Suggested Time Guidelines
Real World Math

September:

Unit 1: The Basics

- Add, subtract, multiply, and divide fractions
- Add, subtract, multiply, and divide decimals
- Convert fractions to decimals
- Convert decimals to fractions
- Convert fractions to percents
- Convert percents to fractions
- Convert decimals to percents
- Convert percents to decimals
- Distinguish between rational and irrational numbers
- Solve proportions to find a value of a variable
- Solve linear equations to find a value of a variable
- Apply previous knowledge of fractions and percents to solve real world problems

October:

Unit 2: Income

- Discuss monthly income:
  - Full-time
  - Part-time
  - Salary
  - Hourly rates
  - National minimum wage
  - Gross pay
- Identify types of deductions:
  - Federal tax
  - State tax
  - Social security tax
  - Medicare tax
  - Healthcare
- Compare and contrast banking options:
  - Credit union
  - Commercial bank
  - Savings account
  - Checking account
- Distinguish between different bank transactions:
  - Check
  - Deposit
  - Withdrawal
  - Debit card
  - Direct deposit
  - ATM
  - Overdraft
  - Insufficient funds
- Balance a checkbook:
  - Checkbook register

- Software program
- Bank statements

- Fill out a check:
  - Payee
  - Date
  - Note
  - Signature
  - Check number
  - Routing number
  - Account number
- Discuss identity theft and how to protect yourself
- Compare savings accounts and calculate simple interest
- Compare and contrast different types of investments:
  - Stocks
  - Bonds
  - CD's
  - Money markets
- Identify different forms of retirement savings:
  - 401k
  - 403b
  - 457
  - Thrift savings plan (TSP)

November:

Unit 3: Get a Job

- Calculate different types of income:
  - Salary
  - Hourly
  - Commission
- Discuss the education requirements for different career options
- Compare and contrast hours worked for different positions
- Discuss paid breaks, overtime, vacation, holiday, restrictions on employees under age 18.
- Understand the benefits available from a job:
  - Health care insurance: medical, dental, eye, disability, …
  - Paid vacation and holiday time
  - Flexible scheduling
- Identify the withholdings from your income:
  - W4 form
  - W2 form
  - Retirement

December:

Unit 4: Transportation

- Distinguish between different types of transportation and their associated costs
- Calculate monthly car payments based on different principal amounts, interest rates, and time periods.
- Compare the initial cost of a vehicle with the total cost including interest.
- Discuss different types of automobile insurance and the cost:
  - Premium
  - Deductible
  - Comprehensive

- Collision
- ❖ Identify routine maintenance of vehicles and the associated costs:
  - Oil changes
  - New tires

January:

Unit 5: Housing

- ❖ Compare and contrast the differences between renting or buying a home
- ❖ Discuss different types of housing: apartments, house, town house, etc.
- ❖ Determine the cost of a house or apartment per square foot.
- ❖ Discuss key factors that should be considered before buying a home.
- ❖ Determine how the cost of a mortgage changes based on different principal amounts, interest rates, and time periods.
- ❖ Compare the initial cost of the house with the total cost after interest.
- ❖ Discuss how credit score rating can influence your interest rate.
- ❖ Identify additional housing expenses based on types of residencies:
  - Heating
  - Cable
  - Phone
  - Internet

February/March:

Unit 6: Additional Expenses

- ❖ Calculate markups, discounts, sale prices, tax and total costs associated with shopping for food, clothing, and/or gifts
- Calculate costs associated with online or catalog ordering including shipping and handling
- ❖ Calculate the costs of groceries when given the price per pound and the weight of the item
- ❖ Calculate and compare unit prices in order to find the best deal
- ❖ Calculate the following costs related to going out to eat: subtotal, tax, total bill, tip, total amount due
- ❖ Discuss various methods to split the cost of a restaurant bill
- ❖ Identify options for childcare and the associated costs
- ❖ Discuss different types of education loans and how they are paid back

March/April:

Unit 7: Travel

- ❖ Convert between Celsius and Fahrenheit using the following formula:

$$F = \frac{9}{5}C + 32$$

- ❖ Compare weather data to make decisions about where to go on vacation
- ❖ Find the arrival time for national and international trips based on travel time and time zone change
- ❖ Convert between U.S. dollars and foreign currency based on exchange rates
- ❖ Determine if the cost of an item is reasonable based on currency conversions
- ❖ Determine if you were charged the correct amount based on currency conversions
- ❖ Find the postage based on variable unit rates and the weight of the object
- ❖ Calculate the total cost, cost per person, and cost per person per day for a trip
- ❖ Calculate the total cost, cost per day, and cost per mile for car rentals
- Research a trip to compare the following criteria: cost, departure and arrival times, hotel information, and type of rental car

April/May:

Unit 8: Make a Budget

- Complete an introductory survey ranking investments by importance to each individual student
- Discuss personal goals with finances for the next 5, 10, and 30 years and how these goals could be accomplished
- "The Game of Life" budget activity
    - The Bookkeeping Basics: Analyze the spending of different individuals and determine if they have funds available for purchases
    - Budget Busters: Analyze budgets and actual spending of different individuals
    - Monthly Payment 101: Calculate monthly payments of different loans
    - As a class: select one job, salary, income tax rate, debt, and savings amount. Then complete a budget together to determine how to pay the loan back.

May/June:

- Identify additional expenses and complete budget for portfolio

Culminating Project: Portfolio for Final Exam

- Students will choose 3 jobs and will research details
- Fill out an application for each job
- Interview each student to determine which job is the best fit
- Fill out new employee paperwork
- Use salary to determine deductions:
    - Federal tax
    - State tax
    - Social security tax
    - Medicare tax
    - Healthcare
- Students will choose 3 vehicles and research details
- Teacher will choose 1 that is most practical for their job
- Determine monthly car payment, insurance, and routine maintenance
- Student will choose 3 types of housing and will research details
- Teacher will choose 1 that is most realistic for their job
- Determine monthly cost of housing, utility expenses, insurance, and upkeep
- Based on given family size, determine amounts spent on additional expenses: childcare, food, clothing, gifts, education, travel, etc…
- Create a budget for the student's income, deductions, vehicle, and monthly expenses.