



GSE AMDM UNIT PLANNER



Unit title	Unit 3 - Statistics	Unit duration	10 days
Essential Questions (OR GUIDING QUESTIONS?)			
How are statistics used in decision-making? What are the components of the research cycle? How can students identify and create non-biased questions? How can students identify variables and populations of interest as well as data sources? How can students interpret a variety of graphical displays of statistical information? How can students collect sets of data and create a variety of displays?			
Assessments			
Common Formative Assessment – Vocab Quiz Common Summative Assessment – Unit 3 Test, Survey Project (possible)			
Content Standards			
<u>Students will explore representations of data and models of data as tools in the decision making.</u> MAMDM.D.3 Students will apply statistical methods to design, conduct, and analyze statistical studies. <u>Students will explore the applications of functions, their characteristics and their use in modeling. Vectors and matrices are employed for solving problems.</u> MAMDM.A.4 Students will analyze and evaluate the mathematics behind various methods of voting and selection. a. Evaluate various voting and selection processes to determine an appropriate method for a given situation. b. Apply various ranking algorithms to determine an appropriate method for a given situation.			

Learning Activities and Experiences			
Topic	Resource	Content Covered	Standards Addressed
Statistical Investigations	Definitions and Study Types 3.2 Parameters and Statistics Practice	<ul style="list-style-type: none"> Populations vs. Samples Parameters vs. Statistics Sampling Types Sampling Methods 	MAMDM.D.3 MAMDM.A.4
	Additional Resources:		
Analyzing Data	3.3 Measures of Central Tendency Data Plots Notes Margin of Error Notes	<ul style="list-style-type: none"> Measures of Central Tendency Box and Whisker Plots Frequency Tables and Histograms Margin of Error 	MAMDM.D.3
	Additional Resources: 7-3 Histogram and Box and Whisker Extension		
Survey Project	3.4 Null and Alternative Hypothesis Questioning Notes	<ul style="list-style-type: none"> The research cycle Null and alternative hypothesis Questioning 	MAMDM.D.3 MAMDM.A.4
	AMDM Survey Project	<ul style="list-style-type: none"> The research cycle Null and alternative hypothesis Questioning 	MAMDM.D.3 MAMDM.A.4
	Additional Resources: Research Cycle Notes		
Personalized Learning and Differentiation			
<p>Teachers differentiate by providing examples (work samples or task-specific clarifications of assessment criteria); structuring support (advance organizers, flexible grouping, peer relationships); establishing flexible deadlines, and adjusting the pace.</p> <ul style="list-style-type: none"> -SWD/504- Accommodations provided -ELL- Five Principle ELL Curriculum Framework and Vocabulary Supports -Intervention Support- Re-teaching Activities in Small Groups with Progress Monitoring -Extensions- Enrichment Tasks and Projects 			
Resources			