

**Mrs. Logan Advanced Math**  
**Week 22: January 29 - February 2**

**Module 6: Probability and Statistics**  
**Topic A: Calculating and Interpreting Probabilities**

|             | Monday<br>January 29th   | Tuesday<br>January 30th   | Wednesday<br>January 31st  | Thursday<br>February 1st   | Friday<br>February 2nd   |
|-------------|--|---|--|--|--|
| Lesson      | Lesson 1: What is Probability?   | Lesson 2: Outcomes of Chance Experiments  | Lesson 3: Theoretical Probability  | Lesson 4: Multistage Experiments   | Lesson 5: Outcomes that are Not Equally Likely   |
| Pages       | 7-27   | 29-38   | 39-56  | 57-71  | 73-89  |
| We will...  | use a number to represent the likelihood of a given result.                                  | conduct a chance experiment to help us answer chance questions more accurately. | explore the difference between what we predict will happen and what actually happens when conducting chance experiments. | learn a new way to organize and represent all outcomes in the sample space for chance experiments and calculate theoretical probabilities. | learn how to find probabilities when outcomes in a sample space are not equally likely.            |
| Bell Ringer | Spinner Game   | Fractions, Decimals and Percents Sprint   | Chance Predictions   | Sample Space   | Equally Likely   |
| Exit Ticket | Likelihood   | Empirical Probability   | Theoretical Probability  | Tree Diagram for Probability   | Using Relative Frequencies   |
| I will...   | calculate the empirical probability of an event by collecting data from a chance experiment. | determine which outcomes in the sample space an event will occur.               | calculate theoretical probabilities of events for chance experiments that have equally likely outcomes.                  | use tree diagrams to organize and represent the outcomes in the sample space of a multistage experiment.                                   | calculate probabilities of events for chance experiments that do not have equally likely outcomes. |
| Reminders   |  | Sprint for a grade.   |  |  | Module 6 Topic A Quiz on Monday 2/5  |

**State Standards**

- 7.SP.C.5 Understand 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  $\frac{1}{2}$  indicates an event that is neither unlikely nor likely, and a probability near 1 indicates a likely event.
- 7.SP.C.6 Approximate 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.a Develop a uniform probability model by assigning equal probability to all outcomes, and use the model to determine probabilities of events.
- 7.SP.C.8.a Understand 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.b Represent sample spaces for compound events using methods such as organized lists, tables and tree diagrams.