2.2 Sampling

	What it is	When to use	Advantages	Disadvantages
Census	A collection of data from an entire population	Gives a completely accurate result	• Small population • Easy to collect data • Large variation of opinion	• Time consuming+Expensive • Can not be used when testing involves destruction • Large volume of data to process
Random Sampling	Each thing has an equal chance of being selected	• Large population • Have a sampling frame	• Numbers truly random and free from bias • Easy to use • Each number has a known equal chance of being selected	• Needs a sampling frame
Systematic sampling	Required elements are chosen at regular intervals in an ordered list	• Time constraint	• Simple to use • Suitable for large samples	• Only random if ordered list is truly random • Can introduce bias
Stratified sampling	Population is divided into groups and a simple random sample is carried out in each group	• More accurate when strata are present • Reflects population structure	• It can give more accurate estimates than simple random sampling where clear strata are present • Reflects the population structure	• Within the strata, the problems are than same as for any simple random sample • If the strata are not clearly defined they may overlap
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	• There is no sampling frame	• Enables fieldwork to be done quickly because a small sample size is taken. • Costs kept to a minimum • Administering test is easy	• Not possible to estimate the sampling errors • Interviewers may not be able to judge characteristics easily • Non responses are not recorded • Can introduce interview bias