| Mrs. Logan Advanced Math Week 25- February 19-23 |  |  |  |  |  |
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| Module 6: Probability and Statistics Topic C: Random Sampling |  |  |  |  |  |
|  | Monday February 19th | Tuesday February 20th | Wednesday February 21st | Thursday February 22nd | Friday <br> February 23rd |
| Lesson | Lesson 10: <br> Populations and Samples | Lesson 11: Selecting <br> a Sample | Lesson 12: Sampling <br> Variability when <br> Estimating a <br> Population Mean | Lesson 13: Sampling <br> Variability and the Effect of Sample Size | Lesson 14: Sampling <br> Variability when <br> Estimating a <br> Population <br> Proportion |
| Pages | 149-161 | 163-174 | 175-191 | 193-211 | 213-225 |
| We will... | look at ways we can gather data about groups we cannot measure completely. | learn ways to find data sets that are random. | look at several samples and examine how we can use them to estimate population mean. | look at the relationship between sample size and sampling variability. | look at what impact sample size has on sampling variability. |
| Bell Ringer | Population vs. Sample | Selecting a Sample | Selecting a Sample | Different Sample Sizes | Sample and Population Proportions |
| Exit Ticket | Sample Statistic or Population Characteristic | Random Sample or Population | Random Number Table | Sample Mean and Population Mean | Sampling Distribution |
| I will... | distinguish populations and their characteristics from samples and their statistics. | take a random sample from a population and describe the importance of the random sample in drawing conclusions. | describe sampling variability in the context of estimating population mean. | observe that increasing the sample size decreases the sampling variability of the sample mean. | observe that increasing the sample size decreases the sampling variability of the sample proportion. |
| Reminders |  |  |  |  | Topic C Quiz next Tuesday, February 27th. |
| State <br> Standards | 7.SP.C.5Understand that the probability of a chance event is a number between 0 and 1 that expresses the likelihood of the event occurring. Larger numbers indicate greater likelihood. A probability near 0 indicates an unlikely event, a probability around $1 / 2$ indicates an event that is neither unlikely nor likely, and a probability near 1 indicates a likely event. |  |  |  |  |
|  | 7.SP.C.6Approximate the probability of a chance event by collecting data on the chance process that produces it and observing its long-run relative frequency, and predict the approximate relative frequency given the probability. |  |  |  |  |
|  | 7.SP.C.7.aDevelop a uniform probability model by assigning equal probability to all outcomes, and use the model to determine probabilities of events. |  |  |  |  |
|  | 7.SP.C.8.aUnderstand that, just as with simple events, the probability of a compound event is the fraction of outcomes in the sample space for which the compound event occurs. |  |  |  |  |

7.SP.C.8.bRepresent sample spaces for compound events using methods such as organized lists, tables and tree diagrams.
7.SP.C.7.bDevelop a probability model (which may not be uniform) by observing frequencies in data generated from a chance process.
7.SP.C.8.cDesign and use a simulation to generate frequencies for compound events.

