



Marietta City Schools
2023–2024 District Unit Planner

AP Statistics

Unit title	Unit 3: Collecting Data	Unit duration (hours)	6 Class Blocks
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Mastering Content and Skills through INQUIRY (Establishing the purpose of the Unit): *What will students learn?*

GA DoE Standards

Standards

- 3.1 Introducing Statistics: Do the Data We Collected Tell the Truth?
- 3.2 Introduction to Planning a Study
- 3.3 Random Sampling and Data Collection
- 3.4 Potential Problems with Sampling
- 3.5 Introduction to Experimental Design
- 3.6 Selecting a Experimental Design
- 3.7 Inference and Experiments

Concepts/Skills to support mastery of standards

- Differentiate between sample vs. population and observational vs. experimental study
- Identify the different methods of sampling
- Determine an appropriate sampling method to answer a statistical question
- Construct a good experiment

Vocabulary

Experiment	Observational study	Simple Random Sampling	Stratified Sampling	Cluster Sampling
Systematic Sampling	Census	Bias	Confounding Variables	Inference

Published: August, 2023

Resources, materials, assessments not linked to SGO or unit planner will be reviewed at the local school level.

Essential Questions
<ul style="list-style-type: none"> • How do we know if the data we collect tells the truth? • What type of conclusions can be drawn from different types of studies? • How do we collect unbiased samples? • How do we design a good experiment?
Assessment Tasks
<i>List of common formative and summative assessments.</i>
<p><u>Formative Assessment(s):</u> Common Formative Assessment – Ticket out the Door, Homework, Group Presentations, Quiz</p> <p><u>Summative Assessment(s):</u> Common Summative Assessment – Unit 3 Test (50% Multiple Choice/50% Free Response)</p>

<u>Learning Experiences</u>		
Add additional rows below as needed.		
Objective or Content	Learning Experiences	Personalized Learning and Differentiation
4.B Interpret statistical calculations and findings to assign meaning or assess a claim.	<p><u>Does SAT Prep Produce Higher Scores? (Stat Medic)</u> Students will explore the effect of SAT Prep classes on SAT scores to explain the concept of confounding and how it limits the ability to make cause-effect conclusions.</p>	<p>Support the Learning: Students may be provided with vocabulary support as well as guided notes and graphic organizers to aid in synthesizing the more complex ideas from the task.</p>

Content Resources

All notes are provided on schoology.
The Practice of Statistics 5th edition
AP College Board

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