

## ABSS Math Unit Planning Template

Introduction:

Grade/Course: 9_12   Discrete Mathematics		Suggested Unit Pacing (# of days): 7 days		
<b>Unit Number and Title:</b> Unit 5 - Voting		<b>Mathematical Practices</b>		
		<b>P1</b>	Make sense of problems and persevere in solving them.	
		<b>P2</b>	Reason abstractly and quantitatively.	
		<b>P3</b>	Construct viable arguments and critique the reasoning of others.	
		<b>P4</b>	Model with mathematics.	
		<b>P5</b>	Use appropriate tools strategically.	
		<b>P6</b>	Attend to precision.	
		<b>P7</b>	Look for and make use of structure.	
<b>P8</b>	Look for and express regularity in repeated reasoning.			
<b>Conceptual Overview</b>				
<b>Essential Understandings</b>				
<b>SCS</b>	The learner will analyze data and apply probability concepts to solve problems.	<a href="#">SCS.9_12.MA.2.03.b</a>	Election Theory.	
<b>SCS</b>	The learner will analyze data and apply probability concepts to solve problems.	<a href="#">SCS.9_12.MA.2.03.c</a>	Voting Power.	
<b>Learning Targets</b>	<ul style="list-style-type: none"> <li>• Create a preference schedule from a preference ballot</li> <li>• Use plurality and majority methods to determine a winner (if any)</li> <li>• Use Borda method to determine a winner</li> <li>• Use run-off method to determine a winner</li> <li>• Use sequential run-off method to determine a winner</li> <li>• Use Condorcet method (with points) to determine a winner</li> <li>• Determine the winning coalitions from a weighted voting list</li> <li>• Determine the critical voters in a winning coalition</li> <li>• Calculate the power index for each person in a weighted voting situation</li> </ul>			
<b>Essential Terminology</b>				
<b>Literacy Integration</b>	<b>Literacy Standards</b>	Level	Standard	Standard Name
	<b>Literature Connections</b>			
<b>Technology Integration</b>	<b>Technology Standards</b>	Level	Standard	Standard Name
	<b>Websites</b>			
<b>Assessment</b>	<b>Formative</b>			
	<b>Performance Tasks</b>			
	<b>Summative</b>			
<b>Resources</b>				
<b>Learning Plan</b>	<b>Instructional Sequence</b>	1- Preference ballots/plurality method 2- Borda, run off,, sequential run-off 3- Condorcet 4- <b>Honors: Arrows Conditions</b> 5- Weighted voting 6- Review 7- Test		
<b>Differentiation</b>	<b>Remediation</b>			
	<b>Enrichment</b>			