ICM Honors Fall 2018 Unit 5 Statistics Name $\qquad$
*Subject to change.*

| Day | Date | Topic | HW | Initials |
| :---: | :---: | :---: | :---: | :---: |
| Monday | 11/26 | Day 1: <br> 1. Intro to Stats <br> 2. Sampling Methods <br> 3. Graphical Representations | Day 1 HW <br> - Get <br> univariate, quantitative data from 50 people |  |
| Tuesday | 11/27 | Day 2: <br> 1. Review Graphical Representations <br> 2. Practice Activity (quiz grade) | Day 2 HW |  |
| Wednesday | 11/28 | Day 3: <br> 1. Measures of Central Tendency <br> 2. Measures of Spread (Range, Midrange, IQR,etc.) <br> 3. Review | Day 3 HW |  |
| Thursday | 11/29 | Day 4: <br> 1. Variance and Standard Deviation <br> 2. Paper Clip Activity <br> 3. Introduce PROJECT- Due Tues 12/11 @ 11:59pm | Day 4 HW |  |
| Friday | 11/30 | Day 5: <br> 1. Review <br> 2. QUIZ (Days 1-4) | Day 5 HW |  |
| Monday | 12/3 | Day 6: <br> 1. Confidence Intervals and Margin of Error <br> 2. Is your data normal? | Day 6 HW |  |
| Tuesday | 12/4 | Day 7: <br> 1. Normal Curve and Empirical Rule <br> 2. Z -scores | Day 7 HW |  |
| Wednesday | 12/5 | Day 8: <br> 1. More Normal Curve, Empirical Rule, and Z -scores <br> 2. Review | Day 8 HW |  |
| Thursday | 12/6 | REVIEW \& QUIZ! | None |  |
| Friday | 12/7 | Day 9: <br> 1. Work on projects in class | Day 9 HW |  |
| Monday | 12/10 | Day 10: <br> Test Review <br> *Test includes information from ALL days.* | Day 10 HW |  |
| Tuesday | 12/11 | Day 11: <br> Unit 5 Statistics TEST! <br> PROJECT DUE BY 11:59PM TONIGHT! | Day 11 HW <br> - Finish <br> Project! |  |

## Mastery Checklist:

*Use the checklist below to determine the areas you are strongest/weakest before taking the unit test.*

## Days 1-2:

$\square$ I can determine which method of surveying a population is being described in a scenario.
$\square$ I can represent data in multiple graphical representations (frequency distribution and polygon, histogram, stem and leaf plot, pie chart, etc.)

## Days 3-4:

I I can tell the difference between measures of central tendency and measures of spread.
$\square$ I can calculate the measures of central tendency given a set of data (mean, median, mode, midrange).
$\square$ I can calculate the measures of spread given a set of data (range, interquartile range, variance, standard deviation).

## Days 5-8:

$\square$ I can calculate values that are within a specified margin of error.
$\square$ I can accurately draw a normal distribution curve labeling the mean and 3 standard deviations above/below the mean.
$\square$ I can accurately label all percentages between data points on a normal distribution curve.
$\square$ I can use the empirical rule to determine the percent of people that fall in a particular range given a set of data.
$\square$ I can determine when it is appropriate to use the normal distribution curve and when it is appropriate to use z-scores to answer questions about a set of data.
$\square$ I can recall the z-score formula to calculate exactly how many standard deviations above or below the mean a data point lies (when it is not exactly 1,2, or 3 standard deviations).
$\square$ I can use the z-score chart to locate the percentage of people that fall below a particular data point, and use that number to calculate the percentage of people that fall above a particular data point.

