

Ganado Unified School District

(Career Math)



PACING Guide SY 2014-2015

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Timeline & Resources	AZ College and Career Readiness Standard	Essential Question (HESS Matrix)	Learning Goal	Vocabulary (Content/Academic)
<p>1st Quarter Unit 1</p> <p>The Basics of Employment – pay periods, types of jobs and corresponding remuneration, and benefits.</p> <p>8 weeks</p>	<p>AZ-HS.A-CED.A.2. Create equations in two or more variables to represent relationships between quantities; graph equations on coordinate axes with labels and scales. [From cluster: Create equations that describe numbers or relationships]</p> <p>AZ-HS.A-CED.A.4. Rearrange formulas to highlight a quantity of interest, using the same reasoning as in solving equations. For example, rearrange Ohm's law $V = IR$ to highlight resistance R. [From cluster: Create equations that describe numbers or relationships]</p> <p>AZ-HS.F-BF.A.1. Write a function that describes a relationship between two quantities. [From cluster: Build a function that models a relationship between two quantities]</p>	<p>What are the basics of employment? How do I find a job and how are my wages calculated?</p>	<p>I will determine methods that are used in finding employment and I will understand various methods of remuneration.</p>	<p>Weekly Biweekly Semimonthly Monthly Hourly Rate Overtime Hours Overtime hourly rate Gross pay Minimum Wage Commission Royalty Piecework Employee Benefits Paid Vacation Time Health Care Base Period Workers' Compensation</p>
<p>Unit 2</p> <p>Research a Profession of interest. What is needed to qualify as</p>	<p>HS.MP.1. Make sense of problems and persevere in solving them.</p> <p>HS.MP.5. Use appropriate tools strategically.</p>	<p>What qualifications is an employer looking for in candidates for employment? How is math a part of those qualifications and of that job?</p>	<p>I will research a profession that interests me and I will present my findings in a paper.</p>	<p>Application Job Search Qualifications References</p>

candidate to be hired? How is math a part of this work?				
2 weeks				
<p>2nd Quarter Unit 3</p> <p>Explore business concepts such as expense, revenue, and profit to model businesses and draw conclusions from those models.</p> <p>8 weeks</p>	<p>AZ-HS.N-Q.A.1. Use units as a way to understand problems and to guide the solution of multi-step problems; choose and interpret units consistently in formulas; choose and interpret the scale and the origin in graphs and data displays. [From cluster: Reason quantitatively and use units to solve problems]</p> <p>AZ-HS.N-Q.A.2. Define appropriate quantities for the purpose of descriptive modeling. [From cluster: Reason quantitatively and use units to solve problems]</p> <p>AZ-HS.F-IF.C.7. Graph functions expressed symbolically and show key features of the graph, by hand in simple cases and using technology for more complicated cases. [From cluster: Analyze functions using different representations]</p> <p>AZ-HS.A-REI.D.11. Explain why the x-coordinates of the points where the graphs of the equations $y = f(x)$ and $y = g(x)$ intersect are the solutions of the equation $f(x) = g(x)$; find the solutions approximately, e.g., using technology to graph the functions, make tables of values, or find successive approximations. Include cases where $f(x)$ and/or $g(x)$ are linear, polynomial, rational, absolute value, exponential, and logarithmic functions.</p>	<p>How do I mathematically model a business using variables and concepts such as expense, revenue, profit, and supply and demand?</p>	<p>I will model real-world situations by using real-life data to create equations, make inferences and predictions.</p>	<p>Scatterplots Linear Regression Correlation Causality Supply and Demand Point of Equilibrium Fixed expense Variable Expense Revenue Breakeven point Profit Loss Data Trend Interpolation Extrapolation Wholesale price Retail price Quadratic equation Parabola Vertex of a parabola</p>

	[From cluster: Represent and solve equations and inequalities graphically]			
Unit 4 Research a business of interest. How did their decisions serve to meet success or failure? Explain the rationale behind a business decision made by a particular company and analyze the results of this decision. 2 weeks	HS.MP.1. Make sense of problems and persevere in solving them. HS.MP.5. Use appropriate tools strategically.	What data does a business look at in determining a strategy for their companies?	I will research a real-life business decision and write a paper outlining the decision-making process and the results of making that decision.	Profit Loss Supply and Demand Fixed Expenses Variable Expenses Competition
3 rd Quarter Unit 5 The basics of banking Services. What are checking and savings accounts? How does my money make money? 8 weeks	AZ-HS.A-CED.A.4. Rearrange formulas to highlight a quantity of interest, using the same reasoning as in solving equations. For example, rearrange Ohm's law $V = IR$ to highlight resistance R . [From cluster: Create equations that describe numbers or relationships] AZ-HS.A-CED.A.4. Rearrange formulas to highlight a quantity of interest, using the same reasoning as in solving equations. For example, rearrange Ohm's law $V = IR$ to highlight resistance R . [From cluster: Create equations that describe numbers or	In what manner, can I use and save my money in a safely so as to meet my financial goals?	I will learn methods used to save money, pay bills in a timely fashion and have my money make money for me.	Checking account Electronic Funds transfer (EFT) Direct Deposit Insufficient Funds Overdraft protection Automated Teller machine Personal Identification number Maintenance Fee Debit Credit Account Number

	relationships]			Bank Statement Starting balance Ending balance Reconciling Savings account Interest Interest rate Principal Simple Interest Compound Interest Annual, semiannual, quarterly, and daily compounding Annual Percentage Rate (APR)
Unit 6 Research a Profession of interest. What is needed to qualify as candidate to be hired? How is math a part of this work? 2 weeks	AZ-HS.A-SSE.A.1. Interpret expressions that represent a quantity in terms of its context. [From cluster: Interpret the structure of expressions] AZ-HS.F-IF.C.8.b Use the properties of exponents to interpret expressions for exponential functions. For example, identify percent rate of change in functions such as $y = (1.02)^t$, $y = (0.97)^t$, $y = (1.01)^{12t}$, $y = (1.2)^{t/10}$, and classify them as representing exponential growth or decay. [From cluster: Analyze functions using different representations]			Federal Deposit Insurance Company (FDIC) Savings Big Ticket Item Pyramid Schemes
4 th Quarter Unit 7 The Basics of	AZ-HS.SP-ID.A.1. Represent data with plots on the real number line (dot plots, histograms, and box plots). [From cluster: Summarize, represent, and interpret data on a single count or measurement variable]	How can I take advantage of a financial plan to improve my standard of living and live within my income?	I will understand the benefits and costs associated with credit – especially in the case of purchasing an automobile.	Credit Debtor Creditor Credit rating Installment plan

<p>Employment – pay periods, types of jobs and corresponding remuneration, and benefits.</p> <p>8 weeks</p>	<p>AZ-HS.SP-ID.A.2. Use statistics appropriate to the shape of the data distribution to compare center (median, mean) and spread (interquartile range, standard deviation) of two or more different data sets. [From cluster: Summarize, represent, and interpret data on a single count or measurement variable]</p> <p>AZ-HS.N-Q.A.1. Use units as a way to understand problems and to guide the solution of multi-step problems; choose and interpret units consistently in formulas; choose and interpret the scale and the origin in graphs and data displays. [From cluster: Reason quantitatively and use units to solve problems]</p> <p>AZ-HS.N-Q.A.2. Define appropriate quantities for the purpose of descriptive modeling. [From cluster: Reason quantitatively and use units to solve problems]</p>	<p>What are all the costs associated with purchasing and owning an automobile?</p>		<p>Down payment</p> <p>Interest</p> <p>Finance charge</p> <p>Principal</p> <p>Annual percentage rate (APR)</p> <p>Lending institution</p> <p>Balloon payment</p> <p>Wage garnishment</p> <p>Monthly Payment</p> <p>Calculator</p> <p>Credit Card</p> <p>Debit Card</p> <p>Average daily balance</p> <p>Mean</p> <p>Sales tax</p> <p>Piecewise function</p> <p>Cusp</p> <p>Statistics data measures of central tendency</p> <p>outlier</p> <p>Quartiles</p> <p>frequency distribution</p> <p>Frequency</p> <p>Ste-and-leaf plot</p> <p>Box-and-whisker plot</p>
<p>Unit 8</p> <p>Research a Profession of interest. What is needed to qualify as candidate to be hired? How is math a part of this work?</p> <p>2 weeks</p>	<p>HS.MP.1. Make sense of problems and persevere in solving them.</p> <p>HS.MP.5. Use appropriate tools strategically.</p>	<p>What are the costs associated with automobile ownership? How can I monitor my spending and enhance my credit worthiness so as to obtain a higher standard of living?</p>	<p>I will write a research paper on a topic associated with credit or with automobiles. Topics may include: Rising gas prices; Alternative energy sources for autos; Automobile insurance pricing; A summary of six laws that regulate consumer credit in the US; Fair Isaac Corporation and their method of determining credit risk.</p>	<p>FICO</p> <p>Automobile Insurance</p> <p>Inflation</p> <p>Hybrid Electric Vehicles</p> <p>Consumer Credit</p> <p>Regulation</p>