

**Union County Educational Services Commission  
High School Course Syllabus**

**Title:** Consumer Math

**Timeline:** Full Year; 5 Credits

**Course Description:**

Consumer Mathematics reinforces general mathematics topics (such as arithmetic using rational numbers, measurement, ratio and proportion, and basic statistics) and apply these skills to consumer problems and situations. Applications include budgeting, taxation, credit, banking services, insurance, buying and selling products and services, home and/or car ownership and rental, managing personal income, and investment.

**Scope and Sequence:**

- I. Introduction to Personal Finance; Making Purchases
- II. Employment Finance; Household Finance
- III. Banking; Supply & Demand
- IV. Planning for the Future

**Curriculum Alignment:**

New Jersey Student Learning Standards - Mathematics

New Jersey Student Learning Standards - Career Readiness, Life Literacies & Key Skills

**Grading Procedures:**

Do Now	10%
Participation	20%
Class Assignments	50%
Assessments	20%

**Adoption Date:**

June 2024

**Union County Educational Services Commission**  
**Curriculum Mapping: Consumer Math**

	<b>Unit 1</b>	<b>Unit 2</b>	<b>Unit 3</b>	<b>Unit 4</b>
<b>Number of Weeks</b>	approx. 10 weeks	approx. 10 weeks	approx. 10 weeks	approx. 10 weeks
<b>Topics</b>	Introduction to Personal Finance; Making Purchases	Employment Finance; Household Finance	Banking; Supply & Demand	Planning for the Future
<b>Essential Question</b>	How does math help in making decisions?  What is Personal Finance?  What should I be doing with my money?	How does my job or career impact my finances?  What should be considered when considering household finances?	Are banks necessary?  What makes one bank different from another?  How does the Law of Supply & Demand relate to me?	Why is savings important?  What financial factors should I consider when beginning a new job or career?  How does paying for college or career training impact my future?
<b>Standards for Mathematical Content</b>	A-REI Solve equations and inequalities  A-SSE Write expressions in equivalent forms to solve problems  A-SSE.A.1 - Interpret expressions that represent a quantity in terms of its context.  F-IF Understand the concept of a function and use function notation;	A-CED Create equations that describe numbers or relationships  A-REI Solve equations and inequalities  A-SSE Write expressions in equivalent forms to solve problems  A-SSE.A.1 - Interpret expressions that represent a quantity in terms of its context.	A-CED Create equations that describe numbers or relationships  A-REI Solve equations and inequalities  A-SSE Write expressions in equivalent forms to solve problems  A-SSE.A.1 - Interpret expressions that represent a quantity in terms of its context.	A-CED Create equations that describe numbers or relationships  A-REI Solve equations and inequalities  F-IF Understand the concept of a function and use function notation; Interpret functions that arise in applications in terms of the context; Analyze functions using different representations

	<p>Interpret functions that arise in applications in terms of the context; Analyze functions using different representations</p> <p>F-IF.C.8 - Write a function defined by an expression in different but equivalent forms to reveal and explain different properties of the function.</p> <p>N-Q Reason quantitatively and use units to solve problems</p> <p>S-ID Interpret linear models</p> <p>S-ID.B3 - Make Inferences And Justify Conclusions From Sample Surveys, Experiments, And Observational Studies</p>	<p>S-ID Interpret linear models</p> <p>S-ID.B3 - Make Inferences And Justify Conclusions From Sample Surveys, Experiments, And Observational Studies</p> <p>F-BF Build a function that models a relationship between two quantities</p> <p>F-IF Understand the concept of a function and use function notation; Interpret functions that arise in applications in terms of the context; Analyze functions using different representations</p> <p>F-IF.C.8 - Write a function defined by an expression in different but equivalent forms to reveal and explain different properties of the function.</p>	<p>F-IF Understand the concept of a function and use function notation; Interpret functions that arise in applications in terms of the context; Analyze functions using different representations</p> <p>F-IF.C.8 - Write a function defined by an expression in different but equivalent forms to reveal and explain different properties of the function.</p> <p>S-ID Interpret linear models</p> <p>S-ID.B3 - Make Inferences And Justify Conclusions From Sample Surveys, Experiments, And Observational Studies</p> <p>F-BF Build a function that models a relationship between two quantities</p> <p>F-LE Construct and compare linear, quadratic</p>	<p>F-IF.C.8 - Write a function defined by an expression in different but equivalent forms to reveal and explain different properties of the function.</p> <p>S-ID Interpret linear models</p> <p>S-ID.B3 - Make Inferences And Justify Conclusions From Sample Surveys, Experiments, And Observational Studies</p> <p>F-BF Build a function that models a relationship between two quantities</p> <p>F-LE Construct and compare linear, quadratic and exponential models and solve problems</p>
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			and exponential models and solve problems	
<b>Standards for Mathematical Practice</b>	<p>MP.1 Make sense of problems and persevere in solving them.</p> <p>MP.2 Reason abstractly and quantitatively.</p> <p>MP.3 Construct viable arguments &amp; critique the reasoning of others.</p> <p>MP.4 Model with mathematics.</p> <p>MP.5 Use appropriate tools strategically.</p> <p>MP.6 Attend to precision.</p> <p>MP.7 Look for and make use of structure.</p> <p>MP.8 Express regularity in repeated reasoning.</p>			
<b>Content</b>	<p>Fractions</p> <p>Decimals</p> <p>Percents</p> <p>Conversions</p> <p>Proportions</p> <p>Scatter Plots</p> <p>Calculating Discounts</p> <p>Sales Tax and Tips</p>	<p>Wages</p> <p>Hourly vs Salary vs Commission</p> <p>Overtime</p> <p>Bonuses</p> <p>Unemployment</p> <p>Raises</p> <p>Employment Statuses</p> <p>Taxes</p>	<p>Bank Accounts</p> <p>Credit</p> <p>Checks</p> <p>Simple and Compound Interest</p> <p>Law of Supply and Demand</p> <p>Supply Inputs</p> <p>Demand Inputs</p> <p>Opportunity Cost</p>	<p>Renting vs Buying</p> <p>Traditional Loans</p> <p>Automotive Loans</p> <p>Mortgage</p> <p>College Loans</p> <p>Career Choices</p> <p>Investing</p> <p>Full Scale Future Budgeting</p>

	<p>Simple and Compound Interest</p> <p>Unit Pricing</p>	<p>Needs vs Wants</p> <p>Utilities</p> <p>Expenses</p> <p>Budgeting</p> <p>50/30/20 Rule</p> <p>Types of Insurances</p>	<p>Scatterplots</p> <p>Graphing</p>	
<b>Skills</b>	<p>Solving fractional equations</p> <p>Solving decimal equations</p> <p>Solving equations with percentages</p> <p>Converting fractions/decimals/percents into real numbers</p> <p>Solving word problems</p> <p>Calculating estimated and exact discounts</p> <p>Comparing and contrasting costs to find the best deal</p> <p>Calculating unit price of an item</p>	<p>Calculating total hours worked based off timesheets.</p> <p>Reading a pay stub</p> <p>Calculating gross and net pay</p> <p>Comparing and contrasting pay offers (Hourly vs Salary)</p> <p>Estimating tax calculations</p> <p>Completing exact tax calculations</p> <p>Classifying expenses as "wants" or "needs"</p> <p>Reading a bill</p>	<p>Understanding credit</p> <p>Calculating simple and compound interest</p> <p>Comparing and contrasting bank offers</p> <p>Graphing equations</p> <p>Graphing scatterplots</p> <p>Interpreting mathematical data</p> <p>Applying mathematical data</p> <p>Making decisions based on mathematical data</p>	<p>Financial decision-making</p> <p>Using mathematical evidence to support a claim</p> <p>Calculating investment returns</p>

	Calculating simple and compound interest	Calculating estimated and exact costs  Creating a personal budget both on paper, and a pie graph		
<b>Project-Based Assessment / Common Assessment</b>	Recipe Planning Project  Food Shopping vs. Take Out	Employment  Home Budgeting with Income Limit	Comparing financial institutions (loans)  Starting a business: Challenges of being an entrepreneur	The Stock Market Challenge  Investment Project
<b>Suggested Resources</b>	<a href="#">IXL Consumer Math Curriculum</a> <a href="#">Consumer Math.Org</a> <a href="#">Consumer Math AGS Workbook</a> <a href="#">Consumer Math Worksheets</a> <a href="#">Khan Academy Resources</a> <a href="#">The Ramsey Show Video Clips</a> <a href="#">Next Generation</a>			