



Marietta City Schools
2023–2024 District Unit Planner

Statistical Reasoning

Unit title	Unit 5: Interpreting Results to Answer the Statistical Investigative Question	Unit duration (hours)	3-4 weeks
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Mastering Content and Skills through INQUIRY (Establishing the purpose of the Unit): *What will students learn?*

GA DoE Standards

Standards

SR.DSR.5 Interpret the results of the analysis, making connections to the formulated statistical investigative question.

SR.MM.1 Apply mathematics to real-life situations; model real-life phenomena using mathematics.

SR.DSR.5

SR.MM.1 SR.MP.1-8

SR.DSR.5.1

SR.DSR.5.2

SR.DSR.5.3

SR.DSR.5.4

SR.DSR.5.5

Concepts/Skills to support mastery of standards

Students will use statistical evidence from analyses to answer the formulated statistical investigative questions. • Students should continue to interpret the impact of outliers, missing values, or erroneous values on the results. • Students will use and interpret the p-value to determine whether the estimate for a population characteristic is plausible. • Students should continue to interpret a given margin of error associated with an estimate of a population characteristic. • Students will explain the impact of multiple variables on one another.

<u>Vocabulary</u>		Missing Values	
		Margin of Error	
	Analysis	Multivariable Analysis	
	Bias	Observational Studies	
	Case Studies	Outliers	
	Causation	p-value	
		Population	
	Confounding Variables	Primary Data	
		Privacy Issues	
	Data Exploration	Quantitative Variable	
	Data Interpretation	Randomization	
	Data Visualization	Sample	
	Erroneous Values	Secondary Data	
	Ethics of Data Use	Statistical Evidence	Survey Question
	Experiments	Statistical Investigation	Variable

Notation - Margin of error written as an interval

Essential Questions

How can I interpret results of my analysis by connecting it to my investigation question?

How are outliers affecting my data? How are missing values and erroneous values affecting my results?

What is the p-value for my statistical investigation? How can I determine plausibility of my p-value? How are multiple variables affecting each other within my investigation?

Assessment Tasks

List of common formative and summative assessments.

Formative Assessment(s):

Unit quiz, skills checks, Classwork, homework

Summative Assessment(s):

Unit test

Learning Experiences

Add additional rows below as needed.

Objective or Content	Learning Experiences	Personalized Learning and Differentiation
SR.DSR.5.2 SR.DSR.5.5 SR.MM.1.1 SR.MM.1.4 SR.DSR.5	Ice Cream/Star Wars tasks - guided chrome-extension://efaidnbmninnbpcjpcglclefindmkaj/ https://lor2.gadoe.org/gadoe/file/9c18-acc675eb4131/1/Ice%20Cream%20or%20Star%20WarsIce-Cream-or-Star-Wars-SR-U5-Stude	Group collaboration, pacing set by individual students and guided by teacher, chunked portions of task

SR.MM.1		
Content Resources		
Stat Medic Teacher created resources GA DOE		