Consumer Math Syllabus
2025-2026

Course Name: Consumer Math   **Teacher Name:** Mr. Dorrenbacher

Room #: 8   **Email Address:** cdorrenbacher@paparts.net *(students)*

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Class Periods: 4 & 5   **Teacher Prep Time:** Period 7

Welcome to Consumer Math 2025 – 26!

Course Description

In Consumer Math, students will explore the topics of finance while reinforcing concepts and skills in the high school mathematics standards. Algebra 1 and Geometry standards are the prerequisite skills needed for this course. The finance topics may include: income and careers; money management; credit and debt; and savings and investing. Business topics covered are: personal income, business ownership; budget; taxes; insurance; credit cards; buying verses leasing, mortgages; rent; credit ratings; bankruptcy, bank and brokerage accounts; interest rates; stocks and bonds; retirement; pensions; inheritance; home and auto insurance, and government financing. The Common Core State Standards for Mathematical Practice apply throughout this course and, together with the content standards, prescribe mathematics as a coherent, useful, and logical subject that makes sense of problem situations in business and finance contexts.

Course Objectives

- Create a budget and compute the percent of income to be spent on each budget item.
- Compute weekly and annual wages and salary for different pay periods.
- Use ratios and proportion to calculate fat calories and change recipe yields.
- Calculate miles per gallon to estimate the cost of fuel for vehicles.
- Track, interpret, and calculate balances for checking and savings accounts.
- Change prices from cents to dollars and for exchange with different currencies.
- Determine the amount of money saved due to sale prices and discounts.
- Learn the basics of preparing tax returns: exemptions, deductions, and taxable income.
- Compute the price of a car when financing arrangements are made.
- Determine semi-annual and monthly car insurance costs.
- Calculate problems related to down payments, monthly payments, and total amounts.
- Understand different types of mortgage loans and estimate the costs for purchasing a home.
- Estimate the quantity of materials and the costs associated doing home improvements.

Class Expectations

To be successful in Consumer Math you will need to follow the 3 P's: Prompt, Prepared, & Professional. These are basic qualities of being a successful student and worker. Being on time, having your work completed well, and speaking politely are soft skills that will benefit you in any workplace environment. Practice habits that emulate these qualities while you are young, and then you will be an expert at performing well under stress, when you get older. **Above all, show respect for everyone in the class.**

Please follow these specific rules:

- *Bring a water bottle to class. Students are not allowed to eat food or drink sweetened drinks in class because crumbs and spills will attract insects.*
- *Cell phones must be put away in your backpack or on the teacher's desk unless the teacher asks students to use them for a class activity. Using your cell phone without permission causes me to contact your parents via email or phone call.*
- *Show up promptly for class. Be in class **BEFORE** the bell starts ringing or you will be counted tardy. Every year students tell me that "the bell was still ringing," when they entered class, but **that is late**. Class starts when the bell starts ringing and ends when the bell starts ringing.*
- *One person may leave the class at a time to go to the bathroom. Make sure to sign out and sign back in on the roster. You will be referred for ditching class if you do not return from the bathroom within 10 minutes.*
- *Please listen and show your complete, undivided attention during whole-class discussion. If you are disruptive to whole-class discussion, you will be redirected to pay attention. Continuous disruptions will result in the teacher contacting parents, and potentially a referral to administrative discipline.*

Behavior Expectations

- All assignments will be turned in on time.
- Students will be constructive and productive in class.
- Students will have their supplies and be working on-task when the bell starts ringing.
- Students will attend class regularly.
- Students will ask for check Google Classroom for make-up work after any absence(s).
- Teachers will model these expectations for students.

Types of Assignments

- ➤ **Weekly Participation Grade** *(1 per week)* – This assignment is a Google Form students must fill out at the end of each week. On the form, students will complete a self-reflection of their participation during class. Students will identify the participation behaviors they showed throughout the week. Students will reflect on one thing they learned from the week, how prepared they were during the week, and one thing they could do to make the following week even better. Finally, students will give themselves a Participation Grade for the week based on their performance.

➢ **Quiz Reviews** *(approx. every 2 weeks)* – These focus on fundamental skills needed to show understanding of Consumer Math. They may include short notes of important concepts needed on a quiz, along with practice problems that are modeled after the types of problems students will see on the Checkpoint Quiz for a particular skill. Quiz Reviews are provided to students the week prior to a scheduled Checkpoint Quiz. A sample version of each quiz is provided to students at the beginning of the quarter. Students should use these review assignments and sample quizzes to study for the Checkpoint Quizzes.

➢ **Checkpoint (CP) Quiz** *(1 per chapter)* – Quizzes consist of 3-5 problems that focus on a specific skill or type of problem. <u>You can retake CP Quizzes as many times as needed</u>, but keep in mind that while the skill needed for a specific quiz does not change, I have several versions of each quiz, so it is important to focus on how to do the problem, not just putting down the numbers you remembered from the last time you took the quiz… that just won't work. <u>If a student fails a Checkpoint Quiz, the student needs to get extra help during 8th period Targeted Assistance for Consumer Math, and when ready, retake the quiz to earn a passing grade of 70% or better.</u>
CAUTION: Students are not allowed to use any notes during the Checkpoint Quiz, so study carefully. Some formulas may be provided depending on the quiz, but most of the time students must rely on their own memory for quizzes.

➢ **Lesson Notes** *(multiple per Chapter)* – During each chapter, students will review vocabulary, concepts, and problems that are representative of the concepts & problems they will use on projects and see on the quizzes and tests. Students need to complete all Lesson Notes before the Unit Test date. Students should study the concepts and practice the skills in these notes. <u>Students are allowed to use their Lesson Notes on the Unit Tests but *NOT on Checkpoint Quizzes.*</u>

➢ **Unit Test** *(1 per Quarter)* – At the end of each grading period *(quarter)*, students will complete a test over the Chapters covered during that unit. Tests may be reviewed in class, but students will not take them home. *<u>Students can only make an appointment outside of class time to make-up a missed Unit Test ONLY IF they missed it because of an Excused Absence.</u>*

➢ ***Math-in-Art Assignments & Projects*** *(at least 1 per quarter)* – This type of assignment is intended to connect Consumer Math concepts and skills to real-world art and architecture. Activities such as quilting, computer-aided design, building design, and dance choreography involve the aesthetics of Artistic Creation along with the logic and fundamentals of business principles. Math-in-Art assignments & projects may be assigned to individuals, completed by teams of 2-4 people, and/or done as an entire class.

➢ ***Final Exam*** *(1 per semester)* – At the end of each semester, students will complete a test that includes skills and concepts from all the Topic areas covered during that semester. The Final is computer-based. *<u>Students cannot make-up a final exam after a semester end.</u>*

Checking Your Grade

PowerSchool is available for you to check your grade whenever you want. It is important that you know your current grades in each of your classes. I will enter grades for assignments weekly. I will enter grades for Quizzes and Tests within 3 days of the assignment. Late and make-up assignments will be entered as I grade them and may take more than a week after the assignment has been turned-in before they are graded. Please monitor your grade weekly. Seek help immediately through office hours if your grade falls below a **C**.

Semester Grading Policy

Students earn 0.5 credits toward high school graduation for passing a semester of Consumer Math with a grade of 60% or better. A semester grade consists of the weighted average between two quarterly grading periods and a final exam for the semester. Students will receive informal progress reports half-way through each Quarter Grade period, along with formal grade reports at the end of each grading period. After a quarterly grading period end-date or the semester end-date, Quarter and Semester Grades are only changed with approval from the classroom teacher or school administrator (Please see the school calendar for the exact dates in each semester Grading Period). The Semester Grade is weighted as indicated below:

Grading Period	Weight on Semester Grade	Basic Grade Scale	
1st Quarter	40%	90-100 = A	80-89.9 = B
2nd Quarter	40%	70-79.9 = C	60-69.9 = D
Semester 1 Final Exam	20%	0-59.9 = F	

EXAMPLE: The following table shows two different students' Semester Grade. Let's assume Student 1 and Student 2 earn the following averages in each category... grade calculations are...

Student 1 EXAMPLE - PASS		Student 2 EXAMPLE - FAIL	
Student earns…	**Calculation of Semester Grade would be…**	**Student earns…**	**Calculation of Semester Grade would be…**
1st Quarter = 85%	0.4(85) 34	1st Quarter = 68%	0.4(68) = 27.2
2nd Quarter = 63%	0.4(63) = 25.2	2nd Quarter = 51%	0.4(51) = 20.4
Final Exam = 68%	0.2(68) = 13.6	Final Exam =59%	0.2(59) = 11.8
TOTAL GRADE	Sum = **72.8% = C**	**TOTAL GRADE**	Sum = **59.4% = F**

CAUTION: Students must earn a passing grade in each Quarter Grade period AND on the Final Exam to guarantee a passing Semester Grade.

Quarter Grading Policy – A quarter grade consists of a weighted average for all the assignments which have due-dates within the beginning and end-dates for that quarter (Please see the school calendar for the exact dates in each quarterly Grading Period). Grades are weighted each quarter in the following assignment categories, beginning with Checkpoint Quizzes, which have the most impact on a student's Quarter Grade:

Assignment Category	Weight on overall Quarter Grade
Checkpoint Quizzes	20%
Unit Tests	20%
Summary & Review • Notes sheets • Lesson assignments • Chapter Review assignments	20%
Projects • In-class mini-projects • Math-in-Art projects • Quarter/Semester Projects	30%
Weekly Participation Grade	10%

NOTE: If a student earns an average of 70% or better on Checkpoint Quizzes, but the overall Quarter Grade is still not above 60%, the teacher will override the Quarter Grade and post a 61% passing grade. This type of override does not guarantee a passing Semester Grade, only a passing grade for that quarter.

EXAMPLE: The following table calculates two different students' Quarter Grade. Let's assume Student 1 and Student 2 earn the following averages in each category… grade calculations are…

Student 1 EXAMPLE - PASS		Student 2 EXAMPLE - FAIL	
Student earns…	**Quarter Grade Calculation …**	**Student earns…**	**Quarter Grade Calculation …**
Checkpoint Quizzes = 81%	$0.20(81) = 16.2$	Checkpoint Quizzes = 47%	$0.20(47) = 9.4$
Unit Tests = 63%	$0.20(63) = 12.6$	Unit Tests = 51%	$0.20(51) = 10.2$
Summary & Review = 82%	$0.20(82) = 16.4$	Summary & Review = 80%	$0.20(75) = 15$
Projects = 78%	$0.30(78) = 23.4$	Projects = 57%	$0.30(52) = 15.6$
Participation = 90%	$0.10(90) = 9$	Participation = 90%	$0.10(90) = 9$
TOTAL GRADE	Sum = **77.6% = C**	**TOTAL GRADE**	Sum = **59.2% = F**

Attendance/Tardies
As noted above, if you come into class after the bell starts ringing, you will be marked tardy. The consequences of excessive tardies are stated in the student agenda. The policy for absences is also in the student agenda. *Keep in mind that in order to get full credit for an assignment, quiz, or test given on the day of an absence, you must turn a note into the office and get the absence excused!!*

Supplies
- Chromebook or other touchscreen computer
- Wi-fi Access in a safe place to work
- 3 Ring Binder for math
- Standard No 2 Pencils (don't forget *extra lead* if using mechanical pencils)
- 100+ pages of lined, college rule paper

Sign and return this portion by Monday, August 11. Keep the remainder of the syllabus at the FRONT of your 3-ring binder for the class.

Student
"I have read the Consumer Math Syllabus completely. I understand the expectations for Consumer Math class and agree to abide by them."

Printed Student Name: _____

Student Signature: _____

Student PAPA Gmail address: _____

Parent/Legal Guardian
"I have read the Consumer Math Syllabus completely with my student. I understand the expectations for Consumer Math class and agree to support my student to achieve them."

Printed Parent Name: _____

Parent Signature: _____

Best contact email address: _____

Best contact phone number: _____

Outline of Topics for Each Quarter

Unit	Time	Topic
Welcome to Consumer Math	3 days	1. Consumer Math Syllabus
		2. Google Classroom Overview
		3. Khan Academy Login & Introduction to Financial Literacy
		4. IXL Diagnostic Test
QUARTER 1 Budgeting & Income	2 weeks	1. The History of Money: Introducing Trade • Explore how the need for trade led to bartering and eventually the development of metal & paper currencies • Trace the history of money across centuries • Compute a basic exchange • Checkpoint Quiz: Wants & Needs
	3 weeks	2. Budget • Calculate average weekly, monthly, & annual expenditures • Create budget for essential & discretionary expenses. • Use the 50:30:20 Rule to analyze and create a healthy budget. • Project: Create a spreadsheet for budgeting using Google Sheets software. • Describe the importance of creating a budget and what needs to be considered when analyzing expenses. • Project: Interview Budget Talks • Checkpoint Quiz: Budget
	3 weeks	3. Gross & Net Income • Understand Hourly Pay and use it to solve problems. • Understand Overtime Pay and use it to solve problems. • Explore the differences between Piecework and Hourly Pay. • Explore the differences between Salary and Hourly Pay. • Understand & calculate what a Commission payment is based on a percentage. • Calculate Graduated Commission based on scales of payment and percentage. • Project: Different types of Income Interview • Checkpoint Quiz: Gross & Net Pay

Unit	Time	Topic
QUARTER 2 Accounts & Shopping	2 weeks	4. Checking Accounts • Calculate total deposits from checks, electronic transfers, and cash. • Compare & contrast similarities & differences between a deposit and a credit. • Read & write checks for a checking account. • Read & balance a check register: paper & electronic. • Use a bank statement to verify a checking account balance. • Reconcile a bank statement to find an adjusted balance. • Project: Comparing Checking Accounts • Checkpoint Quiz: Checking Accounts
	2 weeks	5. Savings Accounts • Calculate monthly total balance & interest earned on money in the account. • Understand withdrawals and penalty fees for savings accounts. • Write time as fractions of a year & write percents as decimals and fractions. • Calculate Simple Interest for years, months, or days.

		• Calculate compound interest using the Simple Interest Formula & a table • Calculate interest using the Compound Interest Formula • Project: Savings Accounts – Impact of Interest Rates and Compounding Period • Checkpoint Quiz: Savings Accounts
	4 weeks	6. Smart Shopping • Calculate Sales Tax • Calculate total purchase price & verify receipts • Calculate unit price & use it to analyze value of purchases • Calculate final price after coupons, markdowns, or discounts. • Calculate Sale Price • Project: Shopping Smarter • Checkpoint Quiz: Smart Shopping

QUARTER 3 Taxes, Credit, & Loans	3 weeks	7. Income Taxes • Interpret and identify income and tax calculations using W-2, W-4, and I-9 forms for employment. • Understand and calculate federal & state income tax, FICA tax, Medicare tax, and social security tax. • Complete and interpret values reported on the IRS form 1040, for filing federal income taxes using form instructions and tables. • Understand how to file taxes using online tax software.
	2 weeks	8. Credit Cards & Credit Scores • Credit card basics – what is required by law • Reading a credit card account statement • Calculate finance charges using the Unpaid Balance Method • Calculate finance charges using the Average-Daily-Balance Method with and without new purchases included. • Understand the factors that contribute to your Credit Score. • Analyze interest rate differences based on creditworthiness (Credit Score) • Project: Comparing Credit Card Offers • Checkpoint Quiz: Credit Cards
	2 weeks	9. Loans & Student Loans • Understand single payment loans. • Calculate maturity value of a single-payment loan. • Understand installment loans. • Calculate monthly payments using a table of Term v. Rate • Calculate down payment amounts. • Calculate monthly principal payment amounts • Read and analyze a monthly repayment schedule • Calculate interest paid and saved at the time of paying off the loan • Project: Loans • Checkpoint Quiz: Loans

QUARTER 4 Car Purchases, Home Buying, & Health/Life Insurance	3 weeks	**10. Buy, Lease, or Rent a Car** • Calculate purchase price based on base price, options, and transfer fees. • Calculate dealer cost based on a percentage. • Find the estimated value of a used vehicle using national valuation tools and average retail price. • Describe the three types of car insurances: liability, comprehensive, & collision • Calculate the insurance annual premium, 6-month premium, and monthly premium based on vehicle type. • Calculate variable operation, maintenance and repair costs of owning a vehicle. • Understand what leasing a vehicle is & calculate costs associated with leasing. • Understand the differences between leasing & renting a vehicle. • Project: Buy, Lease, or Rent a Car – Purchase Options • Checkpoint Quiz: Buy, Lease, or Rent a car
	3 weeks	**11. Buying or Renting a Home** • Explore common types of home purchase options, mortgage loans, and rentals. • Calculate an estimated down payment and loan amount • Calculate payments using a $1,000 Loan Table • Calculate total interest charged on a mortgage. • Explore closing costs & monthly payment breakdowns for purchasing a home. • Calculate the amount financed and the closing costs for specific loan amounts. • Read & analyze an amortization schedule to find new principal after the nth monthly payment. • Understand the purposes of real estate taxes & Calculate real estate taxes. • Explore Homeowners & Rental insurance. • Determine the annual insurance premium • Calculate total annual housing costs from mortgage, utilities, and maintenance. • Project: Buying or renting a Home • Checkpoint Quiz: Buying a Home
	2 weeks	**12. Health & Life Insurance** • Determine health insurance premiums using Insurance Plan premium explanations. • Interpret and calculate costs for routine medical care using an Insurance Benefits Statement • Understand the differences in costs and returns between Term and Whole life insurance.

Disclaimer

The time to cover each topic is approximate. The above procedures and schedule of topics are subject to change in the event of extenuating circumstances and as deemed necessary by the teacher.