

# An Example

If you want to select 20 samples/subjects out of 100 students, ...

**$N = 100$**

**want  $n = 20$**

**$N/n = 5$**

**select a random number from 1-5:  
chose 4**

**start with #4 and take every 5th unit**

1	26	51	76
2	27	52	77
3	28	53	78
4	29	54	79
5	30	55	80
6	31	56	81
7	32	57	82
8	33	58	83
9	34	59	84
10	35	60	85
11	36	61	86
12	37	62	87
13	38	63	88
14	39	64	89
15	40	65	90
16	41	66	91
17	42	67	92
18	43	68	93
19	44	69	94
20	45	70	95
21	46	71	96
22	47	72	97
23	48	73	98
24	49	74	99
25	50	75	100

# Probabilistic Sampling – cont'd

## ***3. Stratified Sampling Method:***

Stratified random sampling is the process of selecting a sample in such a way that identified subgroups in the population are represented in the sample in the same proportion that they exist in the population. It can also be used to select equal-size samples from each of a number of subgroups if subgroup comparisons are desired.

Researcher divides population into natural subgroups that are more homogeneous than the population as a whole. Then items are selected for the sample at random or by a systematic method from each subgroup.

# *Steps in Stratified Sampling*

1. Define the population.
2. Determine the desired sample size.
3. Identify the variable and subgroups (strata) for which you want to guarantee appropriate representation (either proportional or equal).
4. Classify all members of the population as members of one of the identified subgroups.
5. Randomly select (using a table of random numbers) an appropriate number of individuals from each of the subgroups. ("Appropriate" means either a proportional number of individuals or an equal number of individuals.)