Name: _____ Date: _____ Class: _____

BUILDING BLOCKS STUDENT WORKSHEET

Deciding which car and car loan you can afford

Since most people can't buy a big-ticket item like a car with one payment, it's common to get an installment loan so payments can be made over time. It's helpful to compare monthly loan payments and total costs so you can choose the car that meets your needs and budget.

Instructions

1. Review the car-buying simulation.
2. Calculate your monthly transportation budget.
3. Figure out how much of that you can spend on a car payment.
4. Determine monthly payments for the three car options.
5. Answer the reflection questions.

TIP

Whenever you borrow money, one rule to live by is to get a loan offer or approval from at least three lenders. While this activity focuses on loans from a dealership, it's good to also apply with a bank or credit union. For more information about shopping for a car loan, visit: https://www.consumerfinance.gov/consumer-tools/auto-loans/.

A car-buying simulation

Congratulations on your new dream job! Your net monthly income will be $4,000. It's a 20-minute drive to your job, so your commute won't be bad. However, your old car isn't dependable. You don't want car troubles to cause you to be late or miss work, so you've decided to buy a reliable used vehicle. You want to figure out how much you can afford before making your choice.

Because you take the responsibility of loans seriously (you're committed to pay off the debt on time and for the lowest cost possible), you want to be sure the loan is helping you meet your needs (not your wants). You're hoping to find a car that allows you to get the smallest loan possible.

Calculate your transportation budget

Start by calculating your monthly budget. A good rule to live by is to allocate 10–15 percent of your net monthly income to transportation (in this activity, we'll use 14 percent of your net monthly income).

You figure you'll spend $100 on car insurance and $150 on gas, and put away $50 each month to save for maintenance, repairs, and annual registration. Use these numbers to calculate how much you'll have left in your monthly transportation budget for a car payment.

MONTHLY TRANSPORTATION BUDGET BASED ON $4,000 PER MONTH IN NET INCOME

14% of net monthly income ($4,000 x .14)	**$**
Minus car insurance	-
Minus gas	-
Minus savings for future car expenses	-
Amount remaining (monthly payment you can afford)	**$**

Calculate monthly payments for three cars

Now that you have a monthly car payment budget, you're ready to find a car you can afford.

The used car dealership has found three cars for you to consider and has three loan options to choose from: 4 years (48 months), 5 years (60 months), and 6 years (72 months). For the purposes of this simulation, the interest rates are 5 percent for Car #1 and #2, and 4 percent for Car #3.

To estimate the total interest on the loan, you'll use this simplified interest formula:

Interest = Principal x Rate x Time ($I = P \times R \times T$). Time is expressed in number of years.

For each of the three cars, determine what your monthly payments would be.

Note: Car loans with terms of 72 months or more are risky because if you need to sell the car or it stops working before you paid off the loan, you'll likely still owe more than the car is worth.

Car #1	Car #2	Car #3
Used Basic Sedan X Mileage: 28,925 Cost: $13,791 Interest rate: 5%	Used Basic Sedan Y Mileage: 24,039 Cost: $14,712 Interest rate: 5%	Used Luxury Sedan Z Mileage: 38,509 Cost: $14,712 Interest rate: 4%

CAR #1: MONTHLY PAYMENT CALCULATIONS

Length of loan (term)	4 years (48 mos.)	5 years (60 mos.)	6 years (72 mos.)
Price of the car (principal)			
Interest rate	5%	5%	5%
Amount of interest you'd pay (I = P x R x T)			
Total cost for this car (price of car + loan interest)			
Monthly estimated payment (total cost ÷ total # of months to pay off loan)			

CAR #2: MONTHLY PAYMENT CALCULATIONS

Length of loan (term)	4 years (48 mos.)	5 years (60 mos.)	6 years (72 mos.)
Price of the car (principal)			
Interest rate	5%	5%	5%
Amount of interest you'd pay (I = P x R x T)			
Total cost for this car (price of car + loan interest)			
Monthly estimated payment (total cost ÷ total # of months to pay off loan)			

CAR #3: MONTHLY PAYMENT CALCULATIONS

Length of loan (term)	4 years (48 mos.)	5 years (60 mos.)	6 years (72 mos.)
Price of the car (principal)			
Interest rate	4%	4%	4%
Amount of interest you'd pay (I = P x R x T)			
Total cost for this car (price of car + loan interest)			
Monthly estimated payment (total cost ÷ total # of months to pay off loan)			

Reflection questions

Which car and loan options would you choose? What factors would you take into consideration when making this decision?

When taking out loans, how might distinguishing between your needs and your wants help inform your decisions?

Compare the total cost of each of the car loans. What effect can a longer loan term have on the monthly payment? And on the total cost of the car?