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| Sampling Method | Description | Strengths | Weaknesses |
| Random Sampling | Random sampling means that members of a 'population' have equal chances of being selected.  To carry out this type of sampling, you will need to use a table of random numbers. Random numbers can also be generated using a calculator or computer. These can then be listed. |  |  |
| Convenience Sampling | Convenience sampling is where the sample is chosen in a way that makes it as easy as possible for the person doing the sample. For example, choosing the first 20 items from a production line to test. |  |  |
| Stratified Sampling | Strata is different sections of a population such as gender or age groups. A stratified sample is a sample with consideration of the strata within a population. We look at what fraction of the whole population we want. Then take that fraction of each Strata.  Often the sample from each sample would then be selected using random sampling. |  |  |
| Census | The data is obtained from every member of the population. |  |  |
| Sampling Method | Description | Strengths | Weaknesses |
| Cluster Sampling | If a population is divided into clusters (groups of items that have a distribution within them similar to the populations from which they come) then there needs to be a good mix of different types of people or items in that cluster.  You would select a cluster at random and then sample every item within that cluster. |  |  |
| Quota Sampling | Sometimes a particular number of people or items with a certain characteristic are needed. This number is known as the quota. The person carrying out the sample would usually chose the quota as opposed to using a statistical method. |  |  |
| Systematic Sampling | This is a method where items or people are chosen at regular intervals. You should number the population and determine your sample size, select a random starting point and then pick your sample at a selected interval so that you get your sample size. |  |  |
| Multi-Stage Sampling | This is a form of cluster sampling often used in opinion polls. A cluster is chosen to represent the overall population may then be broken down into smaller sections, only some of which will be chosen to be part of the sample. |  |  |
| Pilot Survey | A small-scale survey carried out before the main survey. |  |  |