

The Jelly Blubber Sampling Design Activity

Judgmental Sample - Select 5 Jelly Blubbers that, in your judgment, are representative of the population on this sheet. Record the lengths of your five Blubbers and find the mean.

_____ _____ _____ _____ _____ \bar{x} = _____

Simple Random Sample - Find five random numbers between 1 & 100. Locate the corresponding Jelly Blubbers and record their lengths. Find the mean.

_____ _____ _____ _____ _____ \bar{x} = _____

Stratified Sample - Suppose one shakes the Jelly Blubbers, causing the larger ones to sink and the smaller ones to rise. The result is the sheet of stratified Blubbers, where the sizes are divided into 5 strata. Choose one Blubber at random from each stratum by choosing a random number. Locate the Blubbers & record their lengths. Find the mean.

_____ _____ _____ _____ _____ \bar{x} = _____

Systematic Sample - A system is used to select the sample. Use the original page of Blubbers and select five Blubbers. Choose a random number between 1 & 20. This is the first Blubber. Then add 20 to each previous number to find the other four Blubbers. Record their lengths and find the mean.

_____ _____ _____ _____ _____ \bar{x} = _____

Cluster Sample - Cluster samples select whole groups or clusters of individuals (usually based on location). Choose a random number (r) between 1 & 20 and multiply by 5. Your sample will be that number ($5r$) and the four numbers preceding it. (Example: $r = 12$, $5r = 60$, so sample is 60, 59, 58, 57, 56) Record the lengths of the Blubbers and find the mean.

_____ _____ _____ _____ _____ \bar{x} = _____

SRS- Advantages:

Disadvantages:

Stratified - Advantages:

Disadvantages:

Systematic - Advantages:

Disadvantages:

Cluster - Advantages:

Disadvantages: