

Economics Simulation

6th Grade Social Studies

You are finally entering the world as an adult, and making your own money. Adulthood comes with many financial responsibilities. As a result, it is important for you to make important money management decisions.

Task: To complete a money management profile (budget) for a set amount of time with a given salary and expenses.

Materials Needed: Computer, Calculator, Simulation Worksheet, Dice (teacher provided)

Presentation of Findings: You have the option of either placing your report on a visually appealing poster board, or via PowerPoint, Prezi, or any other computer based presentation software. You will be required to present your money management simulation to the class.

Due: Tuesday September 13, 2016

Students will have time work on the project at home and in school. Personal electronic devices are allowed with written note from parent.

This is an individual project! No groups allowed.

Rubric/Checklist Provided: Use the rubric to ensure you have completed all task with fidelity.

Economics Simulation

You are finally entering the world of adulthood, and making your own way! Adulthood comes with many financial responsibilities. To successfully complete this assignment, your income must NOT be **negative** by the end.

Income: the money coming in monthly/annually

Take one die and roll it twice. Add up the two numbers. Add four 0's to the number to determine your annual salary.

For example: Roll one: 3; Roll two: 1

$3+1=4$ $4+0000=40,000$.

Your annual salary is \$40,000

What is your salary? \$____, 000 a year

Spending: how you use your money

You must buy the basics every month.

- For every person in your household (for simulation purposes, use the number of people in your immediate family) you spend .5% of your salary per person per month.
 - Family Members: ____
 - .5% annual salary (salary x .005): \$ ____ = monthly grocery allowance
 - Monthly grocery allowance X family members = \$ ____ x 12 = \$ ____ **annual grocery budget (Yellow)**
- You live somewhere, other than with your parents. You will use the classifieds in Macon to find your apartment or home. You must find a house or apartment that has room for all family members. No more than 2 people may share a bedroom. For example, if there are 5 members of your family, your home or apartment MUST have at least 3 bedrooms.
 - If you buy a home, you can afford to search for houses up to 3x your annual salary. For example, if you make \$60,000 a year, you can search for houses UP TO \$180,000.
 - Go to www.macon.com/homes
 - You may **only** search in either Macon or Warner Robins.
 - Amount you can spend on a home: \$ ____, 000
 - Number of bedrooms needed: ____
 - Click on the home you choose to find more information and your estimated monthly mortgage cost.
 - Home Address: _____
 - Number of Bedrooms: ____
 - Estimated monthly mortgage: \$ ____
 - Estimated monthly mortgage x 12 = \$ ____, ____ **estimated annual mortgage (Yellow)**
 - If you rent an apartment, you should look at the different costs of apartments based on floor plans.
 - Visit <http://www.apartments.com/Georgia/Macon> to search for your apartment.
 - You may **only** search for apartments in either Macon or Warner Robins.
 - To find how much you should spend on an apartment, divide your annual salary by 12 to find your monthly salary. Monthly salary = \$ ____, ____
 - Divide your monthly salary by 3 to spend one-third of your monthly salary on rent. Maximum monthly rent = \$ ____, ____
 - When you find an apartment you like, click on in to find how much your rent will cost. Scroll down to where you find "Models" information to find the cost of the floor plan you need.
 - Name of Apartment Complex, City: _____

- Number of Bedrooms: _____
- Estimated monthly rent: \$ _____
- Estimated monthly rent x 12 = \$ _____ **estimated annual rent** (yellow)
- Congratulations! You are about to be the owner of a brand new (or used) car! You have saved up to afford a car that is worth HALF of one year's salary.
 - Annual salary / 2 = Down Payment = \$ _____, 000
 - Go to www.macon.com/cars/ to find your new ride.
 - Search either in new or used cars to find your deal. USE THE 31088 zip code.
 - You can purchase whatever car best suits your needs; however, it is suggested that you do not search for cars that cost more than your annual salary.
 - Car Make: _____ Model: _____ Year: _____
 - Once you find your car, click on the link, then click on "Calculate Payment."
 - Type in your Down Payment amount
 - Your new monthly payment is \$ _____
 - **Your monthly payment x 12 = \$ _____ = annual car payment** (yellow)
- The worst part about being an adult is paying bills! However, choices you made in your spending earlier will impact how much you spend annually on bills.
 - If you rented an apartment, while you will spend more in the long run since you cannot own your apartment, you save money in the short term since apartment complexes often include amenities like the gym, yard work, laundry, etc.
 - If you rented an apartment, you will spend 5% of your annual salary on bills.
 - **Annual salary (\$ _____, 000) x .05 = \$ _____ = annual cost of bills** (yellow)
 - If you bought a home, you will save money in the long run since all money spent will go toward owning your house. However, the upkeep of a house costs more since there are not amenities included like in an apartment complex. You must pay for everything you wish to have available at your house.
 - If you bought a house, you will spend 7% of your annual salary on bills.
 - **Annual salary (\$ _____, 000) x .07 = \$ _____ = annual cost of bills** (yellow)

Credit: money that is borrowed

- You can supplement your income by using credit when you are low on surplus cash. Using credit works in the short term, but it comes at a cost. If you choose to use credit, you can add up to 20% of your annual salary to your spending. For example, if you make \$20,000 you can add \$4,000 giving you a total of \$24,000 to spend ($20,000 \times .2 = 24,000$)
 - You can add credit in 5% increments, so either 5%, 10%, 15%, or 20%.
 - However, you must add one percentage per 5% credit to your annual bills.
 - For example, if you rented an apartment and took 10% credit, you will pay 5% (normal bill cost) + 2% (1% per 5% increase in credit) = %7 annual cost of bills.
 - **NEW annual cost of bills = \$ _____** (yellow)

Current Financial Status: # 1

Start with annual salary and subtract every yellow cost. What you are left with is able to be invested or saved.

Starting salary: \$ _____, 000

- annual grocery budget (\$ _____) = \$ _____
- estimated annual rent/mortgage (\$ _____) = \$ _____
- annual car payment (\$ _____) = \$ _____
- annual cost of bills (\$ _____) = \$ _____ = amount left

At this point, if your amount left reflects a negative amount, go back to spending and revise your choices.

Investing: Spending money in the hopes of earning more money

- You can invest up to \$20,000 a year. This money must come from the amount you have left to spend. What you choose to invest will yield a percentage return based on the roll of a die, because investing is a gamble. Multiply the number rolled by 10. This is the percentage. For example, if you roll a 2, your investment will yield %20. This amount will be added to your income EVERY year. You do NOT have to invest. If you cannot afford the basics, you will not have the money to invest.
 - Amount invested: \$ _____
 - Number rolled ___ x 10 = ___% yield
 - Yield of amount invested (amount invested X %yield) = \$ _____ = amount added to next year's salary
 - Now, flip a coin. If it is heads, that is a positive investment, and you will add that amount to your salary. If it is tails, that is a negative investment, and you will deduct that amount from your salary. You will not lose the money from this year's income.
 - Consider: if you invest AGAIN next year (and do well), you would have the current amount earned in addition PLUS next year's addition, and so on until you withdraw your initial investment.

Saving: Setting aside money for a future purchase OR for retirement

- You can save up to \$10,000 a year. This money must come from the amount you have left to spend minus what you invested. What you choose to save will yield a 1% return when you choose to withdraw from savings either for retirement or a future purchase. Savings are a sure thing, not a gamble like investments. You will always make money. You do NOT have to save. If you cannot afford the basics, you will not have the money to save.
 - Amount saved: \$ _____
 - 1% of that amount (x .01): \$ _____
 - At the end of the year you will add the amount saved + % returned = \$ _____
 - At the end of 40 years (the amount of time it will take to reach retirement age), you will multiply the previous amount X 40 = \$ _____
 - However, savings accounts compound, meaning they add interest to what money is sitting in the account.
 - Go to http://www.moneychimp.com/calculator/compound_interest_calculator.htm to see how much money you will earn in 40 years. Your "current principal" is your initial amount saved. Your "annual addition" will be the same amount. Your "years to grow" will be 40, and your "interest rate" is 1%. Calculate your savings to see how much money you will have saved at the end of 40 years.
 - Amount saved: \$ _____
 - Difference between non-compounded amount and compounded amount: \$ _____

Current Financial Status: # 2

See where you stand financially this year and in the future.

Amount left after Spending: \$ _____
 - amount invested (\$ _____) = \$ _____
 - amount saved (\$ _____) = \$ _____ = \$ _____ = amount left

Next Year: Starting Salary (same as this year) = \$ _____
 Salary Addition/Subtraction because of investments = \$ _____
 Revised salary for next year \$ _____ if a higher amount than last year, draw a smiley face ☺

At this point, if your amount left reflects a negative amount, go back to investing and saving and revise your choices.

Name: _____ Date: _____

Economics Simulation Checklist

TOPIC	EXPLANATION OF WHAT SHOULD BE INCLUDED	STUDENT CHECKLIST	TEACHER CHECKLIST
INCOME (5 points)	Established a starting income/ yearly salary written correctly		
SPENDING (20 points)	Has 0 or very limited mathematical mistakes within the final packet including the budget sheet given. Displays your knowledge of creating a budget and spending money wisely.		
CREDIT (10 points)	Has 0 or very limited mathematical mistakes within the final packet including the budget sheet given. Displays your knowledge of using credit wisely.		
CURRENT FINANCIAL STATUS #1 (10 points)	Has 0 or very limited mathematical mistakes within the final packet including the budget sheet given. (If your amount/total reflected a negative number you went back to your spending and revised your choices.)		
INVESTING (10 points)	Has 0 or very limited mathematical mistakes within the final packet including the budget sheet given. Displays your knowledge of positive and negative investing .		
SAVING (10 points)	Has 0 or very limited mathematical mistakes within the final packet including the budget sheet given. Displays your knowledge of saving .		

Name: _____ Date: _____

<p>CURRENT FINANCIAL STATUS #2 (10 points)</p>	<p>Has 0 or very limited mathematical mistakes within the final packet including the budget sheet given. (If your amount/total reflected a negative number you went back to your investing and saving and revised your choices.)</p>		
<p>POSTER BOARD/ MULTIMEDIA FINAL PRODUCT AESTHETICS (5 points)</p>	<p>Board or multimedia final product is displayed in a way that is organized, neat, and contains accurate conventions (grammar)</p>		
<p>IMAGES AND COLOR (10 points)</p>	<p>Included images of your home, car, investments, and other decorations that enhanced the overall look of your project</p>		
<p>ORAL PRESENTATION (10 points)</p>	<p>Knowledgeable of your budget sheet and able to explain your financial plan in a clear manner to audience</p>		

Total Points Earned _____ / 100