

# 13 - 1

## Sampling and Bias

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sample: smaller group from the whole

population: the whole group  
(usually unrealistic to survey everyone)



# Random Samples

1.) **simple** random sample

each item has an equal chance of being selected

2.) **stratified** random sample

form groups first, then select from groups

3.) **systematic** random sample

chosen based on an interval or time



## Biased Samples

### 1.) **convenience** sample

survey people who  
are easily accessible

### 2.) **voluntary response** sample

only includes people  
who want/choose to  
participate



## Classify each type of sample.

Ex: Every 10th bolt is chosen off of the assembly line. *systematic*

Ex: Mrs. York selects 15 student ID numbers from the computer. *simple*

Ex: A journalism student surveys her friends at lunch. *convenience*



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**Identify each sample as biased or unbiased.**

**Ex: Every 10th customer in line for a rock concert is asked about his or her favorite band.** *biased*

**Ex: Every sophomore's name is written on identical slips of paper, and 12 are selected.**  
*unbiased*

