered list is truly random</li><li>• Can introduce bias</li></ul>
Stratified sampling	Population is divided into groups and a simple random sample is carried out in each group	<ul style="list-style-type: none"><li>• More accurate when strata are present</li><li>• Reflects population structure</li></ul>	<ul style="list-style-type: none"><li>• It can give more accurate estimates than simple random sampling where clear strata are present</li><li>• Reflects the population structure</li></ul>	<ul style="list-style-type: none"><li>• Within the strata, the problems are than same as for any simple random sample</li><li>• If the strata are not clearly defined they may overlap</li></ul>
Quota sampling	The population is divided into groups by gender etc. A quota of people in each group is set to try and reflect the group's proportion in the whole population	<ul style="list-style-type: none"><li>• There is no sampling frame</li></ul>	<ul style="list-style-type: none"><li>• Enables fieldwork to be done quickly because a small sample size is taken.</li><li>• Costs kept to a minimum</li><li>• Administering test is easy</li></ul>	<ul style="list-style-type: none"><li>• Not possible to estimate the sampling errors</li><li>• Interviewers may not be able to judge characteristics easily</li><li>• Non responses are not recorded</li><li>• Can introduce interview bias</li></ul>