



Standard #: MAFS.912.S-IC.2.6

This document was generated on CPALMS - www.cpalms.org

Evaluate reports based on data. ★

Grade: 912	
Cluster: Make inferences and justify conclusions from sample surveys, experiments, and observational studies. (Algebra 2 - Major Cluster) -	Date Adopted or Revised: 02/14
Clusters should not be sorted from Major to Supporting and then taught in that order. To do so would strip the coherence of the mathematical ideas and miss the opportunity to enhance the major work of the grade with the supporting clusters.	
Content Complexity Rating: Level 2: Basic Application of Skills & Concepts - More Information	Date of Last Rating: 02/14
Status: State Board Approved	

Related Courses

Course Number	Course Title
1200330:	Algebra 2 (Specifically in versions: 2014 - 2015, 2015 and beyond (current))
1200340:	Algebra 2 Honors (Specifically in versions: 2014 - 2015, 2015 and beyond (current))
1207310:	Liberal Arts Mathematics (Specifically in versions: 2014 - 2015, 2015 and beyond (current))
1210300:	Probability & Statistics with Applications Honors (Specifically in versions: 2014 - 2015, 2015 and beyond (current))
2000360:	Anatomy and Physiology Honors (Specifically in versions: 2014 - 2015, 2015 and beyond (current))
2020910:	Astronomy Solar/Galactic Honors (Specifically in versions: 2014 - 2015, 2015 and beyond (current))
2000320:	Biology 1 Honors (Specifically in versions: 2014 - 2015, 2015 and beyond (current))
2000330:	Biology 2 Honors (Specifically in versions: 2014 - 2015, 2015 - 2018, 2018 and beyond (current))
2003350:	Chemistry 1 Honors (Specifically in versions: 2014 - 2015, 2015 and beyond (current))
2003360:	Chemistry 2 (Specifically in versions: 2014 - 2015, 2015 and beyond (current))
2001320:	Earth/Space Science Honors (Specifically in versions: 2014 - 2015, 2015 and beyond (current))
2000440:	Genetics (Specifically in versions: 2014 - 2015, 2015 and beyond (current))
2002410:	Integrated Science 1 Honors (Specifically in versions: 2014 - 2015, 2015 and beyond (current))
2002430:	Integrated Science 2 Honors (Specifically in versions: 2014 - 2015, 2015 and beyond (current))
2002450:	Integrated Science 3 Honors (Specifically in versions: 2014 - 2015, 2015 and beyond (current))
2002510:	Marine Science 1 Honors (Specifically in versions: 2014 - 2015, 2015 and beyond (current))
2002520:	Marine Science 2 (Specifically in versions: 2014 - 2015, 2015 and beyond (current))
2002530:	Marine Science 2 Honors (Specifically in versions: 2014 - 2015, 2015 and beyond (current))
2003400:	Nuclear Radiation (Specifically in versions: 2014 - 2015, 2015 - 2018 (course terminated))
2020710:	Nuclear Radiation Honors (formerly 202071A) (Specifically in versions: 2014 - 2015, 2015 and beyond (current))
2003390:	Physics 1 Honors (Specifically in versions: 2014 - 2015, 2015 and beyond (current))
2003410:	Physics 2 (Specifically in versions: 2014 - 2015, 2015 and beyond (current))
2002540:	Solar Energy Honors (Specifically in versions: 2014 - 2015, 2015 and beyond (current))
1200500:	Advanced Algebra with Financial Applications (Specifically in versions: 2014 - 2015 (course terminated))
2002340:	Experimental Science 1 Honors (Specifically in versions: 2014 - 2015, 2015 and beyond (current))
2002350:	Experimental Science 2 Honors (Specifically in versions: 2014 - 2015, 2015 and beyond (current))
2002360:	Experimental Science 3 (Specifically in versions: 2014 - 2015, 2015 and beyond (current))
2002370:	Experimental Science 4 (Specifically in versions: 2014 - 2015, 2015 and beyond (current))
2107310:	Psychology 2 (Specifically in versions: 2014 - 2015, 2015 and beyond (current))
1400300:	Peer Counseling 1 (Specifically in versions: 2014 - 2015, 2015 and beyond (current))
1400310:	Peer Counseling 2 (Specifically in versions: 2014 - 2015, 2015 and beyond (current))
1400320:	Peer Counseling 3 (Specifically in versions: 2014 - 2015, 2015 and beyond (current))
1400330:	Peer Counseling 4 (Specifically in versions: 2014 - 2015, 2015 and beyond (current))
1803320:	Leadership Education 3 (Specifically in versions: 2014 - 2015, 2015 and beyond (current))
1803330:	Leadership Education 4 (Specifically in versions: 2014 - 2015, 2015 and beyond (current))
1200335:	Algebra 2 for Credit Recovery (Specifically in versions: 2014 - 2015, 2015 - 2019 (course terminated))
2003500:	Renewable Energy 1 (Specifically in versions: 2014 - 2015, 2015 and beyond (current))
2100335:	African-American History (Specifically in versions: 2014 - 2015, 2015 and beyond (current))
2001330:	Meteorology Honors (Specifically in versions: 2016 - 2019, 2019 and beyond (current))

Related Access Points

Access Point

Access Points Number	Access Points Title
MAFS.912.S-IC.2.AP.6a:	Make or select an appropriate statement(s) about findings.
MAFS.912.S-IC.2.AP.6b:	Describe the data collection process. Describe potential biases or flaws in simple scenarios.

Related Resources

Lesson Plan

Name	Description
CollegeReview.com:	This is a model-eliciting activity where students have been asked by a new website, CollegeReview.com, to come up with a system to rank various colleges based on five categories; tuition cost, social life, athletics, education, city population and starting salary upon graduation.
Corn Conundrum:	The Corn Conundrum MEA provides students with an agricultural problem in which they must work as a team to develop a procedure to select the best variety of corn to grow under drier conditions predicted by models of global climate change. Students must determine the most important factors that make planting crops sustainable in restricted climate conditions for the client. The main focus of this MEA is manipulating factors relating to plant biology, including transpiration and photosynthesis.
Efficient Storage:	The topic of this MEA is work and power. Students will be assigned the task of hiring workers to complete a given task. In order to make a decision as to which workers to hire, the students initially must calculate the required work. The power each worker can exert, the days each worker is available to work each week, the number of sick days each worker has taken over the past 12 months, and the salary each worker commands will then be provided. Full- and/or part-time positions are available. Through data analysis, the students will need to evaluate which factors are most significant in the hiring process. For instance, some groups may select the most efficient workers; other groups may select the group of workers that will cost the company the least amount of money; still other groups may choose the workers that can complete the job in the shortest amount of time. Each group will also be required to provide the rationale that justifies the selection of which workers to hire.
Got You Covered!:	Students will develop a procedure for selecting car covers to protect the fleet of vehicles used by the Everywhere Sales Corporation. They will use a given data table to consider the attributes of several different brands of car covers, analyze their strengths and weaknesses, and then rank and weight the attributes according to their level of importance. The procedure will be written out in detail and a rationale provided to advise the company which car cover(s) should be used.
Gr 9-12. Water Use and Society, Lesson 3: A Question of Quality :	Students will learn about water quality management for the Everglades and will analyze sample data from a Stormwater Treatment Area.
Interpreting Statistics: A Case of Muddying the Waters:	This lesson is intended to help you assess how well students are able to: <ul style="list-style-type: none"> • Interpret data and evaluate statistical summaries. • Critique someone else's interpretations of data and evaluations of statistical summaries. <p>The lesson also introduces students to the dangers of misapplying simple statistics in real-world contexts, and illustrates some of the common abuses of statistics and charts found in the media.</p>
Preserving Our Marine Ecosystems:	The focus of this MEA is oil spills and their effect on the environment. In this activity, students from a fictitious class are studying about the effects of an oil spill on marine ecosystems and have performed an experiment in which they were asked to try to rid a teaspoon of corn oil from a baking pan filled with two liters of water as thoroughly as possible in a limited timeframe and with limited resources. By examining, analyzing, and evaluating experimental data related to resource usage, disposal, and labor costs, students must face the tradeoffs that are involved in trying to preserve an ecosystem when time, money, and resources are limited.
The Election Resource:	This lesson is designed for students who enrolled in an elementary statistics or math for college readiness class who are at the stage of collecting and analyzing data. In their algebra 1 class, they were introduced to statistical topics such as line of best-fit and equation of a line as they relate to real-world meaning.
The Video Game:	This activity can be used with students in statistics, algebra 2, or a precalculus course who have a good understanding of the statistical methods that are used in describing a given data set.
Which Brand of Chocolate Chip Cookie Would You Buy?:	In this activity, students will utilize measurement data provided in a chart to calculate areas, volumes, and densities of cookies. They will then analyze their data and determine how these values can be used to market a fictitious brand of chocolate chip cookie. Finally, they will integrate cost and taste into their analyses and generate a marketing campaign for a cookie brand of their choosing based upon a set sample data which has been provided to them.

Video/Audio/Animation

Name	Description
MIT BLOSSOMS - Is Bigger	This learning video addresses a particular problem of selection bias, a statistical bias in which there is an error in choosing the individuals or groups to make broader inferences. Rather than delve into this broad topic via formal statistics, we investigate how it may appear in our everyday lives, sometimes distorting our perceptions of people, places and events, unless we are careful. When people are picked at random from two groups of different sizes, most of those selected usually come from the bigger group. That means we will hear more about the experience of the

[Better? A Look at a Selection Bias that Is All Around Us:](#)

bigger group than that of the smaller one. This isn't always a bad thing, but it isn't always a good thing either. Because big groups "speak louder," we have to be careful when we write mathematical formulas about what happened in the two groups. We think about this issue in this video, with examples that involve theaters, buses, and lemons. The prerequisite for this video lesson is a familiarity with algebra. It will take about one hour to complete, and the only materials needed are a blackboard and chalk. The downloadable Teacher's Guide found on the same page as the video, provides suggestions for classroom activities during each of the breaks between video segments.

Tutorial

Name	Description
Population Demographic Lab:	This lab simulation allows you to use real demographic data, collected by the US Census Bureau, to analyze and make predictions centered around demographic trends. You will explore factors that impact the birth, death and immigration rate of a population and learn how the population transitions having taken place globally.

Assessment

Name	Description
Sample 3 - High School Algebra 2 State Interim Assessment:	This is a State Interim Assessment for 9th-12th grades.
Sample 4 - High School Algebra 2 State Interim Assessment:	This is a State Interim Assessment for 9th-12th grade.

Student Resources

Name	Description
Population Demographic Lab:	This lab simulation allows you to use real demographic data, collected by the US Census Bureau, to analyze and make predictions centered around demographic trends. You will explore factors that impact the birth, death and immigration rate of a population and learn how the population transitions having taken place globally.