

Sampling

When you are using statistics with a large number of values, you may only want a representative sample in your survey. To do this you should find a random sample. In this sample, every value should have an equal chance of being selected. You should make sure there is no bias. Stratified Random Sampling When the values can be split into different parts, these parts may not all have equal sizes. This means members of one set can have a higher probability of being selected than members of another set. In these cases you should use a method called stratified random sampling. This is basically finding the ratio of the total number of values you want from each group. For example:

Find a sample of 50 pupils from the year groups 7, 8 and 9 which have 124, 146 and 98 pupils respectively.

Total number of pupils = $124 + 146 + 98 = 368$

Number from year 7 = $(124 / 368) ? 50 = 17$

Number from year 8 = $(146 / 368) ? 50 = 20$

Number from year 9 = $(98 / 368) ? 50 = 13$ This then is used to find 17 random pupils from year 7, 20 random pupils from year 8 and 13 random pupils from year 9. Find the information you want from each of these pupils. Then you find the average from each of these samples and then find the average of these averages.

About the Author

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