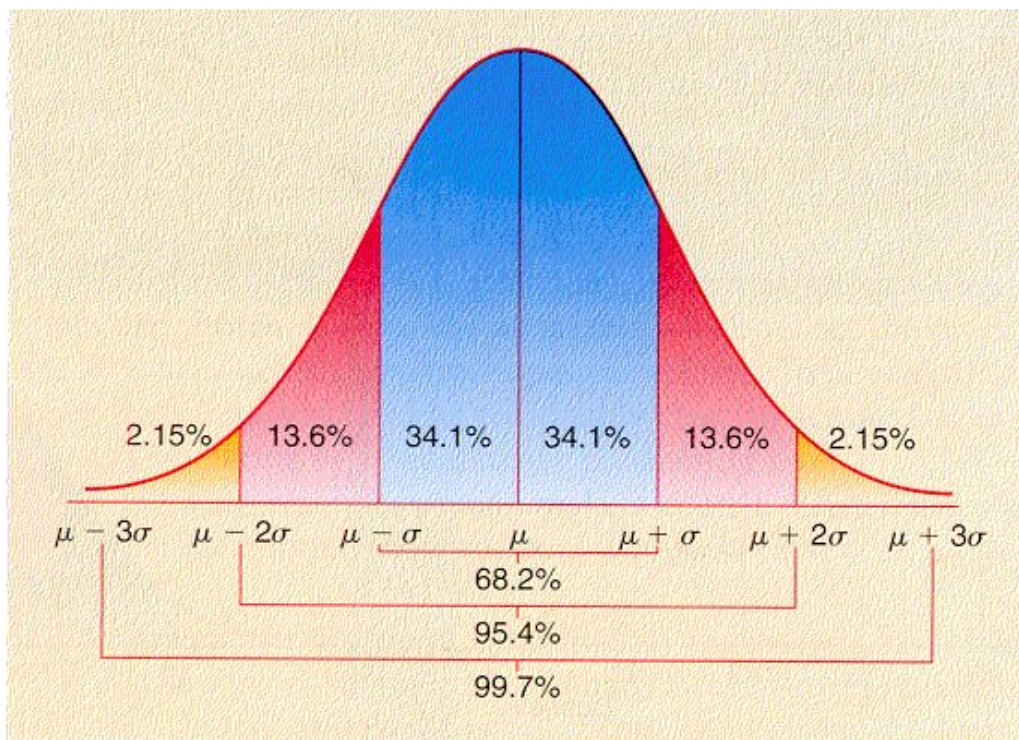Rosie Gurnee
1st period
Quarter 3, 2018

Unit 3
'The Pit and The Pendulum'

The essential question for this unit was about the period of a pendulum, and how to collect and show data from it. In this unit we further explored statistics using a normal distribution curve, which looks like this...

In this unit we learned what a normal distribution curve, or bell curve was. We learned that it displays numerical data and uses standard deviation, or the measure of spread from the mean. Standard deviation is represented by the lowercase greek letter sigma (σ).

Because we were trying to find out how long the period of a pendulum was, we ran experiments testing what variables affect it. We tested angle of release, weight of bob (the object at the end),and length of string. After we gathered this data, we put it on a normal distribution curve and found that the length of the string was the only variable which affected the period of a pendulum. We took the data from the length testing and came up with an equation of best fit.

In the story *'The Pit and The Pendulum'* by Edgar Allan Poe there is a pendulum with a scythe as the bob which we can assume has a string length of 30-40 feet. Using the equation from the length data we can determine how long it took this 30 foot long pendulum to swing 12 times. It takes around 68 seconds.