

### ICM- Statistics Unit Jigsaw Activity

**Directions:** Define and give an example of each vocabulary word below.

1. Statistics - the practice of collecting and analyzing data in large quantities. Ex: finding the average height of a class or of the student body
2. Univariate Data- Univariate means "**one variable**" (one type of data)  
Example: You weigh the pups and get these results:  
2.5, 3.5, 3.3, 3.1, 2.6, 3.6, 2.4
3. Bivariate Data- Data for **two variables** (usually two types of related data).  
Example: Ice cream sales versus the temperature on that day. The two variables are Ice Cream Sales and Temperature.
4. Descriptive Statistics - brief, descriptive summary that describes a data set and highlights all key features, ex. Measures of central tendency
5. Inferential Statistics - taking data from samples and with that data, making generalizations about the larger populations, ex. taking a sample of 100 people to make a statement about people shopping at a mall
6. Population - the entire pool of people in a statistical sample, ex. ICM class is the sample vs PCHS student body as the population
7. Sample - a small part to represent the whole, ex. random people of the class; ICM class is the sample vs PCHS student body as the population
8. Sampling Error - error caused by observing the sample instead of the whole, ex. interviewing only seniors instead of everyone at the school and making inferences based off that data
9. Margin of Error - an amount that is allowed for any case of miscalculation, ex. 95% confidence interval with 10% margin of error
10. Random Sampling - method of sampling, ex. picking names out of a hat
11. Systematic Sampling - selected according to a random starting point at fixed intervals, ex. getting the height of every 10th person off the bus

12. Stratified Sampling - dividing the population into groups called strata and selecting from **each** group, ex. girls and boys of each grade, sampling from each grade at PCHS
13. Cluster Sampling - divides pop into clusters and selects from random clusters, **not** every cluster, ex. selecting only 5 math classes on the 3rd floor, sampling only the mod math classes
14. Convenience Sampling - you choose people who are easy to reach and sample them, ex. surveying shoppers at a local mall at the store you work at
15. Qualitative Data - type of data that can be categorized but not given a number value - ex. eye color, what kind of pet you have, favorite food
16. Quantitative Data - data that can be categorized with numbers - ex. average height, how many pets you have, test scored
17. Standard Deviation - measurement of displacement from the mean, ex. IQ charts, how far away from the mean is your data, how spread out is your data (68-95-99 rule)
18. Variance - how far a set of numbers are from their average value
19. Z-score - the number of standard deviations from the mean any given point on your data curve, makes your values standardized and able to be compared on a similar level