

Cycle 1	27 Days	The recommended number of class periods is less than the number of days in the grading cycle to accommodate differentiated instruction, extended learning time, and assessment days. Complete instructional planning information and support are in the HISD Curriculum documents.
Aug. 23 - Oct. 1, 2021		
Unit	# Class Periods	<p align="center">Texas Essential Knowledge and Skills/Student Expectations (TEKS/SEs)</p> <p>The bold face words in the TEKS/SEs indicate concepts addressed specifically in this unit; the unbolded concepts are addressed in other units of this course.</p> <p>The student will:</p>
		<p><i>The Mathematical Process Standards are integrated throughout the course in all activities and lessons. Teachers should refer to these standards for instructional strategies and depth of rigor. Specific process standards have been highlighted for each unit, but these process standards should not be the only process standards associated with the daily lessons.</i></p> <p>Mathematical Process Standards. The student uses mathematical processes to acquire and demonstrate mathematical understanding. The student is expected to:</p> <ul style="list-style-type: none"> Ⓟ MMA.1A Apply mathematics to problems arising in everyday life, society, and the workplace. Ⓟ MMA.1B Use a problem-solving model that incorporates analyzing given information, formulating a plan or strategy, determining a solution, justifying the solution, and evaluating the problem-solving process and the reasonableness of the solution. Ⓟ MMA.1C Select tools, including real objects, manipulatives, paper and pencil, and technology as appropriate, and techniques, including mental math, estimation, and number sense as appropriate, to solve problems. Ⓟ MMA.1D Communicate mathematical ideas, reasoning, and their implications using multiple representations, including symbols, diagrams, graphs, and language as appropriate. Ⓟ MMA.1E Create and use representations to organize, record, and communicate mathematical ideas. Ⓟ MMA.1F Analyze mathematical relationships to connect and communicate mathematical ideas. Ⓟ MMA.1G Display, explain, and justify mathematical ideas and arguments using precise mathematical language in written or oral communication.

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<p>Unit 1: Mathematical Modeling in Personal Finance – Introduction to Budgeting Students understand how a budget is created and how it can support good financial decision making.</p>	<p>6 class periods (90-min. each) or 12 class periods (45-min. each)</p> <p><i>Enrichment Opportunities</i> Aug. 2-13</p> <p><i>Teachers Report to Work</i> Aug. 16</p> <p><i>Teacher Service Days</i> Aug. 16-17, Aug. 19-20</p> <p><i>Teacher Prep Day</i> (no students) Aug. 18</p> <p><i>Labor Day</i> Sept. 6</p> <p><i>Fall Holiday</i> Sept. 16</p> <p><i>Teacher Service Day</i> (no students) Sept. 17</p>	<p>Mathematical Process Standards. The student uses mathematical processes to acquire and demonstrate mathematical understanding. The student is expected to:</p> <ul style="list-style-type: none"> Ⓢ MMA.1A Apply mathematics to problems arising in everyday life, society, and the workplace. Ⓢ MMA.1G Display, explain, and justify mathematical ideas and arguments using precise mathematical language in written or oral communication. <p>Mathematical Modeling in Personal Finance. The student uses mathematical processes with graphical and numerical techniques to study patterns and analyze data related to personal finance. The students are expected to:</p> <ul style="list-style-type: none"> • MMA.2A Use rates and linear functions to solve problems involving personal finance and budgeting, including compensations and deductions.

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	Aug. 23 - Oct. 1, 2021	
Unit	# Class Periods	<p align="center">Texas Essential Knowledge and Skills/Student Expectations (TEKS/SEs)</p> <p>The bold face words in the TEKS/SEs indicate concepts addressed specifically in this unit; the unbolded concepts are addressed in other units of this course.</p> <p>The student will:</p>
<p>Unit 2: Mathematical Modeling in Personal Finance – Devise a Budgeting Plan Students use graphical and numerical techniques to study patterns and analyze data related to personal finance.</p>	<p>4 class periods (90-min. each) or 8 class periods (45-min. each)</p>	<p>Mathematical Process Standards. The student uses mathematical processes to acquire and demonstrate mathematical understanding. The student is expected to:</p> <ul style="list-style-type: none"> Ⓢ MMA.1C Select tools, including real objects, manipulatives, paper and pencil, and technology as appropriate, and techniques, including mental math, estimation, and number sense as appropriate, to solve problems. Ⓢ MMA.1F Analyze mathematical relationships to connect and communicate mathematical ideas. <p>Mathematical Modeling in Personal Finance. The student uses mathematical processes with graphical and numerical techniques to study patterns and analyze data related to personal finance. The student is expected to:</p> <ul style="list-style-type: none"> • MMA.2A Use rates and linear functions to solve problems involving personal finance and budgeting, including compensations and deductions.

Cycle 2	29 Days	<i>The recommended number of class periods is less than the number of days in the grading cycle to accommodate differentiated instruction, extended learning time, and assessment days. Complete instructional planning information and support are in the HISD Curriculum documents.</i>
	Oct. 5 - Nov. 12, 2021	
Unit	# Class Periods	<p>Texas Essential Knowledge and Skills/Student Expectations (TEKS/SEs)</p> <p>The bold face words in the TEKS/SEs indicate concepts addressed specifically in this unit; the unbolded concepts are addressed in other units of this course.</p> <p>The student will:</p>
<p>Unit 3: Mathematical Modeling in Personal Finance – Banking</p> <p>Students use mathematical processes with graphical and numerical techniques to study patterns and analyze data related to personal finance.</p>	<p>4 class periods (90-min. each) or 8 class periods (45-min. each)</p> <p><i>Teacher Service Day (no students) Oct. 4</i></p>	<p>Mathematical Process Standards. The student uses mathematical processes to acquire and demonstrate mathematical understanding. The student is expected to:</p> <ul style="list-style-type: none"> Ⓢ MMA.1E Create and use representations to organize, record, and communicate mathematical ideas. Ⓢ MMA.1F Analyze mathematical relationships to connect and communicate mathematical ideas. <p>Mathematical Modeling in Personal Finance. The student uses mathematical processes with graphical and numerical techniques to study patterns and analyze data related to personal finance. The student is expected to:</p> <ul style="list-style-type: none"> • MMA.2A Use rates and linear functions to solve problems involving personal finance and budgeting, including compensations and deductions. • MMA.2B Solve problems involving personal taxes. • MMA.2C Analyze data to make decisions about banking, including options for online banking, checking accounts, overdraft protection, processing fees, and debit card/ATM fees.
<p>Unit 4: Mathematical Modeling in Personal Finance – Loans and Credit</p> <p>Students use mathematical processes with algebraic formulas, graphs, and amortization modeling to solve problems involving credit.</p>	<p>4 class periods (90-min. each) or 8 class periods (45-min. each)</p>	<p>Mathematical Process Standards. The student uses mathematical processes to acquire and demonstrate mathematical understanding. The student is expected to:</p> <ul style="list-style-type: none"> Ⓢ MMA.1C Select tools, including real objects, manipulatives, paper and pencil, and technology as appropriate, and techniques, including mental math, estimation, and number sense as appropriate, to solve problems. Ⓢ MMA.1D Communicate mathematical ideas, reasoning, and their implications using multiple representations, including symbols, diagrams, graphs, and language as appropriate. <p>Mathematical Modeling in Personal Finance. The student uses mathematical processes with algebraic formulas, graphs, and amortization modeling to solve problems involving credit. The student is expected to:</p> <ul style="list-style-type: none"> • MMA.3A Use formulas to generate tables to display series of payments for loan amortizations resulting from financed purchases. • MMA.3B Analyze personal credit options in retail purchasing and compare relative advantages and disadvantages of each option. • MMA.3C Use technology to create amortization models to investigate home financing and compare buying a home to renting a home. • MMA.3D Use technology to create amortization models to investigate.

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	Oct. 5 - Nov. 12, 2021	
Unit	# Class Periods	Texas Essential Knowledge and Skills/Student Expectations (TEKS/SEs) The bold face words in the TEKS/SEs indicate concepts addressed specifically in this unit; the unbolded concepts are addressed in other units of this course. The student will:
Unit 5: Mathematical Modeling in Personal Finance – Investment Students use mathematical processes with algebraic formulas, numerical techniques, and graphs to solve problems related to financial planning.	4 class periods (90-min. each) or 8 class periods (45-min. each)	<p>Mathematical Process Standards. The student uses mathematical processes to acquire and demonstrate mathematical understanding. The student is expected to:</p> <ul style="list-style-type: none"> Ⓢ MMA.1A Apply mathematics to problems arising in everyday life, society, and the workplace. Ⓢ MMA.1D Communicate mathematical ideas, reasoning, and their implications using multiple representations, including symbols, diagrams, graphs, and language as appropriate. <p>Mathematical Modeling in Personal Finance. The student uses mathematical processes with algebraic formulas, numerical techniques, and graphs to solve problems related to financial planning. The student is expected to:</p> <ul style="list-style-type: none"> • MMA.4A Analyze and compare coverage options and rates in insurance. • MMA.4B Investigate and compare investment options, including stocks, bonds, annuities, certificates of deposit, and retirement plans. • MMA.4C Analyze types of savings options involving simple and compound interest and compare relative advantages of these options.

Cycle 3	30 Days	<p><i>The recommended number of class periods is less than the number of days in the grading cycle to accommodate differentiated instruction, extended learning time, and assessment days. Complete instructional planning information and support are in the HISD Curriculum documents.</i></p>
	Nov. 15, 2021 - Jan. 14, 2022	
Unit	# Class Periods	<p>Texas Essential Knowledge and Skills/Student Expectations (TEKS/SEs)</p> <p>The bold face words in the TEKS/SEs indicate concepts addressed specifically in this unit; the unbolded concepts are addressed in other units of this course.</p> <p>The student will:</p>
<p>Unit 6: Mathematical Modeling in Social Science – Theoretical to Empirical Probability Students apply mathematical processes to determine the number of elements in a finite sample space and compute the probability of an event.</p>	<p>3 class periods (90-min. each) or 6 class periods (45-min. each)</p> <p><i>Thanksgiving Break</i> Nov. 22-26</p> <p><i>Enrichment Opportunities</i> Dec. 20-21</p> <p><i>Winter Break</i> Dec. 20-31</p> <p><i>MLK Jr. Day</i> Jan. 17</p> <p><i>Teacher Prep Day (no students)</i> Jan. 18</p>	<p>Mathematical Process Standards. The student uses mathematical processes to acquire and demonstrate mathematical understanding. The student is expected to:</p> <ul style="list-style-type: none"> Ⓟ MMA.1B Use a problem-solving model that incorporates analyzing given information, formulating a plan or strategy, determining a solution, justifying the solution, and evaluating the problem-solving process and the reasonableness of the solution. Ⓟ MMA.1G Display, explain, and justify mathematical ideas and arguments using precise mathematical language in written or oral communication. <p>Mathematical Modeling in Social Sciences. The student applies mathematical processes to determine the number of elements in a finite sample space and compute the probability of an event. The student is expected to:</p> <ul style="list-style-type: none"> • MMA.8A Determine the number of ways an event may occur using combinations, permutations, and the Fundamental Counting Principle. • MMA.8B Compare theoretical to empirical probability. • MMA.8C Use experiments to determine the reasonableness of a theoretical model such as binomial or geometric.
<p>Unit 7: Mathematical Modeling in Social Science – Analyze Numerical Data Students analyze data as it applies to social sciences.</p>	<p>4.5 class periods (90-min. each) or 9 class periods (45-min. each)</p>	<p>Mathematical Process Standards. The student uses mathematical processes to acquire and demonstrate mathematical understanding. The student is expected to:</p> <ul style="list-style-type: none"> Ⓟ MMA.1C Select tools, including real objects, manipulatives, paper and pencil, and technology as appropriate, and techniques, including mental math, estimation, and number sense as appropriate, to solve problems. Ⓟ MMA.1F Analyze mathematical relationships to connect and communicate mathematical ideas. <p>Mathematical Modeling in Social Sciences. The student applies mathematical processes and mathematical models to analyze data as it applies to social sciences. The student is expected to:</p>

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	Nov. 15, 2021 - Jan. 14, 2022	
Unit	# Class Periods	Texas Essential Knowledge and Skills/Student Expectations (TEKS/SEs) The bold face words in the TEKS/SEs indicate concepts addressed specifically in this unit; the unbolded concepts are addressed in other units of this course. The student will:
		<ul style="list-style-type: none"> • MMA.9A Interpret information from various graphs, including line graphs, bar graphs, circle graphs, histograms, scatterplots, dot plots, stem-and-leaf plots, and box and whisker plots to draw conclusions from the data and determine the strengths and weaknesses of conclusions. • MMA.9B Analyze numerical data using measures of central tendency (mean, median, and mode) and variability (range, interquartile range or IQR, and standard deviation) to make inferences with normal distributions. • MMA.9C Distinguish the purposes and differences among types of research, including surveys, experiments, and observational studies. • MMA.9D Use data from a sample to estimate population mean or population proportion. • MMA.9E Analyze marketing claims based on graphs and statistics from electronic and print media and justify the validity of stated or implied conclusions.
Unit 8: Mathematical Modeling in Social Science – Formulate and Execute a Statistical Study Students design a study and use graphical, numerical, and analytical techniques to communicate the results of the study.	3 class periods (90-min. each) or 6 class periods (45-min. each)	Mathematical Process Standards. The student uses mathematical processes to acquire and demonstrate mathematical understanding. The student is expected to: Ⓟ MMA.1D Communicate mathematical ideas, reasoning, and their implications using multiple representations, including symbols, diagrams, graphs, and language as appropriate. Ⓟ MMA.1E Create and use representations to organize, record, and communicate mathematical ideas. Mathematical Modeling in Social Sciences. The student applies mathematical processes to design a study and use graphical, numerical, and analytical techniques to communicate the results of the study. The student is expected to: <ul style="list-style-type: none"> • MMA.10A Formulate a meaningful question, determine the data needed to answer the question, gather the appropriate data, analyze the data, and draw reasonable conclusions. • MMA.10B Communicate methods used, analyses conducted, and conclusions drawn for a data-analysis project through the use of one or more of a written report, a visual display, an oral report, or a multi-media presentation.

Cycle 4	27 Days	The recommended number of class periods is less than the number of days in the grading cycle to accommodate differentiated instruction, extended learning time, and assessment days. Complete instructional planning information and support are in the HISD Curriculum documents.
	Jan. 19 - Feb. 25, 2022	
Unit	# Class Periods	Texas Essential Knowledge and Skills/Student Expectations (TEKS/SEs) The bold face words in the TEKS/SEs indicate concepts addressed specifically in this unit; the unbolded concepts are addressed in other units of this course. The student will:
Unit 9: Mathematical Modeling in Science and Engineering – Problem Solving with Quadratic and Variation Functions Students use quadratic properties and functions as they study and apply patterns and survey data in scientific and engineering settings.	4 class periods (90-min. each) or 8 class periods (45-min. each) <i>Teacher Service Day/Presidents' Day</i> (no students) Feb. 21	Mathematical Process Standards. The student uses mathematical processes to acquire and demonstrate mathematical understanding. The student is expected to: Ⓢ MMA.1A Apply mathematics to problems arising in everyday life, society, and the workplace. Ⓢ MMA.1D Communicate mathematical ideas, reasoning, and their implications using multiple representations, including symbols, diagrams, graphs, and language as appropriate. Mathematical Modeling in Science and Engineering. The student applies mathematical processes with algebraic techniques to study patterns and analyze data as it applies to science. The student is expected to: • MMA.5A Use proportionality and inverse variation to describe physical laws such as Hook's Law, Newton's Second Law of Motion, and Boyle's Law. • MMA.5C Use quadratic functions to model motion.
Unit 10: Mathematical Modeling in Science and Engineering – Using Exponential Functions Students apply mathematical processes with exponential models to study patterns and analyze data as it applies to science.	1.5 class periods (90-min. each) or 3 class periods (45-min. each)	Mathematical Process Standards. The student uses mathematical processes to acquire and demonstrate mathematical understanding. The student is expected to: Ⓢ MMA.1A Apply mathematics to problems arising in everyday life, society, and the workplace. Ⓢ MMA.1E Create and use representations to organize, record, and communicate mathematical ideas. Mathematical Modeling in Science and Engineering. The student applies mathematical processes with algebraic techniques to study patterns and analyze data as it applies to science. The student is expected to: • MMA.5B Use exponential models available through technology to model growth and decay in areas including radioactive decay.

Cycle 4	27 Days Jan. 19 - Feb. 25, 2022	<i>The recommended number of class periods is less than the number of days in the grading cycle to accommodate differentiated instruction, extended learning time, and assessment days. Complete instructional planning information and support are in the HISD Curriculum documents.</i>
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<p>Unit 11: Mathematical Modeling in Science and Engineering – Using Geometric and Trigonometric Models to Solve Problems</p> <p>Students apply similarity, geometric transformations, symmetry, and perspective drawing to describe and model mathematical patterns and structure in real-world contexts such as architecture.</p>	<p>6 class periods (90-min. each) or 12 class periods (45-min. each)</p>	<p>Mathematical Process Standards. The student uses mathematical processes to acquire and demonstrate mathematical understanding. The student is expected to:</p> <ul style="list-style-type: none"> Ⓟ MMA.1C Select tools, including real objects, manipulatives, paper and pencil, and technology as appropriate, and techniques, including mental math, estimation, and number sense as appropriate, to solve problems. Ⓟ MMA.1D Communicate mathematical ideas, reasoning, and their implications using multiple representations, including symbols, diagrams, graphs, and language as appropriate. <p>Mathematical Modeling in Science and Engineering. The student applies mathematical processes with algebra and geometry to study patterns and analyze data as it applies to architecture and engineering. The student is expected to:</p> <ul style="list-style-type: none"> • MMA.6A Use similarity, geometric transformations, symmetry, and perspective drawings to describe mathematical patterns and structure in architecture. • MMA.6B Use scale factors with two-dimensional and three-dimensional objects to demonstrate proportional and non-proportional changes in surface area and volume as applied to fields. • MMA.6C Use the Pythagorean Theorem and special right-triangle relationships to calculate distances. • MMA.6D Use trigonometric ratios to calculate distances and angle measures as applied to fields.

Cycle 5		33 Days	The recommended number of class periods is less than the number of days in the grading cycle to accommodate differentiated instruction, extended learning time, and assessment days. Complete instructional planning information and support are in the HISD Curriculum documents.
		Feb. 28 - Apr. 22, 2022	
Unit	# Class Periods	Texas Essential Knowledge and Skills/Student Expectations (TEKS/SEs)	
		The bold face words in the TEKS/SEs indicate concepts addressed specifically in this unit; the unbolded concepts are addressed in other units of this course.	
		The student will:	
<p>Unit 12: Modeling in Fine Arts – Geometric Approach in Art Students use similarity, geometric transformations, symmetry, to describe and model mathematical patterns and structure in real-world contexts such as art and music.</p>	<p>6 class periods (90-min. each) or 12 class periods (45-min. each)</p> <p><i>Enrichment Opportunities</i> Mar. 14-16</p> <p><i>Spring Break</i> Mar. 14-18</p> <p><i>Chávez-Huerta Day</i> Mar. 28</p> <p><i>Spring Holiday</i> Apr. 15</p>	<p>Mathematical Process Standards. The student uses mathematical processes to acquire and demonstrate mathematical understanding. The student is expected to:</p> <ul style="list-style-type: none"> Ⓢ MMA.1C Select tools, including real objects, manipulatives, paper and pencil, and technology as appropriate, and techniques, including mental math, estimation, and number sense as appropriate, to solve problems. Ⓢ MMA.1D Communicate mathematical ideas, reasoning, and their implications using multiple representations, including symbols, diagrams, graphs, and language as appropriate. <p>Mathematical Modeling in Fine Arts. The student uses mathematical processes with algebra and geometry to study patterns and analyze data as it applies to fine arts. The student is expected to:</p> <ul style="list-style-type: none"> • MMA.7B Use similarity, geometric transformations, symmetry, and perspective drawings to describe mathematical patterns and structure in art and photography. • MMA.7D Use scale factors with two-dimensional and three-dimensional objects to demonstrate proportional and non-proportional changes in surface area and volume as applied to fields. 	
<p>Unit 13: Mathematical Modeling in Fine Arts – Geometric Approach in Music Students use trigonometry, and perspective drawing to describe and model mathematical patterns and structure in real-world contexts such as art and music.</p>	<p>6 class periods (90-min. each) or 12 class periods (45-min. each)</p>	<p>Mathematical Process Standards. The student uses mathematical processes to acquire and demonstrate mathematical understanding. The student is expected to:</p> <ul style="list-style-type: none"> Ⓢ MMA.1C Select tools, including real objects, manipulatives, paper and pencil, and technology as appropriate, and techniques, including mental math, estimation, and number sense as appropriate, to solve problems. Ⓢ MMA.1D Communicate mathematical ideas, reasoning, and their implications using multiple representations, including symbols, diagrams, graphs, and language as appropriate. <p>Mathematical Modeling in Fine Arts. The student uses mathematical processes with algebra and geometry to study patterns and analyze data as it applies to fine arts. The student is expected to:</p> <ul style="list-style-type: none"> • MMA.7A Use trigonometric ratios and functions available through technology to model periodic behavior in art and music. • MMA.7C Use geometric transformations, proportions, and periodic motion to describe mathematical patterns and structure in music. 	

Cycle 6	31 Days Apr. 25 - June 7, 2022	<i>The recommended number of class periods is less than the number of days in the grading cycle to accommodate differentiated instruction, extended learning time, and assessment days. Complete instructional planning information and support are in the HISD Curriculum documents.</i>
Unit	# Class Periods	<p align="center">Texas Essential Knowledge and Skills/Student Expectations (TEKS/SEs)</p> <p>The bold face words in the TEKS/SEs indicate concepts addressed specifically in this unit; the unbolded concepts are addressed in other units of this course.</p> <p>The student will:</p>
<p>Unit 14: Problem Solving in Real World Situations – Create and Develop an Exhibition Project Students develop and research mathematical connections to various real- world situations in the prior fields of studies: science and engineering, fine arts, personal finance, and fine arts.</p>	<p>4 class periods (90-min. each) or 8 class periods (45-min. each)</p> <p><i>Memorial Day May 30</i></p> <p><i>Teacher Prep Day (no students) June 8</i></p>	<p>Mathematical Process Standards. The student uses mathematical processes to acquire and demonstrate mathematical understanding. The student is expected to:</p> <ul style="list-style-type: none"> Ⓢ MMA.1A Apply mathematics to problems arising in everyday life, society, and the workplace. Ⓢ MMA.1F Analyze mathematical relationships to connect and communicate mathematical ideas. <p>Mathematical Modeling in Personal Finance. The student uses mathematical processes with graphical and numerical techniques to study patterns and analyze data related to personal finance. The student is expected to:</p> <ul style="list-style-type: none"> • MMA.2A Use rates and linear functions to solve problems involving personal finance and budgeting, including compensations and deductions. <p>Mathematical Modeling in Personal Finance. The student uses mathematical processes with algebraic formulas, numerical techniques, and graphs to solve problems related to financial planning. The student is expected to:</p> <ul style="list-style-type: none"> • MMA.4B Investigate and compare investment options, including stocks, bonds, annuities, certificates of deposit, and retirement plans. <p>Mathematical Modeling in Science and Engineering. The student applies mathematical processes with algebra and geometry to study patterns and analyze data as it applies to architecture and engineering. The student is expected to:</p> <ul style="list-style-type: none"> • MMA.6B Use scale factors with two-dimensional and three-dimensional objects to demonstrate proportional and non-proportional changes in surface area and volume as applied to fields. <p>Mathematical Modeling in Fine Arts. The student uses mathematical processes with algebra and geometry to study patterns and analyze data as it applies to fine arts. The student is expected to:</p> <ul style="list-style-type: none"> • MMA.7A Use trigonometric ratios and functions available through technology to model periodic behavior in art and music. <p>Mathematical Modeling in Social Sciences. The student applies mathematical processes to design a study and use graphical, numerical, and analytical techniques to communicate the results of the study. The student is expected to:</p>

Cycle 6	31 Days Apr. 25 - June 7, 2022	<i>The recommended number of class periods is less than the number of days in the grading cycle to accommodate differentiated instruction, extended learning time, and assessment days. Complete instructional planning information and support are in the HISD Curriculum documents.</i>
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		<ul style="list-style-type: none"> • MMA.10A Formulate a meaningful question, determine the data needed to answer the question, gather the appropriate data, analyze the data, and draw reasonable conclusions.
<p>Unit 15: Problem Solving in Real World Situations – Project Presentation Students communicate methods used, analyses conducted, and conclusions drawn for a data-analysis project through an exhibition project.</p>	<p>6 class periods (90-min. each) or 12 class periods (45-min. each)</p>	<p>Mathematical Process Standards. The student uses mathematical processes to acquire and demonstrate mathematical understanding. The student is expected to:</p> <ul style="list-style-type: none"> Ⓟ MMA.1A Apply mathematics to problems arising in everyday life, society, and the workplace. Ⓟ MMA.1B Use a problem-solving model that incorporates analyzing given information, formulating a plan or strategy, determining a solution, justifying the solution, and evaluating the problem-solving process and the reasonableness of the solution. Ⓟ MMA.1D Communicate mathematical ideas, reasoning, and their implications using multiple representations, including symbols, diagrams, graphs, and language as appropriate. Ⓟ MMA.1E Create and use representations to organize, record, and communicate mathematical ideas. Ⓟ MMA.1F Analyze mathematical relationships to connect and communicate mathematical ideas. Ⓟ MMA.1G Display, explain, and justify mathematical ideas and arguments using precise mathematical language in written or oral communication. <p>Mathematical Modeling in Social Sciences. The student applies mathematical processes to design a study and use graphical, numerical, and analytical techniques to communicate the results of the study. The student is expected to:</p> <ul style="list-style-type: none"> • MMA.10B Communicate methods used, analyses conducted, and conclusions drawn for a data-analysis project through the use of one or more of a written report, a visual display, an oral report, or a multi-media presentation.