

## UNIT 7: COUNTING & PROBABILITY

Use theoretical and experimental probability to model and solve problems.

- a) Use addition and multiplication principles.
- b) Calculate and apply permutations and combinations.
- c) Create and use simulations for probability models.
- d) Find expected values and determine fairness.

Identify and use discrete random variables to solve problems

Day	Topic/Objective	Activity
1 Monday, 5/7	<b>Unit 7 Day 1 Notes –</b> Fundamental Counting Principle	
2 Tuesday, 5/8	More Practice with Fundamental Counting Principle	
3 Wednesday, 5/9	<b>Unit 7 Day 2 Notes –</b> Permutations & Combinations	
4 Thursday, 5/10	Day 1 & 2 Review	
5 Friday, 5/11	<b>Unit 7 Day 3 Notes –</b> Empirical vs. Theoretical Probability & Basic Probability	<b>Unit 7 Quiz (Days 1 &amp; 2)</b>
6 Monday, 5/14	<b>Unit 7 Day 4 Notes –</b> Probability of Mutually Exclusive Independent/Dependent Events	
7 Tuesday, 5/15	Review/More Practice with Day 3 & 4	
8 Wednesday, 5/16	<b>Unit 7 Day 5 Notes –</b> Expected Value and Fairness	
9 Thursday, 5/17	<b>Unit 7 Day 6 Notes –</b> Geometric Probability	
10 Friday, 5/18	<b>Unit 7 Day 7 Notes –</b> Binomial Probability	
11 Monday, 5/21	Review Day	
12 Tuesday, 5/22	<b>Unit 7 Test</b>	<b>Unit 7 Test</b>